Holroyd Development Control Plan 2013

Date of Adoption: 16 July 2013

Date of Effect: 5 August 2013

Contents

Introduction

Name of this Development Control Plan

This Development Control Plan is to be known as Holroyd Development Control Plan 2013.

Where this Development Control Plan applies

Holroyd Development Control plan applies to all development within Holroyd Local Government Area.

Adoption of Plan

This plan was adopted by Council on 16 July 2013, and came into effect on 5 August 2013.

This plan constitutes a development control plan under section 74C of the Environmental Planning and Assessment Act, 1979 and has been prepared in accordance with Part 3 of the Environmental Planning and Assessment Regulation 2000.

Related plans and policies

Holroyd Local Environmental Plan 2013

The Holroyd Local Environmental Plan 2013 is a legal planning instrument that has the broad function of controlling development throughout the City. It divides land into different zones and, among other things, details the activities that can be carried out within each zone and those activities which are prohibited.

The Development Control Plan (DCP) provides greater detailed policies and guidelines adopted by Council for development within Holroyd. The information contained within the Holroyd Development Control Plan is applied in addition to the provisions of the Holroyd Local Environmental Plan 2013.

State Planning Policies

State Environmental Planning Policies address matters of state significance and should be read in conjunction with the Holroyd Local Environmental Plan 2013 and the Holroyd Development Control Plan. Should there be a conflict in controls between a SEPP and a LEP or DCP, the provisions within a SEPP shall prevail unless otherwise stated.

Contributions Plans

Under Section 94 of the Environmental Planning and Assessment Act, 1979, Councils are able to levy contributions from developments for the provision of public services and facilities required as a consequence of development. These contributions are used for the upgrade and development of community facilities, recreation facilities, infrastructure, roads and traffic management and town centre improvements.

The development contributions plan supplements the provisions of the Holroyd Local Environmental Plan 2013 and the Holroyd Development Control Plan 2013.

Savings Provision

This DCP applies to all development applications lodged on or after the date of effect of this DCP. Development applications lodged before that date will be assessed and determined under the provisions of the former Holroyd Development Control Plan 2007.

Objectives of Draft Holroyd Development Control Plan 2013

The objectives of Holroyd Development Control Plan 2013 are:

- To provide detailed development controls to supplement the provisions of Holroyd Local Environmental Plan 2013.
- To provide direction for the manner in which development may be carried out in the City of Holroyd.
- To ensure that the natural environment of the City of Holroyd is protected and enhanced throughout all stages of development works.
- To promote economically, socially and environmentally sustainable development within the City of Holroyd.
- To protect and enhance the amenity of the City of Holroyd.
- To require a appropriate standard of urban design for all development.
- To ensure that development is designed to avoid, minimise and manage potential environmental risks.
- To create development that will enhance the City of Holroyd as a great place to live and work.
- To provide a appropriate opportunity for the public to participate in the development process.

In addition to the Holroyd Development Control Plan 2013 Council is required to consider all matters within 79C of the Environmental Planning and Assessment Act 1979.

Structure of Draft Holroyd Development Control Plan 2013

Holroyd DCP 2013 contains 18 Parts. Each part contains objectives and development controls that relate to development within Holroyd Local Government Area.

The plan is divided into the following Parts:

Part A - General Controls

Part B - Residential Controls

Part C - Commercial, Shop Top Housing and Mixed Use Development Controls

Part D - Industrial Controls

Part E - Public Participation

Part F - Advertising and Signage Controls

Part G - Places of Public Worship Controls

Part H - Heritage and Conservation Controls

Part I - Child Care Centre Controls

Part J - Site Specifc Controls

Part K - Holroyd Gardens Controls

Part L - Town Centre Controls

Part M - Merrylands Centre Controls

Part N - Transitway Station Precinct Controls

Part O - Guildford Pipehead Site Controls

Part P - Pemulwuy Residential Controls

Part Q - Pemulwuy Northern Employment Lands Controls

Part R- Definitions

Part A

General Controls

Holroyd Development Control Plan 2013

General Controls

Contents

General Controls

Introduction

Land to which this Part applies

This Part of the DCP applies to all land within Holroyd Local Government Area.

Relationship to other Parts of this DCP.

Part A of Holroyd DCP 2013 shall be read in conjunction with the following Parts of Holroyd DCP 2013, which contain objectives and development controls that may relate to development in this part:

Part B - Residential Development

Part C -Commercial, Shop top housing and Mixed use Development

Part D - Industrial Development

Part E - Public Particpation

Part F - Advertising and Signage

Part G - Places of Public Worship

Part H - Heritage and Conservation

Part I - Child Care Centres

Part J - Site Specific Controls

Part K - Holroyd Gardens

Part L - Town Centres

Part M - Merrylands Centre

Part N - Transitway Station Precincts

Part O - Guildford Pipehead Site

Part P - Pemulwuy Residential

Part Q - Pemulwuy Northern Employment Lands

Part R - Definitions

1. Subdivision

1.1. Design and Landscaping for Subdivision

Objectives

O1. To provide detailed criteria for the subdivision of land.

O2. To permit subdivisions that provide a safe and convenient environment for pedestrians, cyclists and motorists.

O3. To provide subdivision layouts that are compatible with and acceptable for the intended use of each lot.

O4. To promote subdivision layouts that provide comfortable living and working spaces.

O5. To ensure that subdivision of land throughout the LGA has regard to site opportunities and constraints.

O6. To ensure that subdivision respects the predominant subdivision pattern of the locality.

O7. To ensure that allotments of sufficient size are created to facilitate development that meets the requirements of different zones.

O8. To maintain and enhance existing streetscape and landscape character.

O9. To enhance the setting of buildings.

O10. To provide for acoustic and visual privacy through layout of lots and streets.

O11. To reinforce and define vehicle speed control design through street layout.

O12. To provide shade for buildings and areas of open space through protection and provision of trees.

O13. To preserve certain mature trees of high ecological or amenity benefits.

O14. To preserve significant landscape elements that contribute to the existing landscape character of the street, are sensitive to site attributes, existing landscape features, streetscape view and vistas.

Development Controls

C1. In determining the suitability or otherwise of any subdivision application, consideration of the following matters will be taken assessed:

a) Slope and orientation of land;
b) Opportunities for solar and daylight access to future development;
c) Design of roads, access ways and individual site access;
d) Retention of special qualities or features of a site, such as trees and views;
e) Availability of utilities;
f) Evacuation controls as per flood risk precincts table in Section 8;
g) Provision of adequate site drainage;
h) Provision of public open space;

i) Heritage conservation;

j) The adequacy of each site in achieving relevant development standards detailed within this control plan such as setbacks, car parking, landscaping, etc; and

k) The relationship of the subdivision layout to adjacent land suitable for subdivision.

C2. Landscape the subdivision to enhance the natural features of the site and adjoining areas. For example, preserve existing landscape elements such as peaks, valleys, rock outcrops, vegetation stands and watercourses .

C3. In established areas, ensure landscaping relates to the scale of other elements of the streetscape and the landscaping of adjoining development. For example, locate landscaped areas to adjoin the landscaped areas of adjacent allotments so as to provide for a contiguous area of deep soil and vegetation (see Figure 1).

C4. Avoid rear fences directly fronting public roads. Where this is unavoidable, the following measures may be required (see Figures 2 & 3):

- greater setbacks for landscaping against fences, consistent with acoustic and road design standards (Figure 2).
- building frontages to face road by provision of parallel access road separated by landscaped buffer (Figure 3).

C5. Subdivision must aim to retain all trees, except those marked for removal by a tree survey conducted by an Australian Qualification Framework (AQF) Level 3 Arborist. Such trees must be shown on the approved engineering plan or the approved preliminary plan of subdivision.

Where consent to remove trees is granted, provide suitable replacement trees for those to be removed.

Note: Consult with Council's Tree officers for advice on species and location.

Note: For Subdivision Design requirements specific to residential subdivision, see Part B of this DCP.

Figure 1

Figure 2: Landscaped berm

Figure 2 & 3

Easement of support

C6. The provision of an easement of support will be required to cover all embankments that extend into the lots if the batters are steeper than 5 to 1. In place of the embankment.

Note: Council will consider a retaining wall whose structural integrity is to the Engineer's satisfaction as indicated on an approved engineering plan.

Retaining walls

C7. Provide space for a retaining wall, together with protection fence if required, where:

- **a)** the boundary of a new road coincides with the boundary of land not owned by the subdivider, and
- **b)** construction of the road would deprive such land of support, and
- **c)** the batter of an embankment encroaches upon such land.

1.2. Services

Objectives

O1. To ensure the provision of public utilities to each allotment, within road reserves, in an efficient and cost-effective manner.

O2. To maximise the opportunities for shared (common) trenching and to reduce restrictions on landscaping within road reserves.

O3. To ensure residential, industrial and business areas are adequately serviced in a timely, cost-effective, coordinated and efficient manner.

Development Controls

C1. Easements required by Council for the purpose of subdivision may include those necessary for utility services. The width of the easement is to be determined by the service authority.

C2. The design, construction and location of utility services shall conform to Council's stormwater standards and work specifications for subdivision and developments and the specific standards of the relevant servicing authority.

C3. Design road corridors and other accessways to take into account existing services to avoid any unnecessary alterations or diversions.

C4. Where possible, coordinate compatible public utility services in common trenching to minimise cost.

C5. Reform areas affected by construction works to appropriate grades, covered with 100mm of topsoil and then grassed.

Electricity

C6. For subdivision requiring a new low voltage electricity supply, reticulate via an underground supply system. Service battleaxe blocks with underground electricity to the rear of the accessway.

Water supply

C7. Provide an adequate reticulation water supply system from water supply mains for domestic supply and fire fighting purposes.

Sewerage

C8. Arrange sewerage reticulation to allow the whole of each new allotment to be serviced by gravity drainage.

Certificates for water and/or sewerage facilities

C9. Ensure provision of water and/or sewerage facilities is authorised by the appropriate Certificate from Sydney Water. The Council must supply Sydney Water with a copy of its first approval (including conditions). At the same time, the Council will supply the subdivider with a form of application to Sydney Water. The subdivider must then obtain from Sydney Water a Certificate under Section 73 of the Sydney Water Act 1994, stating that the applicant has paid a contribution towards the required services or has made other suitable arrangements.

Note:

- For controls related to easements, see Section 7.3 of this Part.
- Holroyd Local Environment Plan 2013 may apply in some instances.

1.3. Drainage

Objectives

O1. To minimise impacts on the water quality and hydrology of natural watercourses.

O2. To prevent stormwater damage to the built and natural environment.

O3. To reduce nuisance flows to a level which is acceptable to the community.

O4. To provide a stormwater system which can be maintained economically.

O5. To provide a stormwater system which utilises open space in a manner compatible with other uses.

O6. To control flooding and enable access to allotments.

O7. To stabilise the land form and control erosion.

O8. To prevent both short and long term inundation of development.

O9. To manage food and the availability of flood free access and egress.

Development Controls

Note:

- For controls related to stormwater see section 7 of this Part
- Holroyd Local Environmental Plan 2013 may apply in some instances

C1. Design the drainage system in accordance with the major/minor stormwater flow concept (for a 1% AEP storm event) as per the current edition of Australian Rainfall and Runoff, meet the following guidelines:

Trunk drainage

Note: Trunk drainage applies to flows over 2m3/s in a 20% AEP storm event, or to a pipe >900mm in diameter

C2. Construct detention basins to eliminate the increased run-off from the proposed development for all storms up to and including a 1% AEP storm event.

C3. In private land use and/or public reserve, drainage shall be either piped, in a lined channel, or a combination of a pipeline with a grass swale . Applicants should consult with Council's Engineering Services Department to determine the most appropriate method for the particular site.

C4. In public reserves only, the minor (low) stormwater flow system shall generally be designed for a 20% AEP storm event unless the retention basin design dictates otherwise.

C5. Generally, any low flow pipe in a grass swale shall not be less than 600mm diameter.

C6. In a public road, base the pipeline on a minimum 20% AEP storm event, but contain the gap flow (i.e. the difference to a 1% AEP storm event) within the road reserve at safe depth and velocities for pedestrians and vehicles.

C7. Design major structures over, and/or filling near creeks, on the basis that upstream inundation must not be increased in any storm event up to and including a 1% AEP storm event. Council may also require consideration of the effects of larger storms up to the Probable Maximum Flood (PMF).

C8. Locate drainage lines to minimise disturbance to landforms.

C9. Avoid steep gradients to minimise runoff velocities.

C10. Minimise road carriageway widths to that required to accommodate vehicles, cyclists, pedestrians and PMFs.

C11. Make provision for the deceleration, infiltration, detention, and cleansing of stormwater through source controls such as landscaping, vegetated filter strips, infiltration pits, sand/gravel filters and vegetated swales (including the their ongoing maintenance), with due consideration to the impact of any resultant altered water table. See Section 7.4 of this part for Stormwater flow targets for sites 2,500m^2 and greater in area.

C12. Where the above measures are implemented, design stormwater drainage system to reflect the resultant peak flows. See Figures 4 & 5:

Local drainage

C13. Within private property and at sag points in public roads, generally provide a piped system based on a 5% AEP storm event. Under certain circumstances a piped system to accommodate

greater than a 5% AEP storm event may be required.

C14. Within public roads, provide a piped system generally based on a 20% AEP storm event. Depending on inlet and outlet conditions, a more major storm may need to be accommodated. Pay particular attention to the location of depressions in the terrain and watercourses which may function as overland flowpaths for stormwater. At the design stage, also give consideration to the likely effect of overland flow on proposed building structures and the need for clearly defined/constructed overland flow paths over easements and natural depressions for at least all storms up to the 1% AEP storm event.

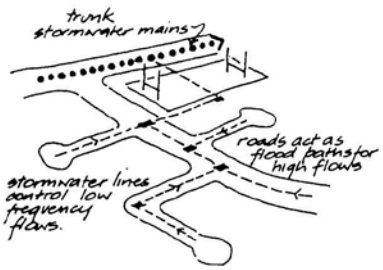


Figure 4

C15. In areas where localised flooding has occurred, it may be necessary to prepare and submit to Council a "stormwater master plan". See Section 7 of this part.

C16. Maintain overland flow paths over easements, natural waterways and depressions. Applicants should note that On Site Detention (OSD) provisions may be required in certain locations to restrict stormwater flows to minimise risks of downstream flooding.

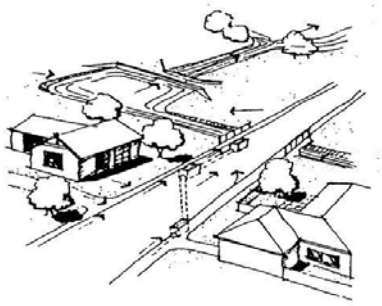


Figure 5: Typical combination of public roads, piping, retention basin and stream.

Figure 5

C17. If adequate detention basins are provided as part of the subdivision development, On Site Detention will not be additionally required for individual allotments. Full details of On Site Detention requirements are available in a separate policy. Applicants are advised to check with Council's Engineering Services Department.

C18. Lay stormwater drainage runs in reinforced concrete pipes with necessary inlets, junction boxes and headwalls. Make provision for disposal of stormwater discharge into suitable channels or piped drains under the control of Council. Provide inter allotment drainage.

C19. The designing engineer is required to provide certification at the completion of work, prior to final approval of the development, that the stormwater system has been constructed and will function in accordance with the design.

Note: Upgrading/augmentation of the existing downstream drainage system may be required. This may be in the form of actual construction work, to be carried out by the applicant at the time of development or in the form of a contribution to be determined by Council at development application stage.

Easements/ Restrictions/Covenants

C20. Where a stormwater drainage line, including inter-allotment for subdivisions, is proposed and/ or an existing line is proposed to be utilised through adjoining property, a drainage easement giving drainage rights to the benefited lot is required.

C21. All easements required within a site (other than those required only for the purposes of a strata plan subdivision) shall be created pursuant to Section 88B of the Conveyancing Act, subject to the approval of Council.

C22. Create easements over trunk and local drainage systems in favour of Council. Create easements over inter allotment drainage in favour of the benefiting allotments. Council shall be joined as a party whose consent is required for any amendments to easements for rights of carriageway, utility services, inter-allotment drainage, and the like, but not nominated as a beneficiary.

C23. Consideration shall be given to the path taken by stormwater during storm events that generate runoff in excess of the design pipe capacity up to the 1% AEP storm event (overland flow paths) and system blockage. Where overland flows could result in flood damage on adjoining properties, the pipe and collection system shall be designed to accommodate runoff generated by the 1% AEP storm event.

C24. The erection of buildings/permanent structures, retaining walls and/or dividing brick walls and filling over easements shall not be permitted unless written approval from the benefiting property is provided or if they will alter the performance and function of the easement to the detriment of the site or adjoining properties. Drainage easements shall be accessible for maintenance of stormwater drainage line and allow for stormwater overland flow paths. Council will not permit the above structures over public easements.

C25. Where easements are required to be created over the adjoining property, Council requires written confirmation from the affected property owners that they are willing to participate in the negotiation of an easement with the development application. If an existing easement is to be utilised the applicant shall submit proof from the Department of Lands that the site benefits from such an easement. Proof of registration of the easement, at the Department of Lands, will be required prior to the issue of development consent (including deferred commencement).

C26. Easements required by Council for the purposes of Strata or Community plan subdivision may include those necessary for utility services not initially provided with a development by the developer. Width of easement is to be determined by the service authority, to the satisfaction of the Director of Engineering Services.

C27. Arrange easements required in connection with the provision of electricity in consultation with Integral Energy or the equivalent authority, and such easements shall be created by transfer or otherwise depending upon the circumstances.

Note:

- For specific subdivision controls for residential and industrial development see Part B and Part D of this DCP.
- For easement widths, section 6 in this part.

2. Roads and Access

The location, type and design of access points to a development will have significant impacts on the streetscape, the site layout and the building façade design. It is important that access is integrated with site planning from the earliest stages to balance any potential conflicts with streetscape requirements and traffic patterns and to minimise potential conflicts with pedestrians.

Objectives

O1. To provide roads consistent with their function within the road network, having regard to their safety, visual impact and amenity of local areas.

O2. To provide sufficient road reserve, carriageway and verge widths to allow roads to perform their designated functions within the road network.

O3. To minimise road construction and life cycle costs without compromising other objectives.

O4. To integrate adequate car parking and servicing access without compromising street character, landscape or pedestrian amenity and safety.

O5. To optimise the opportunities for active street frontages and streetscape design.

2.1. Road Design and Construction

Development Controls

Works Affecting State Roads

Note: In respect of any application for consent to open a public road or other means of access forming a junction or intersection with a state road, the consent authority shall consult with the Roads and Maritime Service of New South Wales and shall take into consideration:

- the treatment of the junction or the intersection and its location having regard to town planning principles and to the safety and convenience of the public;
- the effect of opening the road or other means of access on the development of the locality; and
- any representations by the Roads and Maritime Service of New South Wales.

Road Specifications and levels

C1. Construct and seal all driveways, accesses and car parking areas to Council's requirements.

C2. Ensure all public engineering works comply with Council's Specification for Subdivisions and Developments (current version), unless as otherwise approved by Council.

C3. For any works requiring levels within the road reserve, submit Council's Vehicular Crossing application form prior to works commencing.

Existing road frontages

C4. Where an existing road frontage is directly or indirectly involved in a subdivision, provide that road with the following (for the purposes of drainage and access):

- kerbing and guttering,
- sealed pavement to the gutter, and
- a footway and path paving formed to levels which will be supplied on application to Council.

Subdivision & new roads

C5. Where the land is zoned for the purpose of a proposed new road, Council shall not consent to a subdivision of land of which the proposed road forms part unless the subdivision makes provision for the opening of a road in reasonable conformity with the proposed road.

C6. Subdivision involving new roads shall conform to any site specific development controls for the area, showing the road network which satisfies projected district and regional travel.

C7. If Relocation of services is required, it will be at the subdivider's expense. Council will also require reconstruction of such works where the Engineer deems this necessary in respect to existing facilities.

2.2. Road geometry and Intersections

Development Controls

C1. Ensure that Road layout and geometry accords with approved standards such as the Austroads Guide to Road Design, or the Roads and Maritime Service's Guide to Traffic Engineering and supplements, and Australian Standards.

C2. .Ensure that the minimum distance from an access place or road to a collector road is 60 metres if the junction is on the same side of the road, or 40 metres if the junction is staggered on opposite sides of the road. See Figure 6.

C3. Ensure that intersections are T-junctions and/or roundabouts. See Figure 6.

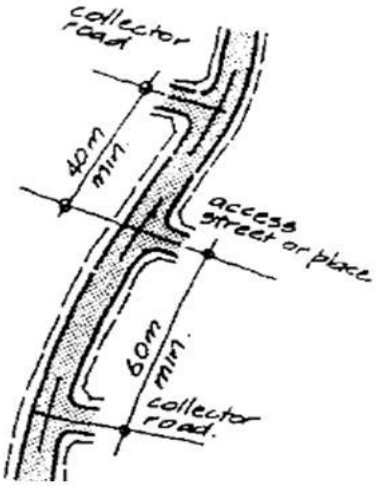


Figure 6

2.3. Road Design and Construction within Industrial Zones

Development Controls

C1. Ensure that new roads are constructed with kerb and gutter and are sealed from gutter to gutter. Construction is to be of a standard not less than Council's standard specification for heavy duty roads.

C2. Ensure that the minimum width of carriageway plus verge is 20 metre wide with 12 metre carriageway and 4 metre verges .The construction of 1.2 metre wide concrete footpaths will be required.

Note: Complete standard specifications for road and drainage works may be purchased or inspected at the Council Chambers.

C3. Cul-de-sac roads will only be accepted where surrounding land has been fully developed, or where the site specific controls for the area provide for cul-de-sac roads.

C4. Ensure that cul-de-sac roads have an 18 metres radius turning circle with 18 metres radius reverse curves on boundary alignments. See Figure 7.

C5. Provide a higher strength pavement for cul-de-sacs at intersections in industrial areas. Generally a minimum of 1 metre clearance is required.

2.4. Vehicular Crossings, Splay Corners, & Kerb and Guttering

Objectives

O1. To enable a person using the road to have access to the land on the other side of the footpath or channel.

O2. To provide road reserves consistent with their function within the road and pedestrian network, having regard to their safety, visual impact and amenity of local areas.

Development Controls

C1. Construct all works in accordance with Council's Vehicular Crossing Policy.

C2. Construct a plain concrete (not patterned or coloured) vehicle crossing at each vehicle entrance/exit to the property, to specifications found in Council's Vehicular Crossing Policy.

C3. Where a vehicular crossing exists and is in poor condition or is damaged during construction/ demolition or does not comply with Council requirements, Council require it to be fully reconstructed at no cost to Council. Where levels are changed as a result of development, the developer shall reconstruct the adjacent road pavement to suit the new levels.

C4. Fully reinstate the road shoulder adjoining newly constructed vehicular crossings to the satisfaction and/or requirements of Council's Engineer.

C5. For safety reasons, access to a property from a public road must clearly avoid items such as sewer vents, service poles, existing trees, street construction, light standards, telecommunications areas, stormwater pits, pedestrian crossings, pram ramps and the like, transformer units and the like which may be located in the footway area, unless the applicant is able to make arrangements for the relocation of equipment not owned by Council at no expense to Council.

C6. Maintain pedestrian safety by minimising potential pedestrian and vehicular conflicts through:

- Limiting the width and number of vehicle access points,
- ensuring clear site lines at pedestrian and vehicle crossings,
- utilising traffic calming devices, and
- separating and clearly distinguishing between pedestrian and vehicular accessways.

C7. Ensure adequate separation distances between vehicular entries and street intersections. For corner allotments, vehicular crossings must be no closer than 6 metres from the tangent point of the kerb at the intersection.

C8. Optimise the opportunities for active street frontages and streetscape design by:

- making vehicle access points as narrow as possible
- consolidating vehicle access within sites under single body corporate ownership
- locating car park entry and access from secondary streets and lanes.

C9. Where not already provided, splay corners are to be dedicated in road reserves at intersections as follows:

- Commercial subdivision 4m x 4m

- Industrial subdivision 6m x 6m
- Residential Subdivision 3m x 3m.

C10. As a condition of consent with all development applications, construct kerb, guttering and associated works along the street frontage(s) where no kerb and guttering currently exist.

C11. For development in R3, R4 and business zones, reconstruction of kerb and gutter where it is in poor condition will be required.

C12. Where kerb and guttering are damaged during construction/demolition, Council requires them to be fully reconstructed in accordance with Council's Engineer's requirements and at no cost to Council.

C13. Where kerb and gutter levels are changed as a result of development, the developer shall reconstruct the adjacent road pavement to suit the new levels. Council will require lodgement of a cash bond or a bank guarantee against satisfactory completion of these works. The amount of such bond will be determined at the development application stage and paid prior to the release of the construction certificate.

Note: Existing footpaving, kerb, gutter and the like is considered to be in "poor condition" where at least one of the following is observed: -

- The existing shows signs of failure with exposed (visible) aggregate within the concrete, cracking and/or level difference that creates or has potential to create a trip hazard;
- The kerb and gutter has rotated (tilted) and/or levels have changed which can result in stormwater ponding within the gutter;
- The existing footpath, kerb and gutter are not in accordance with Council's current standard, e.g. 150 kerb with monolithic gutter;
- The crossfall of the adjoining roadway is excessive. Generally 3% to 5% is considered acceptable within urban areas. Adjustment of the kerb and gutter level is necessary to reduce the crossfall, providing adequate vehicle ingress and egress and reduce the potential for a standard vehicle to scrape, and consideration of stormwater requirements;
- Excavation and installation of electrical conduit is required as part of the development within the footpath area in accordance with the relevant authority requirements;
- Removal of existing redundant vehicular crossings and construction of new vehicular crossings in different locations as part of the development. This will result in new and old sections which may be difficult to construct, can create a poor finish to the project, result in higher maintenance costs and can be difficult to construct without impacting on the adjoining existing asset.

2.5. Concrete Footpath Paving & Underground Ducts

Development Controls

C1. For all new development within R3, R4 and business zones, construct a concrete footpath of a minimum 1.2m width and associated works along the street frontage(s) and in specific locations consist of the following widths:

- R3 Medium Density Residential zone - 1.2 metres
- R4 High Density Residential zone - 1.5 metres

- Business zones (except where a contribution towards public domain improvements is required) - 2.5 metres

Note: Existing concrete footpaths which are in poor condition or were damaged during construction/demolition are to be fully reconstructed in accordance with Council's Engineer's requirements at no cost to Council. Council will require lodgement of a cash bond or a bank guarantee against satisfactory completion of these works. The amount of such bond will be determined at the development application stage and paid prior to the release of the construction certificate.

Note: Make satisfactory arrangements with the relevant electricity supply authority for the installation of underground ducts in the footpath area, prior to the construction of any concrete works on the footpath.

2.6. Kerb (Pram) Ramps

Development Controls

C1. In the case of new corner developments in business zones (except where a contribution towards public domain improvements is required), the construction of kerb ramp/s and associated works at road intersections is required.

Note: Existing kerb (pram) ramps which are in poor condition or were damaged during construction/demolition are to be fully reconstructed in accordance with Council's Engineer's requirements at no cost to Council

C2. Where kerb and guttering levels are proposed to change, the developer shall reconstruct the adjacent road pavement to suit the new levels.

Note: Council will require lodgement of a cash bond or a bank guarantee against satisfactory completion of these works. The amount of such bond will be determined at the development application stage and paid prior to the release of the construction certificate.

2.7. Guidelines For Road Widenings, Road Closures And Splay Corners in and Adjacent To Residential R4 Zones

The increase in population associated with higher density development makes it necessary for wider carriageways and footpaths to cater for the increase in vehicular and pedestrian traffic. Therefore, to achieve a more consistent road width and a more efficient road system, Council requires in those areas of higher density development, that a strip of land be dedicated for road widening.

Objectives

O1. To provide controls for road widening, road closures and splay corners.

O2. To achieve a more consistent carriageway width along the length of nominated roads.

O3. To achieve a more efficient road system in those areas of higher density development associated with the increase in population.

O4. To provide wider carriageways and footpaths to cater for the increase in vehicular and pedestrian traffic.

O5. Within the 'no development' strip located at the rear of the properties between Tottenham Lane and High Street, Granville (shown on Appendix K)

a) to make the laneway a safer place;
b) to create passive supervision;
c) to improve landscaping; and
d) to minimise opportunities for graffiti and vandalism.

Development Controls

Plans

C1. Plans for development applications must show any road widenings, splay corners, road closures and/or "No Development Strips" that are required by the provisions of this development control plan. This applies where:

a) the property is identified in Appendix K of this section; and
b) the property is not a single dwelling house.

C2. Applicants should note that this provision also applies to development for commercial purposes on land zoned Business, in accordance with Part C of this DCP.

Road Widening

C3. 1.5m of land shall be dedicated for road widening and/or footpath widening in areas where wider carriageways and footpaths are necessary to cater for the increase in vehicular and pedestrian traffic, as identified in Appendix K.

C4. The developer must meet the cost of constructing the widened road pavement, kerb and gutter and foot paving on the new alignment in accordance with the provisions of this plan.

Splay Corners

C5. In accordance with Appendix K showing where splay corners must be provided, the developer must construct and dedicate to Council any splay corner thus identified.

Road Closures

C6. Maps 1 and 4 Appendix K show where road closures will be constructed by Holroyd City Council. Council will maintain access to existing developments after the road closures have taken place.

C7. All new developments will not be permitted to use the roads proposed to be closed by the provisions of this plan for access to their land. Access to these sites must be off another road.

'No Development' Strip

C8. The 'no development' strip is located at the rear of the properties between Tottenham Lane and High Street, shown in Appendix K. The 'no development' strip is to start from the rear of the lots, and be a strip of land 4 metres wide. Landscape this land and keep it free from any structures.

C9. Locate decorative tubular pool style fencing that stands a minimum of 1.5 metres on the boundary of the laneway. Existing conditions are permitted, but the no development strip must be implemented for any future development to be approved.

Rear Access Laneway between High Street and Tottenham Lane

C10. Existing access from the laneway to lots will be continued. Access from the laneway to new developments will be prohibited, with access being from either Raymond Street, High Street, Junction Street or Tottenham Lane.

Land Fronting Parkside Lane, Westmead

C11. On those properties (Appendix K) subject to 6.0 metres of road widening, Council will require a minimum 4.0 metre setback to Parkside Lane. This setback distance shall be measures from behind the line of the required road widening as if the area of road widening had already been taken.

Implementation

C12. Carry out the construction of the road widening when:

- **a)** Affected sites are developed for any purpose other than for a single dwelling house.
- **b)** Affected sites containing an existing use, other than a single dwelling house, is the subject of an application for further development.
- **c)** Affected sites are the subject of an application for subdivision or strata subdivision.

C13. Complete the works required under this Development Control Plan prior to the release of an occupation certificate by Council.

C14. In the case of all sites, other than those used, or to be used, for a single dwelling house, show the required works on any strata or subdivision plan submitted to Council for approval. Council will hold a bond on the dedication of the subject land.

Andrew Place, Girraween

C15. 0.5m of land as shown in Figure 10 of Appendix K is to be dedicated to Council for the purposes of road widening.

C16. A 10m wide accessway shall be provided between Andrew Place and Targo Road as indicated in Figure 10. Amalgamation of 155, 153A Targo Road and 18-20 Andrew Place (as indicated in Figure 10) is required in order to achieve the accessway.

C17. Development within the amalgamated lots shall be orientated to address all road frontages including Targo Road, Andrew Place and the proposed accessway.

Land Fronting Church Street, Granville

C18. 5m of land as shown in Figure 11of Appendix K is to be dedicated to Council for the purposes of road widening.

Greystanes Shopping Centre

C19. A 9m wide easement for the purposes of a public thoroughfare shall be provided in accordance with Figure 12 of Appendix K.

3. Car Parking

3.1. Minimum Parking Spaces

Objectives

O1. To ensure that adequate and convenient off-street parking facilities are provided for all vehicles generated by the various types of development.

O2. To ensure that off-street parking facilities do not interfere with traffic flow and safety in adjacent streets or endanger pedestrian traffic on or off the site.

O3. To limit traffic generation associated with private vehicle use, in order to encourage public transport, walking and cycling, as alternative forms of transport, where possible.

Development Controls

C1. Parking spaces shall be provided in compliance with Council's minimum car parking spaces requirements as set out in Table 3.1.

C2. Parking rates for commercial and other non-residential land uses may be provided off-site with payment of a local parking contribution where a Section 94 development contributions plan makes provision for such contributions.

C3. Notwithstanding the above provision, a minimum parking rate of 20% and maximum of 70% must be provided on-site.

Note:

- State Environmental Planning Policy 59 may apply in some instances.
- Site specific parking rates as indicated in Part G may apply.
- Where circumstances warrant, such as for Major Parking Generators for example, Council may seek higher standards.
- If applicants are of the opinion that in the circumstances of the proposed development, the full car parking requirement is not necessary, or will not be required when the use of the building commences, Council may reduce the requirement for parking or may defer the provision of some of the car parking. In the latter case, Council may permit a portion of the car parking area to be used for an alternative purpose or may require the area to be landscaped.
- Holroyd Local Environmental Plan 2013 may apply in relation to parking rates for Heritage Items.
- All calculations for parking rates shall be rounded up.
- Controls permitted S94 contributions for future public parking do not apply until a S94 plan permits such contributions.

General Controls

Residential			
Use	**Measure**	**Minimum Spaces Required**	**Maximum Spaces Required**
Attached dwellings and Small lot dwelling houses (<300m^2 or 8m or less width)	Per dwelling	1	2 (max. 1 covered)
Dwelling houses (other than on small lots), semi detached dwellings, dual occupancies.	Per dwelling	2 (min. 1 covered)	n/a
Multi dwelling housing	Bedroom per dwelling: Studio / 1 bedroom	1	1.5
	2 bedroom	1	2
	3 bedroom	1.2	2
	4+ bedroom	1.5	2
	Visitor / dwelling	0.2	0.5
Residential flat buildings, dwellings in B1, B2 and B6 business zones (including shop top housing)	Bedroom per dwelling: Studio / 1 bedroom	0.8	1
	2 bedroom	1	1.5
	3 bedroom	1.2	2
	4+ bedroom	1.5	2
	Visitor / dwelling	0.2	0.5
Dwellings in mixed use development in B4 Mixed Use zone (including shop top housing)	Bedroom per dwelling: Studio / 1 bedroom	0.8	1
	2 bedroom	1	1.2
	3 bedroom	1	1.2
	4+ bedroom	1.2	1.5
	Visitor / dwelling	0.2	0.2
Secondary dwellings ("Granny Flats")	Additional parking spaces	None required	n/a

Self-contained dwellings and "hostels" for aged and disabled persons (excluding Residential Care Facilities)		Refer to State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004	
"Residential Care Facilities" As defined by the SEPP (Housing for Seniors or People with a Disability) 2004 (use for "Nursing and Convalescent Homes")			
Group Homes and "hostels "		Refer to State Environmental Planning Policy (Affordable Rental Housing) 2009	
Bed and Breakfast Accommodation	Off-street spaces per guest bedroom	1 (provided behind the building line)	n/a
Private Hotels	spaces per bedrooms,	1 per 2	n/a
	+ spaces per resident manager,	+ 1	
	+spaces per employees.	+ 1 per 2	

Motels / Hotel Accommodation in B4 Merrylands zone [not "Pub"] and B2 (Wentworthville, Pendle Hill, Toongabbie & Guildford) zone.	spaces per unit	1	n/a
	+ spaces per employees	1 per 2	
Motels / Hotel Accommodation in all other areas.	spaces per unit	1	n/a
	+ spaces per employees	+ 1 per 2	

Retail & Commercial			
Use	**Measure**	**Minimum Spaces Required**	**Maximum Spaces Required**
Commercial (including retail premises, business premises and office premises) - B4 zone	Ground Floor Leasable GFA	1 per 50m^2	1 per 15m^2
	Above Ground Floor Leasable GFA		
Commercial (including retail premises, business premises and office premises) - B2 zones in: * Wentworthville * Pendle Hill * Toongabbie * Guildford	Ground Floor - Leasable GFA	1 per 20m^2	1 per 15m^2
	Above Ground Floor - Leasable GFA	1 per 40m^2	1 per 20m^2
Commercial (including retail premises, business premises and office premises) in all other B1, B2 and B6 zoned areas	Ground Floor - Leasable GFA	1 per 20m^2	1 per 10m^2
	Above Ground Floor - Leasable GFA	1 per 40m^2	1 per 15m^2
Neighbourhood shop	leasable GFA	1 space per 30m^2	n/a
Bulky goods premises (in B5 zones) + Open yard activities/ storage (including "Timber and building supplies " + "Landscape and garden supplies") + Hire Centres	GFA, or	1 per 50m^2, or	n/a
	Spaces per employees,	1 per 2, whichever is the greater	
	+ space per open yard area	+ 1 per 140m^2	

Retail & Commercial continued			
Use	**Measure**	**Minimum Spaces Required**	**Maximum Spaces Required**
Food and drink premises and registered clubs in B1, B2, B6 and R4 zones:	GFA	1 per 10m²	n/a
Upon demonstration to Council that the restaurant will have its main patronage outside of normal business hours and that there is existing parking in the vicinity, consideration may be given to reducing the above requirement. (For major developments with a mixture of uses, overlapping parking demands may be considered.)			
Food and drink premises (including Restaurants, Take away food and drink premises and Pubs) in all zones other than B1, B2, B4, B6 and R4)	GFA	1 per 8m²	n/a
Pubs and Registered Clubs in B4 zones	GFA	1 per 25m²	n/a
Upon demonstration to Council that the pub, tavern or licensed club will have its main patronage outside of normal business hours and that there is existing parking in the vicinity, consideration may be given to reducing the above requirement. (For major developments with a mixture of uses, overlapping parking demands may be considered.)			
Health consulting rooms (in residential area)	per surgery, specialist room, etc	3 (min. 1 disabled)	n/a
Medical centre	GFA	1 per 25m²	
Note: disabled parking at medical centres is at the discretion of Council, (above the minimum elsewhere of 2 spaces per 100 visitor or customer spaces up to 400 spaces, and 1 per 100 thereafter, or part thereof).			
Sex Services Premises	space per employee on the premises	1 per 2 (1 suitable for disabled)	n/a

Automotive			
Use	**Measure**	**Minimum Spaces Required**	**Maximum Spaces Required**
Car Wash Facility (machine and hand wash)	per automatic bay, or	5 (to allow for queuing)	n/a
	per GFA hand-wash bays or where vacuum facilities are available		
	+ per staff member	+ 1	
Service Station	per work bay (in vehicle workshop)	6	n/a
Convenience Store	GFA	1 per 20m²	n/a
Vehicle repair stations, vehicle body repair workshop	per work bay	3	n/a
	+ GFA of offices	+ 1per 40 m²	
Spare parts/accessories sales	GFA	1 per 20m²	n/a

Battery, tyre, muffler service	per work bay	3	n/a
	+ GFA of offices	+ 1 per 40 m^2.	
Vehicle showroom , and new and used car sales yard (called "Vehicle sales or hire premises "	GFA of display area	1 per 140m^2	n/a
	+ space per employees.	+ 1 per 2 employees	

Entertainment and Recreation			
Use	**Measure**	**Minimum Spaces Required**	**Maximum Spaces Required**
Function centres	per guest	0.25	n/a
	+ per employees	+ 1 per 2	
	+ GFA of office	+ 1 per 40m^2	
Squash Courts	spaces per court	2	n/a
Tennis Courts	spaces per court	2	n/a
Bowling Alley	spaces per alley	2	n/a
Indoor Cricket	spaces per pitch	15	n/a
Lawn Bowling Greens	spaces for the first green	30	n/a
	spaces for additional greens	+ 15 for each	
Gymnasium and Fitness Centre*	GFA	7 per 100m^2	n/a
*Applies whether the Centre is a separate development or in conjunction with other recreational facilities.			
Entertainment Facilities (Theatres, Cinemas, Concert Halls, Public Halls, places of assembly)	per seats	1 per 6 (based on the maximum accommodation allowed under any licensing requirement)	n/a
Recreation Facilities Major**	GFA of assembly area, or	1 per 10m2 or	n/a
	space per seats	1 per 6 seats, whichever is greater	
**Recreation Facilities Major applies to sports stadiums, showgrounds, racecourses, motor racing, and the like			
Recreation Areas***	Requires a traffic study		n/a
***Recreation Areas applies to children's playgrounds, community sporting facilities, public parks, reserves, gardens, and the like			
Information and education facility****	GFA of assembly area, or	1 per 10m^2	n/a
	space per seats	1 per 6, whichever is greater	
****Information and education facility includes an art gallery, museum, library, visitor information centre and the like.			

General Controls

Industrial			
Use	**Measure**	**Minimum Spaces Required**	**Maximum Spaces Required**
Factories (including amenities)	GFA	1 per 70m²	n/a
	+ GFA of offices	+ 1 per 40m²	
Warehouses (including amenities)	GFA	1 per 300m²	
	+ GFA of offices	+ 1 per 40m²	
Note: The above figures do not apply to Yennora Distribution Centre– see Part D			
Industrial Units	GFA of each unit	1 per 70m²	n/a
Bulky goods premises	GFA or	1 per 50m² or	n/a
	space per employees	1 per 2 employees, whichever is the greater	
Open yard activities/ storage (including "Timber and building supplies ")	GFA	1 per 140m²	n/a
	+ space per employees	+ 1 per 2 employees	
Hire Centres	GFA of buildings	1 per 70m²	n/a
	+ GFA of open yards storage area	+ 1 per 140m²	

Community Uses			
Use	**Measure**	**Minimum Spaces Required**	**Maximum Spaces Required**
Hospitals	* per beds	1 per 3	n/a
	+ per resident matron	+ 1 per resident matron	
	+ per employees	+ 1 per 2 + an ambulance bay	
Note: disabled parking at hospitals is at the discretion of Council, (above the minimum elsewhere of 2 spaces per 100 visitor or customer spaces up to 400 spaces, and 1 per 100 thereafter, or part thereof).			
Schools (primary and secondary)	* per employee,	1 per 1	n/a
	+ per students	+ 1 per 100 (for visitors parking)	
	+ public areas	+ pick up and setdown area + bus bay	
Note: Numbers assume that the school has a policy of not permitting final years students to drive to school. Otherwise, a traffic study is required.			
Child Care Centres/Kindergartens/After school care facilities	per children	1 per four	n/a
	per employee (only required for child care cetres located in the R2 zone)	1 per two	
Places of Public Worship	GFA	1 per 8.5m²	n/a

Bicycle Parking

USE/LOCATION	MEASURE	MINIMUM SPACES	MAXIMUM SPACES
Ground floor - business zones	GLFA: Employee	1 per 300m^2	Unlimited
	GLFA: Visitor	1 per 2500m^2	
All first- floor business zones and all other commercial floors	GLFA: Employee	1 per 200m^2	
	GLFA: Visitor	1 per 750m^2	
Residential Flat Buildings	Unit:		
	Studio	None	
	1 bedroom	0.5	
	2 bedroom	0.5	
	3+bedrooms	0.5	
	+Visitors per unit	0.1	

3.2. Parking Design Guidelines

Objectives

O1. To ensure that parking areas are readily accessible and usable and adequately provide for circulation and manoeuvring of vehicles.

O2. To ensure that the external appearance of any car parking structure or area is of an acceptable standard and finish when viewed from the street.

Development Controls

Note: Parking design for specific land uses are addressed under those Parts of this DCP.

External Appearance

C1. Use setbacks from the front facade and landscaping to soften the impact of car parking structure or areas. Unpaved car parking will not be permitted.

Alterations and Additions

C2. Where the application involves alterations and additions to existing premises for the purpose of its existing use, base the additional car parking requirement on:

a) the net increase in gross floor area, or
b) the number of seats, or
c) beds or
d) whatever the specific requirement is for that type of development,

in addition to the original parking requirement. However, if the Council is of the opinion that the application involves the virtual reconstruction of the building, it may require the provision of car parking based on the total requirement of the development - existing plus proposed.

Change of Use

C3. Where the application involves a change of use to a purpose which would generate a greater car parking requirement than the previous purpose, in terms of this Plan, provide additional parking based on the difference between the two requirements. See also the clauses regarding changes of use involving virtual reconstruction of the building.

C4. Take into consideration the possibility of a change of use, and make due allowance for the provision of additional parking spaces when the property is developed. This applies particularly to properties where the type of occupancy could be subject to variation. Failure to provide adequate parking spaces under these circumstances could lead to the rejection of a development application for a change of use.

New Buildings

C5. New buildings shall be assessed in terms of the total parking requirement specified under this Plan. Do not calculate parking requirements based on a previous use on the land. However, Council may consider a reduction in its requirements where it is of the view that:

C6. the proposed usage is preferable to the previous use, and

a) there would be some hardship in carrying out the proposal if the full car parking

requirement were to be met, and

b) there would not be any increase in on-street parking generated by the proposal relative to the previous use of the land.

Mixture of Uses

C7. Where a development comprises several uses that require different parking spaces according to this Plan, it will be assessed as follows:

a) Where the component uses are operated concurrently (e.g. squash court/fitness centres), parking will be assessed as the sum of the requirements for each component. Where the Plan requirement for one or all of those components is based on the gross floor area, calculations shall include an appropriate proportion of any shared common or administrative area.

b) Where the component uses are not operated concurrently (e.g. markets and church halls; or indoor recreation facilities and warehouse), parking will be based on whichever of the components generates the greatest car parking requirement. The onus will be on the applicant to satisfy Council that the uses are not operated concurrently.

c) Where the main usage periods of the component uses do not coincide, Council may consider a reduction in the car parking requirement provided the total car parking is not less than that needed for the component which generates the greatest requirement. The onus will be on the applicant to satisfy Council that the main usage periods do not coincide or compete with car parking.

Major Parking Generators - Justification of Parking Proposals

C8. For applications involving major traffic generating development, such as major retail development, new hotels and licensed clubs, certain recreational uses, etc. the applicant will have to justify to Council the amount of car parking which should be provided. All such uses, identified by Schedule 3 of State Environmental Planning Policy (Infrastructure) 2007, are potentially intensive generators of car parking, and parking for the disabled. Accordingly, the level of parking generation may vary substantially. The Council will therefore require the preparation of an appropriate study or survey.

Previous Provisions of Parking Spaces

C9. Where a provision of car parking has previously been made in respect of a particular property, such provision may be taken into account when assessing the parking requirement for any redevelopment of that land.

3.3. Dimensions and Gradients

Objectives

O1. To ensure that parking areas are readily accessible and usable and adequately provide for circulation and manoeuvring of vehicles.

Development Controls

Dimensions for Car Parking Spaces

C1. A minimum parking space length of 5.5 metres applies; however longer spaces are required for parallel parking. This applies to both enclosed and open car parking spaces.

C2. A minimum parking space width of 2.4 metres applies; however the following widths also apply:

a) enclosed garages (single) - 3.0 metres with 2.8m metres minimum between door jambs;
b) where the space is also used for access to waste bins or to a courtyard (single garage)- 3.6 metres;
c) enclosed spaces (e.g. between walls/fences) - 3.0 metres;
d) double garages - 5.5 metres with 5.3m metres minimum between door jambs;
e) where the space is also used for access to waste bins or to a courtyard (double garage) - 6.1 metres.

C3. A minimum clearance height of 2.3 metres applies.

C4. Minimum widths and clearance heights for parking for the disabled shall comply with the requirements of AS2890.6-2009.

Note: The above dimensions are clear of all obstructions including columns, ducts, pipes, jambs, etc.

Aisle Widths for Open Car Parks not containing Garages

C5. For 90 Degree Parking

Space Width Metres (m)	Aisle Width Metres (m)
2.4	7.2
2.5	6.7
2.6	6.3
2.7	5.8

C6. For undercover parking consisting of garages or lockable spaces, the minimum aisle width shall be 7.0 metres.

Angle Parking

C7. For angle parking:

Minimum Dimensions (m)	Angle (Degrees)		
	30°	45°	60°
Aisle Width (Column free)	2.9	3.8	4.6
Aisle Width (with Columns)	3.3	4.3	5.3
Perpendicular Depth of Car Space	4.9	5.6	6.0

Parallel Parking

C8. For parallel parking:

Aisle Width (m)	Space Length (m)	
	Column Free	With Columns
3.0	6.3	6.6
3.3	6.1	6.4
3.6 +	5.9	6.2

Motor Cycling Parking

C9. Parking for motor cycles shall be 2.5 metres deep with a width of 1.5 metres per motor cycle, parking at 70 or 90 degrees to the kerb.

Gradients for Parking Floors

C10. Provide up to the maximum gradients for parking spaces and floors as follows. All gradients must be consistent with Australian Standard AS2890.1 - 2004 (Off Street Parking.), and in the case of any inconsistency with the figures below the Standard applies:

at 90 degrees to the angle of parking	1:16 (6.25%)
parallel to the angle of parking	1:20 (5.0%)
parking spaces for the disabled - in either direction	1:40 (2.5%)

Gradients for Ramps and Driveways

C11. Provide Gradients for Ramps and Driveways as follows:

a) Maximum gradient of 1:6 (17%).

b) Intermediate gradients are required for changes of gradient greater than 1:8 (12.5%). (For the maximum 1:6 gradient an intermediate gradient of 1:10 (10%) for 2.0 metres in length would be required).

c) Gradients adjacent to entry/exit points to be a maximum of 1:20 (5%) for the first 6 metres inside the property boundary, but for long term parking up to 25 spaces with no goods vehicles usage, this may be reduced to a maximum of 1:10 (10%) for 3 metres.

d) Where ramps and driveways are also intended to be used as part of an access route for people with disabilities from parking spaces to the premises or street, gradients are to be of a maximum of 1:14, designed in accordance with AS 1428, Parts 1 & 2.

Straight Ramps

C12. Provide the minimum dimensions for straight ramps (kerb to kerb) as follows:

one way ramps	3.5m
two way ramps	6.5m
Separator width (where provided)	0.6m
Minimum clearance from kerb to obstruction (wall column)	0.3m

Curved Ramps

C13. Provide the minimum dimensions etc for curve ramps as given in Australian Standards 2890.1-1993 Off-Street Parking.

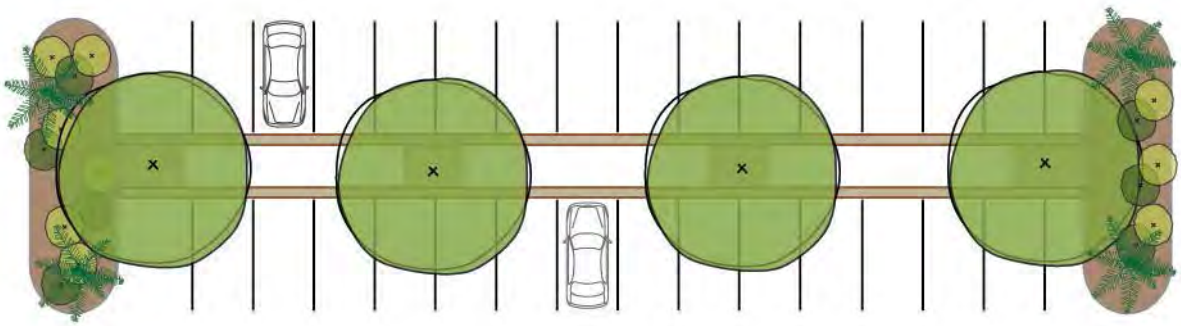


Figure 8

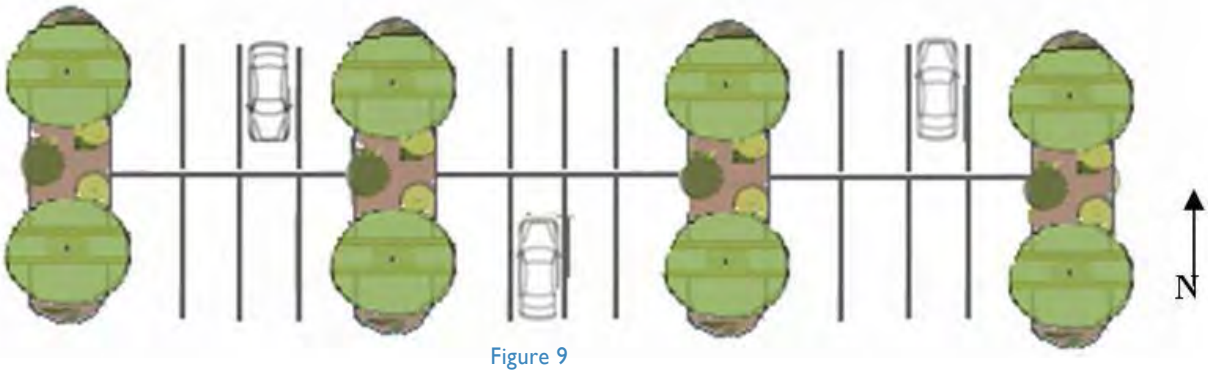


Figure 9

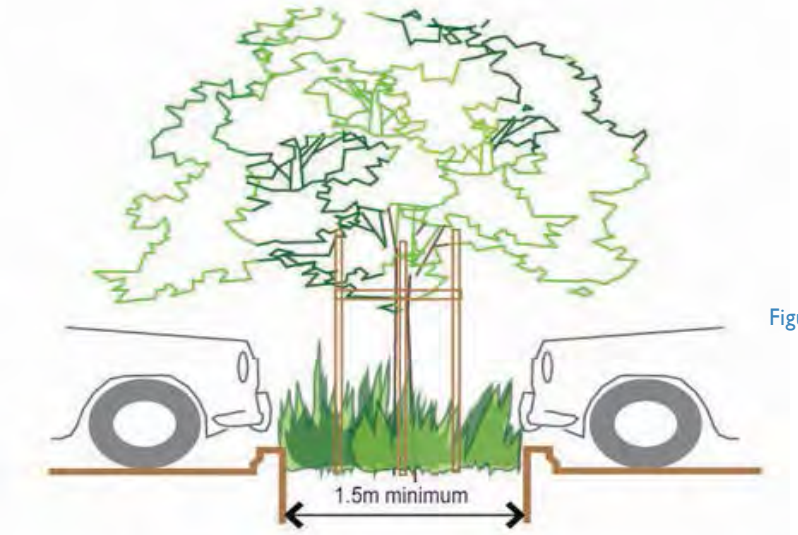


Figure 10

Preferred landscaping layout in carparks -
a central dividing planter bed and returns and end of parking bay.
Min. 1.5m wide planted with shribs and trees at the rate of
tree for every 5 car spaces

3.4. Site Works

Objectives

O1. To ensure that off-street parking facilities do not interfere with traffic flow and safety in adjacent streets or endanger pedestrian traffic on or off the site.

O2. To ensure that parking areas and associated facilities are of an acceptable appearance by imposing construction standards and landscaping requirements.

O3. To provide for adequate drainage, lighting and ventilation within car parking areas.

O4. To ensure that on-site parking is appropriately designed, treated and landscaped.

O5. To reduce the amount of hardstanding areas within an open car park and provide shade to vehicles.

Objectives

Drainage, Light, & Ventilation

C1. In all car parking areas, provide adequate drainage of surface water to Council's stormwater system, to prevent flooding of adjoining property or public footpaths. In this regard, confer with the Council's Development Engineer in the case of open car parks, and the Building Surveyor for parking within buildings.

C2. Where a car park is excavated, make provision for the drainage of runoff and seepage, and where necessary, obtain an easement over adjacent properties to facilitate this.

C3. Obtain consent, to Council's satisfaction, from downstream property owners where the easement is to be created. Consent shall be via proof of the adjoining owner's consent submitted with the development application, and will be required prior to the issue of the Development Consent.

Note: Section 6 of this Part details further drainage and stormwater requirements.

C4. Ensure covered or enclosed car parks have adequate provision for lighting and ventilation, preferably by natural means:

a) Lighting must be sufficient to allow a person to see into the back seat of a parked car.
b) Artificial lighting must be vandal resistant.
c) Council may require the provision of artificial lighting and ventilation where necessary.
d) Mechanical ventilation systems shall be installed for car parks in accordance with BCA and AS 1668 requirements .
e) Ensure mechanical ventilation of car parks minimises noise impacts in accordance with the Protection of the Environment Operations Act 1997. To this end, an acoustic report may be required by Council.

Landscaping of open car parks

C5. Adequately landscape open car parking to screen them from view of the street and other public areas.

C6. Provide a landscape strip of between 1.5 metres and 3.0 metres along the frontage to a street

or other public property. A greater landscaped strip may be required to screen multi-level car parks.

C7. Provide landscaping to all car parking areas so as to break up large expanses of paving and cars. Provide landscaping:

- around the perimeter;
- at the ends of parking bays;
- for north-south central divides, one every five (5) car spaces, set within a continuous planter bed divide (as per Figure 8 & 10);
- for east-west central divides, one every five (5) car spaces between aisles (as per Figure 2) (planter beds of 1.5 m and 3.0m long, surrounded by a 150mm concrete kerb); and
- along pedestrian access routes.

C8. Use contrasting finishes to break up large sections of paving and to delineate pedestrian areas, entries or car parks. Use porous paving wherever possible (Refer Fig. 8 & 10).

C9. Delineate parking and circulation areas by planter beds at the ends of parking bays. Ensure planter beds are a minimum width of 1.5 m and 3.0m long, surrounded by a 150mm concrete kerb and shall contain both trees and shrubs. See Figure 11.

C10. Establish and maintain such landscaping strips with appropriate planting of shrubs and shade trees.

C11. Provide a fully automatic irrigation system in all car park planter beds. Install tree root barriers around the edge of planter beds to reduce future maintenance.

C12. Submit a detailed landscape plan of the open car park as part of the Development Application, for Council's consideration and approval. The landscape plan shall:

- Be prepared by a suitably qualified person and be of a minimum scale of 1:100;
- Plant trees and shrubs in sufficient numbers and scale to ensure that they have an informal an softening effect on buildings and the overall environment;
- Ensure that any on-site stormwater detention system is complementary to and corresponds with the proposed landscape treatment;
- Screen and shade private open spaces;
- Provide privacy to occupants of neighbouring properties;
- Screen poor views;
- Be easily maintained;
- Where possible, use Australian native plants, particularly material indigenous to the area;
- Provide for street trees consistent with, and complementary to existing street trees at 6 metre centres within the footpath area at the front of the property; and
- Detail the position of existing street trees, where relevant, and show the location of street tree plantings.

Car Wash Space provision

C13. Where a car wash space is provided, minimise impervious areas by using pervious or open pavement materials. This may be turfed or gravel and should prevent contaminants from entering the stormwater system . Sydney Water prohibits hosing of hard surfaces during water restrictions.

3.5. Access, Manoeuvring and Layout

Objectives

O1. To ensure that parking areas are readily accessible, usable and adequately provide for circulation and manoeuvring of vehicles.

O2. To encourage the efficient flow of traffic through car parks to minimise the potential for pedestrian and vehicle conflict.

O3. To ensure that off-street parking facilities do not interfere with traffic flow and safety in adjacent streets or endanger pedestrian traffic on or off the site.

O4. To prohibit the use of wide and dominating access ways as they impact on the streetscape and interrupt active uses along street frontages.

O5. To locate on-site car parking so that it is convenient and accessible to the persons using it; that is, within a reasonable distance of access to the premises it serves .

O6. To locate driveways to minimise the loss of on-street car parking, and to minimise the number of access points and impact of pedestrian areas.

O7. To locate car parking and service/delivery areas to minimise their visual impact to the public domain.

O8. To locate parking and service/delivery areas to minimise conflict between pedestrians and vehicles and to minimise impact on public and residential amenity.

Development Controls

Internal Roadways

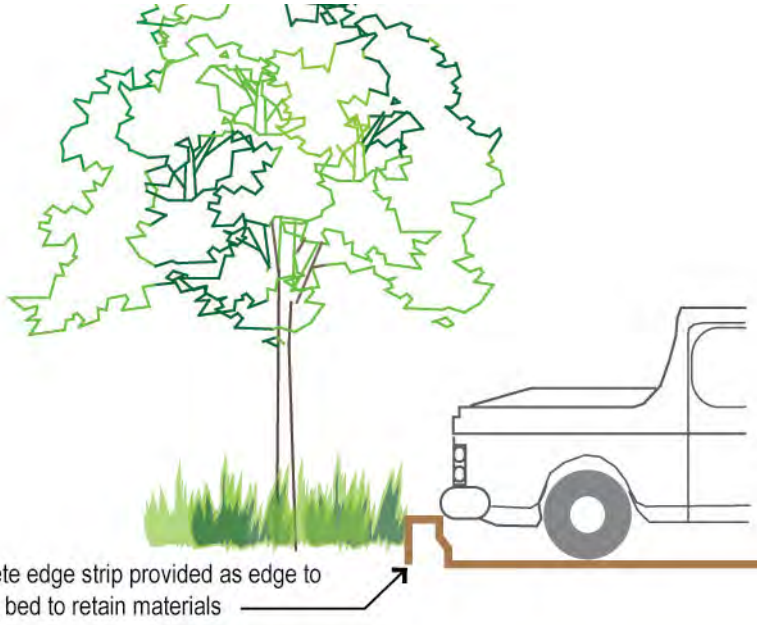
C1. The minimum width for internal roadways that access internal parking areas/structures depends on the number of parking spaces and service bays served. Provide minimum widths for two-way traffic as detailed below:

3-10 spaces	4.0m - 6.0m*
11-25 spaces length not exceeding 40 metres	4.5m - 6.5m
26-50 spaces or 0-25 spaces + service bay	5.0m - 7.0m
Over 50 spaces or 25 spaces + service bay	6.0m - 8.0m

Note:

- Consideration will be given to increasing the higher widths where high levels of heavy vehicle usage are anticipated within a development or where the development fronts an arterial or sub-arterial road.
- *In the case of residential developments of 3-10 spaces, the width for internal roadways is between 3m (plus 1m side boundary setback), and 6.0m (plus 1m side boundary setback).

C2. Passing bays shall be located every 30 metres fro long driveways sevicing 4 or more dwellings.



Wheel stops car overhang into garden beds reducing exhaust fumes and physical damage to planting. Only concrete is permissible

Figure 11

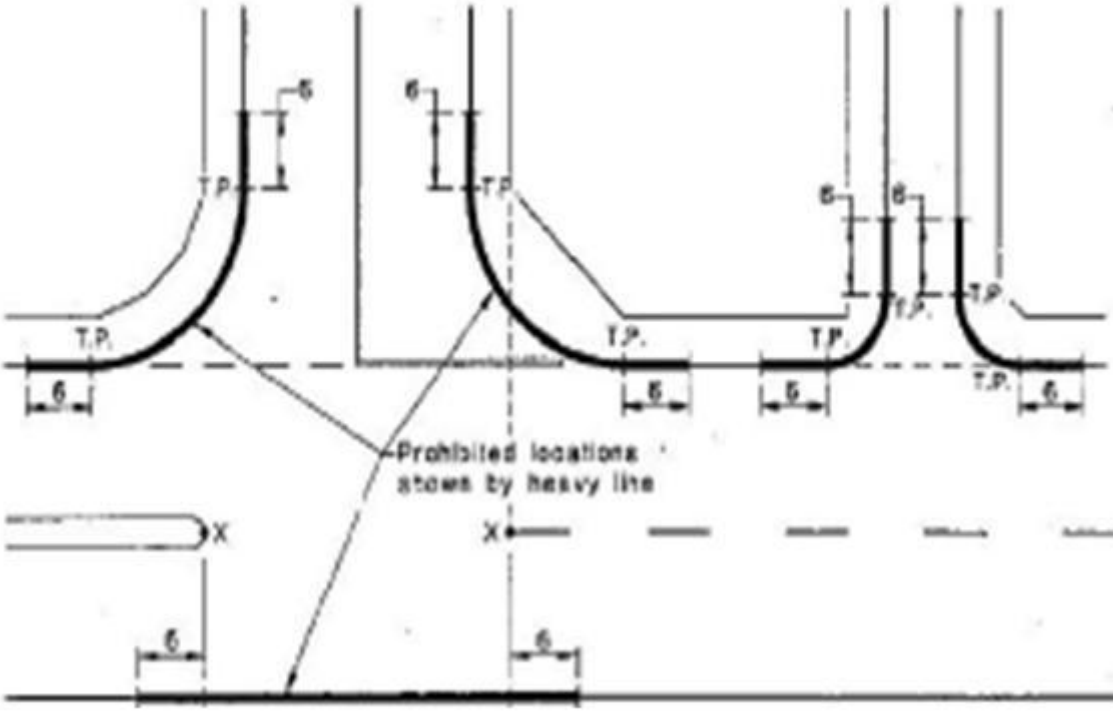


Figure 12

General Layout

C3. Design car parking areas to expedite vehicle circulation by adopting a simple layout and by minimising congestion points and the possibility of conflicting vehicle movements.

C4. Ensure that all vehicles using the car park can conveniently enter and leave the site in a forward direction.

C5. Within larger, short term car parks, adopt a one-way circulation pattern.

C6. Dead-end aisles shall not service more than 12 spaces unless a turnaround facility is provided. A manoeuvring layback is required at the end of dead-end aisles to facilitate access to the end car spaces.

C7. Locate and design driveways to avoid the following:

a) being located opposite other existing access ways with significant vehicle usage;
b) restricted sight distances;
c) on-street queuing; and
d) being located within 6m of an intersection.

Note : Consideration may be given to the provision of car parking facilities on another adjacent parcel of land if the applicant can provide a secure guarantee that such parking will be available at all times during the currency of the development.

C8. Development on arterial roads is to provide access via a secondary street or via a slip road for larger developments (i.e. development sites more than 5000m^2 in size).

C9. Car park entries are to be set back behind the building line to reduce their visual dominance, and to reinforce building articulation along street frontages (min. 1.0m).

Driveways

C10. A passing bayshall be provided every 30m for driveways servicing 4 or more dwellings to comply with Australian Standard 2890.1-2004.

C11. Provide the appropriate class of access driveway for each particular parking facility, taking into account:

a) the land use category;
b) the road frontage type; and
c) the size of the parking facility.

Note:

- For specifications for vehicular crossings, further consult Council's Vehicular Crossing Policy.
- As a general rule, low to medium turnover rates are generated by most residential, industrial and commercial uses, whereas high turnover rates are likely to be generated by entertainment, transport and retail land use.

Minimum setbacks from side property boundaries to driveways

C12. Provide as a minimum the following setbacks from side property boundaries to driveways:

Residential density	Setback from side property boundaries to driveways
Detached dwellings, dual occupancies, integrated housing & medium density development.	1.0m
Residential flat buildings & buildings where there is a commercial component	1.5m

C13. Suitably landscape the area between the driveway and property boundary.

C14. Construct the driveways of full width plain concrete (not patterned or coloured) from the kerb or layback up to the front property boundary. This ensures consistency and regularity in residential environments.

C15. Locate driveways a minimum of 6.0m from kerb return tangent points of corners (refer Figure 12).

Swept Turning Paths

C16. In restricted manouevring areas where standard turning templates cannot be used, a swept path analysis using the largest design vehicle in accordance with Austroads shall be provided.

Note: Where there is any doubt as to the suitability of manoeuvring areas, Council will assess proposed road designs based upon swept turning paths of appropriate vehicles as defined by the Roads and Maritime Service's 'Guide to Traffic Generating Developments' and 'Road Design Manual'.

Clearances

C17. The minimum permitted clear headroom within car parking areas is 2.3 metres, or as per 2.5 metres for parking spaces for the disabled.

C18. Clearance heights for each category of commercal vehicles shall be in accordance with AS2890.2.

C19. Ensure that the provision of pipes, ducts and sprinkler systems within the car park does not compromise minimum clearances.

C20. In casual parking areas, install flexible clearance striker bars at entry points.

Pedestrian Circulation

C21. Locate car parking spaces to not obstruct pedestrian access to the premises or major pedestrian routes. Within large car parks, give consideration to provision of segregated routes for major pedestrian movements.

Speed Humps

C22. Speed humps within car parks are to be in accordance with AS2890.1-2004. Where it is necessary to provide speed humps to regulate vehicle speeds on public roads, these shall be provided in accordance with Council's Local Area Traffic Management Policy.

C23. Locate proposed speed humps in detail on application plans.

Linemarking and Signposting

C24. Linemark all car parking spaces clearly. Where customer or visitor parking is provided, indicate the location of these spaces with signposting .

C25. Where a one-way circulation pattern is adopted, indicate the direction of flow by signposting and arrow markings on the surface of aisles and driveways. Segregated entries and exits are to be signposted to that effect.

C26. In large car parks, indicate the means of egress by directional signs.

C27. Signpost parking spaces for the disabled in accordance with the Australian Standard AS 1741.11 and AS 2890.1.

Note: Show the location of signs on application plans.

3.6. Parking for the Disabled

Objective

O1. To ensure that parking areas are readily accessible.

O2. To provide parking spaces that are usable for disabled people.

O3. To provide adequately for the circulation and manoeuvring of the vehicles of disabled people.

Development Controls

C1. Provide parking for the disabled at the rate of 2 spaces per 100 visitors or customer spaces up to 400 spaces, and 1 per 100 thereafter, or part thereof . Ensure compliance with Table D3.5 (Carparking spaces for people with a disability) of the Disability (Access to Premises — Buildings) Standards 2009 Act, and AS/NZS 2890. 6 - Off-street carparking for people with disabilities.

C2. Council may seek additional parking for the disabled where it is of the opinion that the development, either due to its nature or context, will generate a greater demand for disabled parking spaces than the above rates. For example, adequate parking for the disabled should be provided to service developments likely to have a high level of patronage by people with disabilities, such as hospitals, medical centres, housing for older people or people with a disability, etc.

C3. Parking for Self-contained dwellings and "hostels" for aged and disabled persons, and Residential Care Facilities must comply with requirements of the State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004. See Section 3.1 of this Part of the DCP.

C4. Disabled Parking spaces shall be located in accordance with AS 2890.6:

a) as close as possible to the entrance(s) of subject premises,

b) on a maximum floor gradient of 1:40 (2.5%) ,

c) with ramp access to the premises provided at a maximum gradient of 1:14, and

d) be signposted using standard signage in accordance with Australian Standards AS 1741.11 and AS 2890.1.

C5. For Health consulting rooms in residential areas, provide at least 1 surgery space as parking for the disabled, subject to consideration under C2 above;

C6. For Medical Centres provide sufficient parking for the disabled, above the minimum standard elsewhere (of 2 spaces per 100 visitor or customer spaces up to 400 spaces, and 1 per 100 thereafter, or part thereof);

C7. Provide a minimum clearance height of 2.5 metres for parking for the disabled;

C8. Provide a minimum clear headroom within car parking areas of 2.5 metres for parking spaces for the disabled; and

C9. The width shall be in accordance with AS2890.6-2009.

Note:

- Detail the location of parking for the disabled on application plans.

- Specific parking requirements for disabled persons are found elsewhere in this Part of the DCP under Section 3.1 above.

3.7. Referrals/Other Approvals

Note: Pursuant to Section 91 of the EP&A Act1979, some proposals constituting Integrated Development will be referred to the Roads and Maritime Service for approval under the Roads Act 1993. Where this is necessary, proposals should be supported by a traffic study prepared by a suitably qualified Traffic Engineer.

Note: In addition, under the provisions of State Environmental Planning Policy (Infrastructure) 2007, major traffic generators, particularly those on or near to major roads, will require referral to the RMS. Applicants are referred to Part 9 of the Roads and Maritime Service's 'Guide to Traffic Generating Developments'. Where a proposal is referred to either the local or regional traffic committee, applicants should provide appropriate traffic studies prepared by a suitably qualified Traffic Engineer.

4. Tree and Landscape works

4.1. Preservation of Trees

Objectives

O1. To guide the management of trees within the City of Holroyd.

O2. To conserve and retain trees and vegetation within the City of Holroyd.

O3. To provide for and retain habitats for native wildlife.

O4. To promote the retention and planting of trees.

O5. To improve air quality, prevent soil erosion and assist in improving water quality stormwater retention and energy conservation.

O6. To provide shade and shelter for residents.

O7. To enable increased privacy for development.

O8. To maintain the character of place that trees and vegetation provide to the City of Holroyd.

O9. To ensure that pruning works comply with the relevant Australian Standard, in order to maintain and improve a tree's health.

Development Controls

Note: Holroyd Local Environmental Plan 2013 applies to trees prescribed within this DCP.

C1. Prescribed trees or vegetation for the purposes of Holroyd Local Environmental Plan 2013 includes all trees and vegetation over a height of 3.6 metres (12 feet).

C2. Except where located in Pemulwuy, any tree located less than 2 metres from the external walls of an approved residential dwelling, as measured from the outside edge of the trunk at 1 metre above existing ground level, is not a prescribed tree for the purposes of Holroyd Local Environmental Plan 2013.

C3. Tree species listed in Table 1 are not prescribed trees or vegetation for the purposes of Holroyd Local Environmental Plan 2013.

C4. Tree species listing in Table 2 are not prescribed trees for the purposes of Holroyd Local Environmental Plan 2013, where located within 5 metres of the external wall of an approved residential dwelling, as measured from the outside edge of the trunk, 1 metre above existing ground level.

C5. Trees declared noxious weeds under the Noxious Weed Act 1993 are not prescribed trees or vegetation for the purposes of Holroyd Local Environmental Plan 2013.

Note:

- Tree means any woody and soft wooded perennial plant.
- Threatened Species Conservation Act 1995 may apply.
- For tree and vegetation works on heritage items, a development application must be lodged.
- External walls of approved residential dwellings shall not include carports, detached garages, verandahs or any ancillary buildings and cantilevered and pier supported structures, such as decks and balconies.

C6. For the removal of a dead tree, the provisions of Holroyd Local Environmental Plan 2013 are applicable. Applicants are required to obtain advice in writing from Council that the proposed tree removal complies with these provisions.

Note: Council may exempt or delay the need for consent for prescribed tree and vegetation removal or works in the following circumstances:

- Where a natural disaster has been declared. Council will notify residents through various channels including the media, where this is the case. Where damaged trees or branches are removed under this clause, affected parties will be required to forward both a written and photographic record of works carried out to Council.
- Emergency works and public safety: Where a real and ongoing threat to life and property exists, an application to Council may be made by telephone. Where this is not possible, an independent arborist (AQF Certificate Level 4, preferably Level 5) is required to assess the immediate hazard to life and property. This assessment will determine what emergency works are required to make the situation safe. An application for a permit/development application is to be retrospectively lodged along with a written report and photographic evidence from the independent Arborist for Councils' assessment.

Tree Assessment

C7. Matters such as the following are to be considered in the assessment of a tree application:

- Health and condition of tree/s
- Potential hazard/s
- Significant property damage
- Significant poor amenity
- Prominence as part of the streetscape.
- Cultural significance.
- Significant as a visual screen.
- Importance to habitat and wildlife.
- The significance of species.

Note: The following are not considered as substantive criteria for tree removal:

- Flower, leaf or fruit fall causing nuisance, to reduce fruit, resin or bird/bat droppings on vehicles or insect or animal 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.
- Dropping of deadwood.
- A tree being too large or high.
- To increase direct sunlight onto solar panels or pool heating apparatus.

Note: Supporting documentation provided with a tree works application, in the form of an Arborist report (Australian Qualifications Framework (AQF) level 5) or any other relevant supporting information prepared by

suitably qualified persons will be considered by Council in its assessment.

Note: It is often difficult to expect applicants to understand what solution to apply to improve a tree's health or rectify a tree's impacts on their property. Council staff may provide more concise information to applicants with an on site inspection of the subject tree/s.

Note: Council may provide alternative solutions for the rectification of tree related issues in lieu of permitting tree removal.

Note: Council may refuse an application for tree removal, but provide consent for appropriate pruning works to a tree or vegetation.

Note: Council will generally require the planting of native replacement trees where approval for tree removal is granted.

Pruning

Note: Pruning works are to be carried out by a minimum AQF Certificate Level 2 arborist after assessment by an AQF Level 3 arborist.

C8. All pruning works, whether exempt or requiring consent, shall comply with Australian Standard 4373-2007 – Pruning of Amenity Trees.

C9. The following pruning works are exempt from requiring consent:

- The pruning of deadwood or dead palm fronds, and vegetation overhanging pedestrian walkways or driveways to a height of 2.4m above the walkway as per clause 7.2.2 of AS4373-2007 to a maximum branch diameter of 150mm.
- The pruning of deadwood as per clause 7.2.2 of AS4373-2007 to a maximum diameter of 150mm.

C10. The following pruning works are exempt from requiring consent, where the branch size is no greater than 50mm in diameter at the branch union, where pruned in compliance with AS4373-2007:

- 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 1 metre from the main electrical powerlines to an approved building.

C11. Other than those exempt pruning works above, the following pruning works as defined under clauses 7.2 and 7.3 of AS4373-2007 require consent:

- Crown thinning and lifting, selective pruning, formative pruning, reduction pruning, and remedial (restorative) pruning.

4.2. Development Works including existing trees and landscaping

Objectives

O1. To guide the management of trees in the City of Holroyd.

O2. To conserve and retain trees and vegetation within the City of Holroyd.

O3. To provide for and retain habitats for native wildlife.

O4. To promote the retention and planting of trees within new developments.

O5. To improve air quality, prevent soil erosion and assist in improving water quality stormwater retention and energy conservation.

O6. To promote the many benefits of trees such as provision shade, cooling of hard surfaces and increase privacy

O7. To maintain the character of place that trees and vegetation provide to the City of Holroyd.

O8. To encourage the retention of healthy and structurally sound trees.

O9. To ensure a high standard of environmental quality for developments

O10. To enhance the streetscape and amenity for the city of Holroyd.

O11. To ensure the longevity of landscape works by providing essential soil conditions that promote healthy plant growth.

O12. To consider the location and species of new tree plantings in order to minimise the potential impact on buildings in the vicinity.

Development Controls

Tree Management and Proposed Development

Note:

- Applicants are encouraged to obtain pre-development application (Pre-DA) advice regarding tree management and preservation on development sites. Approval for tree removal will not be granted through pre-DA advice.
- Pre-DA advice provided by Council shall inform the preparation and design of development and shall be submitted as a supporting document with the development application.
- Where trees are located on a development site and pre-DA advice has not been sought, applicants are required to submit a report from a suitably experienced independent arborist (AQF Level 5) with a development application.
- All existing trees and other vegetation above 3.6 metres in height on, overhanging and within 5 metres of the subject site and any associated works e.g. easements, are to be shown accurately on a survey plan prepared by a registered surveyor to AHD. The trees are to be shown in terms of trunk location at ground level and canopy spread. The reduced level at the base of the tree, trunk diameter, measured 1.4 metres above ground level and tree height are also to be shown. The trees and other vegetation surveyed are also to be shown whether they will be retained/removed on all other relevant plans.
- Applicants should be aware of the requirements set out under Section 4.1 of this Part.

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 identified through Council's Tree Retention Assessment in Appendix J as having medium to high retention values, with adequate setbacks to any works and protection measures stipulated in accordance with AS4970-2009 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. Vehicular driveways shall be located a minimum of 3 metres from the outside edge of the trunk measured 1 metre above the existing ground level of any street tree to be retained.

C5. Development shall not impact trees on public land.

C6. Trees identified as having moderate to significant retention value, as assessed in accordance with Council's tree retention assessment in Appendix J should be retained with adequate setbacks to any development works to ensure their long term survival.

C7. Notwithstanding the above, Council may decide not to consent to the removal of a prescribed tree or vegetation where:

- The tree is, or helps form, a prominent part of the streetscape, or
- Has cultural/heritage significance, or
- Provides a significant visual screen, or
- Is an important habitat for wildlife, or
- The tree is within a remnant or riparian vegetation.

Note: Council may consider concessions to the standards contained within this development control plan in order to encourage the retention of suitable existing trees.

C8. Council may require a Tree Management Plan (TMP) to be prepared by a consulting arborist (AQF Level 5) in accordance with Australian Standard 4970-2009 – Protection of Trees on Development Sites, and submitted with development proposals where existing trees are to be retained.

Required Landscaping Works

- Controls for specific landscape requirements for each development type are contained within all parts of this DCP.

C9. Where a landscape plan is required, it shall be prepared by a Landscape Architect/Designer. The landscape plan shall be prepared at a minimum scale of 1:100, be fully documented and show sufficient detail to enable construction.

C10. Provide landscaping that enhances 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.

C11. Street trees shall be provided in appropriate locations in accordance with Council's guidelines for all new development at a rate of 1 tree per 6 metres of street frontage and from a minimum container size of 45 litres.

C12. Where trees are to be planted, consideration should be given to the species type, height and size of the tree at maturity and to the distance of the tree to any structures including

stormwater pits and services such as overhead powerlines and underground pipework.

Landscape specifications

C13. Proposed landscaping shall incorporate environmentally sustainable principles (ESD) through species selection, minimal water usage, irrigation methods/schemes, soil and mulch types and the use of composting and recycling.

C14. Planting shall incorporate native Australian plants, particularly species indigenous to the Holroyd Local Government Area. A list of preferred plant species is available from Council.

C15. 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.

C16. 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.

C17. All landscape works on structures including planter boxes and roof gardens shall provide the minimum soil depths as stated below:

	Min. Soil Depth	Min. Soil Volume
Turfed areas	100-300mm	
Ground cover	300-450mm	
Shrubs	500-600mm	
Small Trees (Canopy up to 4m)	800mm	9m^3
Medium Tree (Canopy up to 8m)	1m	35m^3
Large Tree (Canopy up to 16m)	1.3m	150m^3

C18. Suitable mulch such as native hardwood mulch is to be provided to all garden areas to a depth of 75mm (pine bark is not considered a suitable mulch). Where garden beds extend to OSD basins, a non-floatable decorative mulch is to be used.

During Construction

C19. Council may require an independent consulting arborist (AQF 5) to supervise and certify all works adjacent to trees that are required to be retained.

C20. 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.

C21. Unless specifically authorized in writing by Council, no activities are permitted within the TPZ.

After Construction

C22. 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.

Table 1 Exempt Trees/Vegetation Species

Botanical Name	Common Name
Acacia baileyana	Cootamundra Wattle
Ailanthus altissima	Tree of Heaven
Alnus jorullensis	Evergreen Alder
Bambusa spp.	Bamboo
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
Ligustrum lucidum	Broad leaf privet
Ligustrum sinense	Small leaf privet
Malus spp.	Apples
Morus spp.	Mulberry
Olea africana	African Olive
Olea spp.	Edible olives
Populus spp.	Poplar
Prunus spp.	Peaches, Plums, Apricots etc
Pyracantha augustifolia	Firethorn
Pyrus spp.	Edible pears
Ricinus connunis	Castor Oil Plant
Robinia pseudoacacia	False Acacia
Salix babylonica	Willow
Schefflera actinophylla	Umbrella tree
Schinus terebinthifolius	Brazilian Mastic Tree
Syagrus romanzoffianum	Cocos palms
Toxicodendron succedaneum	Rhus tree

* Trees/vegetation declared weeds under the Noxious Weeds Act 1993 are also exempt

Table 2 Exempt Tree- 5 metre rule

Liquidambar styraciflua	Liquidambar

5. Biodiversity

The Holroyd LEP 2013 provides for the protection of land that is environmentally sensitive or has high scenic value from adverse development. Such land is identified as:

(a) environmentally sensitive land identified on the Environmentally Sensitive Land Map, and

(b) all land within the E2 Environmental Conservation zones.

This element applies to the environmentally sensitive land identified above, and to any other land within the Holroyd LGA containing threatened species, populations or ecological communities or their habitats (as listed in the TSC Act 1995).

Objectives

O1. To form habitat areas for wildlife.

O2. To minimise water use.

O3. To consider the likely effect of a proposed development on the condition, extent and long term viability of any threatened or significant vegetation within Holroyd.

O4. To consider the possible impact of the development on any habitat or wildlife corridor.

O5. To consider any feasible alternatives to the development that are likely to be of lesser effect and the reasons justifying the carrying out of the development in the manner proposed, taking into account biophysical, economic and social considerations and the principles of ecologically sustainable development.

O6. To promote measures to mitigate any adverse effects of the proposed development on the species, populations or ecological communities.

Development Controls

Threatened Species – Assessment of Significance

Note: Where proposed development sites have remnant indigenous vegetation, designers must be aware of the NSW Threatened Species Conservation Act 1995 (TSC Act) and check whether any of the plant species, populations or vegetation communities on the proposed development site are listed as threatened. In addition, landscape designers must check to see if the remnant indigenous vegetation is a habitat to any threatened fauna.

C1. A Flora and Fauna Assessment: If there is remnant vegetation on the site, submit to Council a Flora and Fauna Assessment, (in accordance with Section 5A of the EP&A Act 1979 and Section 94 of the TSC Act). This will enable Council to determine whether the proposed development is likely to have a significant effect on threatened species, populations or ecological communities or their habitats (as listed in the TSC Act 1995). This will need to be prepared by an appropriately qualified ecologist.

C2. A Species Impact Statement: If Council subsequently determines from the above Assessment that a significant effect on threatened species is likely, Council will request the submission of a Species Impact Statement, (in accordance with the requirements of the EP&A Act). Approval may also be required under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act). Please contact Council for further information on the TSC Act, and the Federal Department of the Environment, Water, Heritage and the Arts or its replacement for information regarding possible approvals under the EPBC Act.

C3. Select indigenous plant species suitable for the predominantly clay soils and climatic conditions of the Holroyd City Council area. Suitable species lists may be available from Council.

C4. Select a mix of planting types. This involves a variety of structures, incorporating trees and shrubs of various sizes, grasses, groundcovers and climbers.

C5. Select species which minimise water use.

6. Soil Management

6.1. Cut & Fill and Retaining Walls

Objectives

O1. To minimise the amount of cut and fill and therefore disruption to natural drainage patterns.

O2. To maintain the free passage of overland dstormwater flow.

O3. To allow buildings to follow the natural topography of the land, as much as possible, to minimise the need for cut and fill

O4. To minimise soil loss through effective site management practices in order to reduce the impact of sedimentation on downstream waterways and drainage systems .

O5. To maintain privacy for adjoining residents .

O6. To reduce the bulk and scale of dwellings.

O7. To prevent movement of soil in association with the erection or demolition of a dwelling.

Development Controls

C1. Carry out no fill except with the approval of Council.

Note:

- State Environmental Planning Policy (Exempt and Complying Development Codes) 2008, may apply in some instances.
- Specific cut and fill requirements for residential development are location in Part B of this DCP.

C2. Do not place fill over stormwater easements.

C3. On sloping sides, cut and fill should be balanced.

C4. Cut and fill shall not reduce the privacy of adjacent land uses.

C5. Development is to be designed and constructed where possible to integrate with the natural topography of the site.

C6. Soil loss from development is to be minimised through effective site management practices that reduce the impact of sedimentation on downstream waterways and drainage systems and that minimise windblown soil loss.

C7. Validate all fill imported on to the site to ensure it is suitable for the proposed land use from a contamination perspective Contaminated Lands Policy.

C8. Contaminated fill, either imported or existing, is not permitted.

C9. Show the location of any retaining walls plus the heights of the tops and bottoms of walls on all landscape plans.

C10. Limit the height of retaining walls associated with dwellings generally to no more than 1m.

C11. Submit engineering details with the development application if a retaining wall is more than 1m in height.

C12. Limit the overall height of the wall and fence to no more than 2.2m from ground level on the

lower side, where a fence is erected on a supporting retaining wall associated with dwellings.

C13. Maintain access to drainage easements and natural depressions, for stormwater drainage line maintenance purposes and for the free passage of overland flow.

C14. Do not erect retaining walls and/or dividing brick walls and filling over easements and natural depressions.

6.2. Site Contamination and Land Filling

Objectives

O1. To ascertain the extent of contamination of existing undeveloped areas on site.

O2. To recognise where no data exists on the possible contamination of developed land on site.

O3. To ensure that Council is satisfied that no new building works take place on land contaminated by previous land uses.

O4. To ensure future building works are constructed on stable sub-surfaces.

Development Controls

C1. Council may require investigation of existing site contamination levels prior to the approval of new building works on the site.

C2. New building works may need to demonstrate the geotechnical stability of sub-surface conditions prior to Council issuing a Construction Certificate. Contact Council's Engineers for further information.

Note: Refer to Council's Contaminated Land Policy for details of when Council requires site contamination investigation.

6.3. Erosion and Sediment Control

Objectives

O1. To minimise the disturbance caused by erosion and sedimentation.

O2. To effectively control the movement of water and sediment from the top of the site through to the bottom of the site.

O3. To continue to be effective from the initial clearing of the site through to the completion of the development.

O4. To minimise the potential for sediment and silt-laden waters coming off the site or contributing to watercourses.

O5. To minimise soil loss from development through effective site management practices that reduce windblown soil loss.

O6. To progressively rehabilitate the disturbed areas of the site.

Development Controls

Minimum Erosion and Sediment Control Standards

C1. Wholly contain on the site all soil materials arising from the removal of vegetation, clearing, levelling, filling, excavation and/or disturbance of any site, including the placement of any building material stock piles; and

C2. Do not permit said soil materials to enter adjacent lands, street gutters, drains and/or waters.

Vegetation

C3. Minimise the area to be cleared and leave as much vegetation as possible.

C4. Progressively stabilise and/or revegetate all disturbed areas as soon as practicable.

C5. Implement appropriate erosion control measures to effectively minimise erosion until the disturbed areas are restored.

Sediment Fencing

C6. Erect a sediment fence(s) along or adjacent to the downslope boundary(s) of the site before work begins.

C7. Construct the fence from an approved geotextile filter fabric to capture the sediment from stormwater runoff.

C8. Key either ends of the fence into the ground and turn its base upslope.

C9. Regularly remove excessive sediment build up behind the fence in order for the fence to stay effective.

C10. Where the sediment fence is located adjacent to the street, erect the fence on the development side of the turf filter strips and within the property boundary.

Stormwater control

C11. Divert upslope water around the work site and stabilise channels.

C12. Protect all stormwater entry points with approved filtration device e.g – sand bags, geotextile fabric installed under the stormwater grate, hay bales wrapped in geotextile fabric.

C13. Ensure that the neighbouring property is not flooded.

C14. Using the most appropriate type, locate sediment traps at all points where stormwater leaves the site and enters the street stormwater gutter or drainage system.

C15. Clean the sediment traps regularly in order to maintain effectiveness.

Site Access

C16. Provide an all weather site access pathway for vehicles.

C17. Limit all vehicles entering and exiting the site to a single, stabilised, controlled area so as to avoid excessive ground disturbance.

C18. Ensure appropriate sediment controls are implemented at the entry/exit point to prevent sediment being tracked off the site, such as aggregate extending a minimum of 6 metres into the site as a shaker. The all-weather access may require additional aggregate from time to time.

C19. All runoff from driveways, access ways and water used to clean sediment off wheels of vehicles must be drained into an approved sediment trapping device on site.

C20. Any additional vehicles are to park on the road way and not on Council's footpath.

C21. Sweep the road every day and dispose of waste material on site. Washing of roads, driveways and footpaths is unacceptable.

Turf Filter Strips

C22. Leave or lay a kerb-side turf filter strip to slow the speed of water, minimise erosion and trap excess sediment.

C23. Should the soil on the nature strip be disturbed, install a strip(s) of turf 600mm width adjacent to the street gutter.

C24. Do not remove native vegetation on the nature strip to make way for turf.

Stockpiles

C25. Stockpile soil and other materials within the sediment controlled boundaries on the construction site.

C26. Do not store stockpiles of building materials on nature strips, footpaths, roadways, access ways or within drainage lines and easements.

C27. Protect the stockpiles with appropriate sediment & erosion control measures.

Guttering and downpipes

C28. Install stormwater roof guttering and downpipes connected to an approved stormwater system as soon as the roof framework has been completed. Connecting to the stormwater system immediately after the roof is laid will improve site access and drainage and prevent erosion.

C29. Downpipes may be temporarily removed during wall construction.

Responsibilities

C30. The construction and maintenance of all erosion & sediment controls shall be supervised by personnel:

- **a)** With appropriate training or demonstrated knowledge and experience in erosion & sediment control; and
- **b)** Who will act with due diligence during the design, implementation and maintenance of the erosion & sediment control plan and measures; and
- **c)** Who will conduct modifications and changes as required and as directed; and
- **d)** Who will remove such structures when the site is no longer prone to erosion or sedimentation; and
- **e)** Who have the appropriate authority to make decisions on the site without further consultation.

C31. Ensure all staff on site are aware of their obligations under the environmental legislation and conditions of consent for the development.

C32. Maintain erosion & sediment control measures for the entire period of construction. Keep logs of maintenance and cleaning schedules and have them signed by the appropriate person at the end of each day.

C33. Ensure the approved control measures are implemented prior to any land disturbance commencing and are maintained until the completion and/or effective establishment of stabilisation works. Once in place, the approved control measures shall be effectively maintained for as long as they are required (if unsure, Council staff are available to comment on whether controls are adequate or still needed).

C34. All site personnel are responsible for notifying the appropriate people prior to the removal of any erosion & sediment control measures. The control measures must be reinstated within the same working day.

6.4. Erosion and Sediment Control Plan

Objectives

O1. To consider early in the planning stage a strategy to manage erosion & sedimentation that is integral to the initial site development.

O2. To gauge an understanding of the features and limitations of the site in order to prevent and minimise erosion and sedimentation.

O3. To plan and complete both development activities and erosion & sedimentation control together.

O4. To outline how potential erosion and sedimentation from any site will be minimised.

O5. To account in the Erosion and Sediment Control Plan (ESCP) for all aspects of development of the site.

Development Controls

C1. All Development Applications must have an ESCP where the proposal has, or could have the potential to involve:

- **a)** the disturbance of the soil surface including that which arises from clearing, levelling, shaping, filling, excavation and/or placement of fill thereon; or
- **b)** any changes in the rate and/or volume of runoff entering, directly or indirectly, to any waters or flow over any land .

Note: Holroyd City Council retains the discretion to decide when an ESCP is required.

C2. Where an ESCP is required, the Council must approve it prior to any soil disturbance occurring.

The Form of an ESCP

C3. Vary the form of the ESCP depending on the complexity, scope and nature of the development. The plan can be in the form of a simple statement for minor proposals to detailed plans and associated documentation for major proposals. The content of an ESCP is outlined below in this section of the DCP.

C4. For major proposals that are staged over an extended time, prepare a staged ESCP.

C5. Demonstrate within the ESCP that the minimum erosion and sediment control standards (see Checklist at 11.2) have been incorporated.

Note: Unsatisfactory ESCPs will be rejected, and development applications will not be approved until an amended ESCP satisfactory to Council has been submitted.

C6. To enable an ESCP to be effective, use the correct format. The nature and size of the development or work will determine the preparation and detail of the plan. The standard format for an erosion & sediment control plan consists of:

C7. A site plan;

- **a)** Supporting information;
- **b)** Construction details, calculations and notes; and
- **c)** Details of reasons for staging (where appropriate).

The Site Plan

C8. A Site Plan for the ESCP shall include as a minimum the following:

- **a)** A recognised scale (1:100, 1:200 for a general plan);
- **b)** Locality;
- **c)** Contours;
- **d)** Existing & proposed vegetation;
- **e)** Existing site drainage;
- **f)** Land slope gradient;
- **g)** Location of stockpiles;
- **h)** Erosion control measures;
- **i)** Sediment control measures;

j) Location of roads, driveways, and accessways and all impervious surfaces;
k) Details of site revegetation program;
l) Outline of maintenance program for erosion & sediment control;
m) Details of method for pumping out / removal of excess water from the site; and
n) Name of person responsible for implementing ESCP.

Supporting information

C9. Submit supporting information along with the plan which may include:

a) A brief description of any areas on site that have the potential for serious erosion or sedimentation, together with the proposed management details;
b) A maintenance strategy for all control measures, including the nomination of responsibility for the follow–up maintenance required;
c) A brief description of the overall site rehabilitation program; and
d) Stormwater management plan.

Construction details, calculation and notes

C10. Provide Construction drawings and/or written specifications for the structural erosion & sediment controls proposed.

Responsibilities

C11. The person responsible for a site to which this DCP applies shall:

a) Prepare and implement an ESCP which specifies how erosion and sedimentation will be controlled, including the need for removal of excess water on site; and
b) Implement erosion and sediment control measures specified in the development application, pursuant to the Environmental Planning & Assessment Act, 1979; and
c) Implement erosion and sediment control measures as specified in this DCP.

Notes:

- Council's approval of development applications will be subject to approval of submitted erosion & sediment control plans.
- Failure to comply with the submitted ESCP causing a pollution incident to occur will result in Council issuing a monetary penalty infringement notice under the Protection of the Environment Operations Act, 1997 for every day that the offence occurs. More serious matters can be heard in the Local Court or in the Land & Environment Court.
- Failure to comply with the submitted ESCP will result in Council serving Clean Up Directions and Prevention Notices under the Protection of the Environment Operations Act, 1997. There is an administration fee that is associated with both notices and a time limit of thirty (30) days to pay the fee.
- Failure to comply with the submitted erosion & sediment control plan may also result in Council serving a stop work notice requiring all work on the site to cease until compliance is met.

6.5. Salinity management

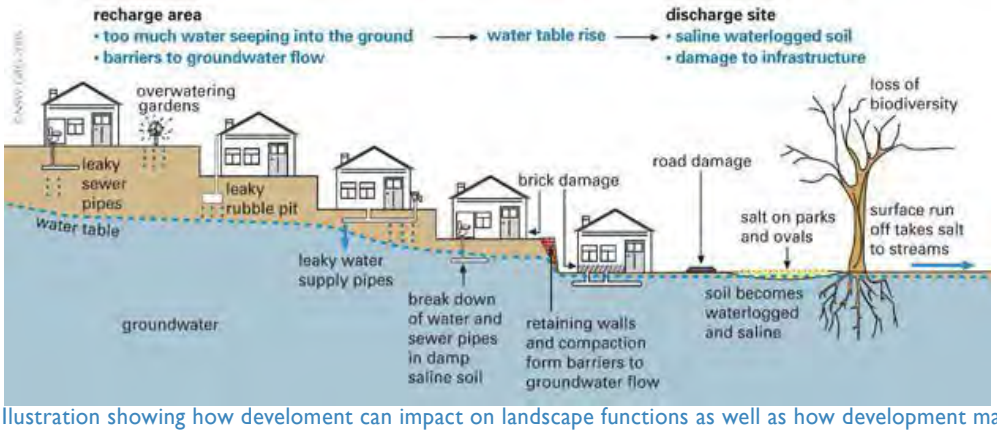


Figure 13. Illustration showing how develoment can impact on landscape functions as well as how development may be impacted upon by salinity processes. Source: www.dpi.nsw.gov.au

Important note about map interpretation

The LEP map of salinity potential is based on a map prepared by DIPNR in 2002. Mapping was undertaken at a scale of 1:100,000 and at such a small scale it is not possible to determine the salinity potential of individual lots. It is therefore necessary to identify the salinity potential for the broader locality of a development site, which is all land within a 1km radius of the site.

The salinity mapping has been incorporated into Council's LEP maps, which are available through Council's website.

Where it is difficult to determine which colour is applicable, it should be assumed that the colour for the higher salinity potential applies.

Objectives

O1. To ensure further spread of urban salinity is prevented, and remedy, where possible, existing areas of salinity.

O2. To ensure minimal disturbance to natural hydrological systems as a result of development and appropriately manage land uses affecting land salinisation and/or those affected by salinity.

O3. To ensure the land is used and developed in a manner that does not significantly increase water infiltration to groundwater systems and does not significantly increase salt loads in waterways, wetlands, drainage lines or soils.

O4. To ensure the impact of a development on prevailing and potential soil or groundwater salinity in the urban environment is controlled.

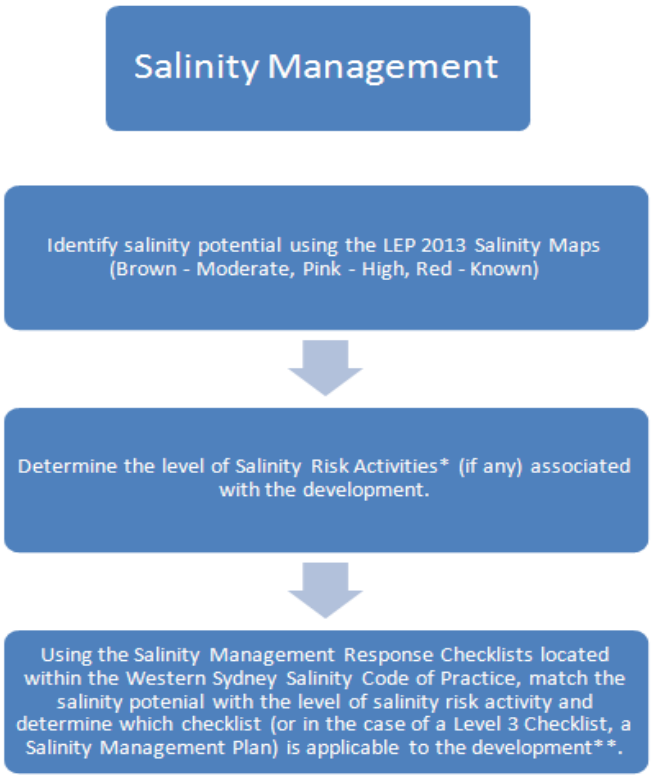
O5. To ensure soil or groundwater salinity does not impact on the structural integrity of a development.

O6. To ensure that consideration is given to any physical limitations of land, including soil salinity and the impacts of that salinity, to minimise the potential for future adverse economic impacts arising from development.

Development Controls

C1. The following flowchart shall be used to determine an appropriate course of action for salinity investigation and management for single or multi-lot developments.

C2. If a Level 1 or 2 Salinity Management Response is required, the applicant shall use the relevant Salinity Management Response Checklist to determine appropriate measures to prevent salinity impacts. These measures shall be detailed in the Statement of Environmental Effects or equivalent and be approved by Council prior to the issuing of development consent.



*Refer to the Western Sydney Salinity Code of Practice for examples of salinity risk activities. If the development does not involve any salinity risk activities then no checklist applies and the development application can proceed normally.

**The Western Sydney Salinity Code of Practice can be obtained from the NSW Government's Office of Environment and Heritage website.

Figure 14.

C3. If a Level 3 Salinity Management Response is required:

- This investigation shall be approved by Council prior to issuing development consent.
- The Salinity Management Plan shall be approved by Council prior to issuing development consent.
- The Salinity Management Plan shall be integrated into a Total Water-cycle Management Plan for the site for developments where such a plan is developed.

C4. The Salinity Management Response shall be based on site conditions and the proposed development. It shall include controls to protect buildings and also strategies to protect infrastructure, including roads and underground services and to manage the water cycle. The response shall assume worst-case scenario for salinity on the site.

C5. Salinity investigations shall be undertaken by an appropriately qualified professional with experience in salinity investigations and management.

C6. Management strategies for salinity shall be developed in accordance with the approved Guidelines. This includes general management strategies for all sites and salinity processes and strategies including, but not limited to, the following:

- Building requirements
- Vegetation and landscaping
- Roads and pavements
- Soil landscapes with shale geology
- Localised concentrations of salinity
- Deeply weathered soils
- Salinity in groundwater.

C7. Council may require monitoring reports to be submitted to ensure appropriate measures or management strategies are being employed.

C8. For developments involving the construction or removal of dams, artificial wetlands or stormwater retention ponds, Level 3 Salinity Management Response is required, and water sensitive urban design (WSUD) principles shall be applied.

C9. Development shall have minimal impact on the water table. For areas with moderate to high salinity potential, development shall demonstrate no net increase in hydrologic load or water inputs and shall maintain the natural water balance.

7. Stormwater Management

Stormwater management aims to prevent the negative impact of water on human life and property, and of development on the receiving waters of the catchment.

Objectives

O1. To manage flooding and to minimise urban run-off impacts on watercourses and downstream properties.

O2. To minimise any negative impacts on development and natural processes in urban environments.

O3. To provide effective measures to:

a) prevent adverse effects on the flood peak at any point upstream or downstream of development; and

b) ensure development will not adversely alter the quality or flow characteristics of stormwater leaving the site; and

c) minimise alteration of flow distributions and velocities to avoid adverse impacts on the proposed development or other properties.

O4. To incorporate effective measures to improve the water quality of stormwater leaving the site, where likely or potentially adverse impacts have been identified.

O5. To emulate the runoff characteristics of more natural site conditions.

O6. To reduce mains water consumption by capturing stormwater.

O7. To ensure the provision of all roofing with adequate gutters and downpipes connected to the site stormwater system.

7.1. Roof and Surface Water

Development Controls

C1. Design the eave, gutter and downpipe systems to prevent overflows for storms up to the 5% Annual Exceedance Probability (AEP) storm event.

C2. Design box gutter and downpipe systems to prevent overflows for storms up to the 1% AEP storm event. Council's on-site detention policy may also require a design standard for storms up to the 1% AEP storm event.

C3. Discharge the drainage system to an open-grated surface inlet pit and then into Council's drainage system.

C4. Design stormwater drainage pipelines to the following minimum standards:

a) 90mm diameter where the line only receives roofwater runoff;

b) 100mm diameter where the line receives surface runoff or if the line is part of an on-site detention system;

c) a minimum pipeline grade of 1.0% for pipes with a diameter less than 150mm and 0.5% for pipes of greater diameter. Consideration may be given to reducing the grade of the pipe if

the pipe line is a return line associated with an on-site detention storage basin;

d) underground pipes shall be provided with a minimum cover of 100mm for private pipelines and 300mm for public pipelines;

e) Council will permit above-ground pipework only if it is considered that site constraints prevent otherwise. In this case, all works shall comply with the relevant Australian Standard and be subject to Council approval.

C5. Pits shall be installed to facilitate maintenance of stormwater pipes, orifice plates, and debris screens. Cleaning eyes will be permitted at pipe junctions, pipe change in direction or reflux valves.

C6. All drainage systems draining to Council's drainage system or to a public road must have a grated drainage pit of not less than 450mm x 450mm within the site over the outlet pipe and adjoining the site boundary.

C7. Runoff, whether generated on-site or by upstream properties, shall not be obstructed or redirected so as to alter flow distributions and velocities to the detriment of any other property.

C8. Where the efficiency of an existing drainage system (as outlined within Council's works specification for subdivisions and development) on the property will be compromised by the proposed development, modify the existing system to comply with this part of the DCP and to offset any adverse impacts.

C9. Mechanical means, such as pumpout systems, will not be permitted for discharge of roof and surface water.

7.2. Stormwater Drainage- Acceptable Systems

Development Controls

C1. Gravity fed drainage systems, consisting of a combination of underground pipes/conduits (i.e kerb and gutter etc) shall be implemented to discharge stormwater from a site. This may include discharge to natural watercourse or creek.

Note: An on site detention (OSD) system is required for most development types in order to control the discharge of stormwater from a site as provided in Section 7.3.

C2. Where a site slopes away from the street, drainage shall occur through access to, or the creation of, an easement to enable inter allotment drainage through properties downstream (i.e via gravity).

C3. Charged Systems are only acceptable for minor development types such as garages, shed, single and secondary dwellings and dual occupancies (not subject to OSD), where attempts to gain access to an easement for a gravity fed system have been unsuccessful, and subject to criteria in Section 7.3.

C4. Pump systems are permitted for basement car parks, for seepage and runoff from access ramps, and subject to criteria in Section 7.3.

Note: Infiltration/absoprtion trench systems and rubble pits are generally not acceptable within Holroyd due to the soil types being unsuitable and will not be considered for new dwellings.

7.3. Stormwater Drainage- Technical

Gravity Systems

C1. Stormwater outlets discharging to the public road shall generally do so in front of the development site or to a point on the kerb requiring a pipeline less than 45 degrees relative to the front property boundary alignment. Where the connection into the kerb or existing Council drainage system cannot be laid at or less than 45 degrees to the front property boundary alignment, the following will apply:

- **a)** A drainage easement shall be obtained through the adjoining downstream property to a point where the 45 degree limit can be achieved or the existing nearest drainage system under the control of Council is extended to the property frontage. A grated gully pit, to the relevant Council standards, will be required at the end of any street drainage pipe requiring extension;
- **b)** All Council drainage pipes shall be reinforced concrete with a minimum diameter of 375mm.
- **c)** Fully detailed designs, including a long section of the pipe and a pipe trench cross-section detail, shall be submitted for all proposed drainage works within the road reserve

C2. Stormwater outlets shall not be permitted to cross a public road. However, consideration may be given to the extension of Council's stormwater system to the site frontage, subject to compliance with the preceding clause.

C3. Discharge to a suitable natural watercourse or creek may be allowed subject to approval by Council. Approval and compliance with the standard guidelines from the NSW Office of Water and The NSW EPA are also required.

C4. Where stormwater is to discharge into a natural watercourse, bushland, or open space, full details of the proposed method of stormwater discharge shall be supplied to Council detailing the means of preventing scouring or erosion at the point of discharge.

On Site Detention

C5. On-site detention systems shall be provided for all new developments, except for single dwellings, extensions, additions and improvements on existing single residential lots. The design and construction of an on-site detention system shall be in accordance with Council's On-site Stormwater Detention Policy. Note: Council's On-site Stormwater Detention Policy is based on the guidelines developed by the Upper Parramatta River Catchment Trust.

C6. Despite C5, on-site detention shall be required for development associated with single dwellings where this is specified by a restriction on the title of the property (generally only lots created after 1991) or where the impervious area of the site is increased beyond that permitted for single dwellings by this DCP.

C7. Any agreement, covenant or similar instrument which would otherwise prohibit or restrict an on-site detention system required by this DCP, does not apply.

C8. Fully documented On-Site Detention (OSD) drawings, prepared by a suitably qualified person, shall be submitted with the development application, along with a completed Holroyd City Council On-Site Detention drawing submission checklist.

Note:

- Councils OSD Policy and checklist are available from Council's customer services section or from the Council website.
- Applicants should seek full details of Council's On-Site Detention requirements early in the design of the development.

C9. Upon completion of a site stormwater drainage system and prior to occupation of the development, a suitably qualified and registered engineering consultant must certify that the stormwater system has been constructed and can be maintained in accordance with the approved design.

C10. Where an on-site detention system is required, a restriction on use of land and positive covenant shall be registered on the title of the subject property, requiring that the on-site detention system constructed on the site:
(i) not be altered, unless approved by Council; and
(ii) be maintained in good working order.

Charged Lines

C11. Charged lines shall only be permitted for development stated in Section 7.2 subject to the following conditions:

a) Documentary evidence being submitted with the application demonstrating that an easement to enable a gravity drainage system cannot be acquired from downstream properties, based on a reasonable offer.

b) It can be demonstrated that it will not cause any adverse third party impacts along the diverted route (outside the street network).

c) It can be demonstrated that there are no existing drainage problems downstream in the catchment where the water is to be directed.

d) Flows shall not be transferred from one creek catchment to another.

e) A full hydraulic analysis of the system is submitted with the application, including hydraulic grade line and calculations.

f) The charged line connects to a junction pit immediately adjoining the boundary and then is drained by gravity into the Council kerb and gutter, with no direct connection into the Council system.

g) A cleaning eye is provided at the low point of the system within a pit to enable the system to be cleaned and flushed.

h) The charged line is not connected with an on-site detention system;

i) A restriction on use of land and positive covenant shall be registered on the title of the subject property requiring that the charged line system constructed on the site:
(i) not be altered, unless approved by Council; and
(ii) be maintained in good working order.

Pump Systems

C12. Pumpout systems shall be permitted for basement car parks, associated with residential dwellings, commercial or industrial development, for seepage and runoff from access ramps, subject to the following:

a) Demonstrate that drainage by gravity is impractical.

b) Grade the basement car parking areas to fall to the sump and pump system.

c) Limit the contributing catchment area to the pump-out system to the basement access ramps and sub-soil drainage only.

d) Ensure that the access ramp catchment draining to any sump does not exceed 50 square metres unless it can be demonstrated that there are no existing drainage problems downstream from where the drainage is being redirected.

e) Install two (2) submersible type pump units, the capacity of each being calculated to allow for subsoil drainage and any water falling on access points to the basement car park. Calculate stormwater run-off to the sump and pump system for a 1% AEP storm of five (5) minute duration.

f) Design the two (2) pumps to operate on an alternative basis to ensure that both pumps receive equal usage and neither pump remains continuously idle.

g) Provide storage capacity in case of pump failure, with its volume being sufficient for a 1% AEP storm of twelve (12) hour duration, with:

- a below-ground component capable of storing the volume generated by the 1% AEP ninety (90) minute storm; and
- an above-ground component capable of storing the remaining volume up to the 1% AEP storm twelve (12) hour duration, such that the above ground component acts as a visual warning to occupants.

h) Provide alarm systems to give a flood warning in case of pump failure, including:

- non-audible alarm positioned at the main entrance to the basement car park; and
- audible alarms positioned at the first floor level of each common property stairwell within the building or buildings.

i) Submit engineering details and manufacturers specifications for the pumps and switching system for approval by Council's Engineer, including a plot of the System Curve against the Pump Curve.

j) Ensure that pumpout systems are compliant with any other relevant guidelines contained in Council's On-Site Detention Policy.

k) Connect pumpout systems to a junction pit from which water drains by gravity into Council's stormwater drainage system, with no direct connection being permitted. Locate the junction pit immediately adjoining the property boundary.

i) Register a restriction on use of land and positive covenant on the title of the subject property requiring that the pumpout system constructed on the site:
(i) not be altered, unless approved by Council; and
(ii) be maintained in good working order.

General

C13. Development shall not take place on any land unless arrangements satisfactory to the Council have been made for the carrying out of drainage works, on or for the land.

C14. Where development increases the flow of stormwater from the site, Council may require the upgrading / augmentation of the existing downstream drainage system, dependent upon the scale of the increase. This may be in the form of actual construction work to be carried out by

the developer at the time of development, or in the form of a contribution to be determined by Council at the development application stage.

C15. A hydraulic analysis may be required, to demonstrate that the development will not adversely affect any existing overland flow paths, if the development has:

i) existing public drainage structures within the site;

ii) or existing public drainage structures on an adjoining property;

iii) orthe site is located wholly or partially within a natural overland flow path.

Note: For most overland flow analysis, the assumption of uniform flow will not be appropriate and consideration must be given to upstream and downstream controls.

C16. On sites where localised flooding has occurred, submission of a "stormwater master plan" may be required. Such a plan is to demonstrate that consideration has been given, at the design stage, to the likely effect of overland flow on proposed buildings, structures, fences etc and the need for clearly defined/constructed overland flow paths over easements and natural depressions. Applicants should refer to the Flood Prone Land clause 6.6 of Holroyd LEP 2009 for further guidelines.

C17. 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:

i) not be altered; and

ii) 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.

C18. Stormwater quality control measures shall be provided in accordance with the current version of Council's Stormwater Management Plan.

C19. Where a stormwater quality control system is required under Council's Stormwater Management Plan, a restriction on use of land and positive covenant shall be registered on the title of the subject property requiring that the stormwater quality control system:

i) not be altered, unless approved by Council; and

ii) be maintained in good working order.

C20. Approval of engineering drawings and specifications for the construction of any stormwater drainage line will be required prior to release of development consent. Council will require the payment of a checking and inspection fee, which will be determined prior to release of development consent.

C21. All engineering works, including those within public property, shall be designed and undertaken in accordance with the relevant aspects of the current version of Holroyd City Council's Specification for Subdivisions and Developments.

C22. Where stormwater drainage is being constructed on public land, Council easements or adjoining private property, a bond and/or bank guarantee shall be lodged to cover that construction. The amount of the bond will be determined at the development application stage and payment is to be made prior to the release of the construction certificate.

7.4. Easements

Development Controls

C1. All easements required within a site (other than those required only for the purposes of strata plan subdivision) shall be created pursuant to Section 88B of the Conveyancing Act, subject to the approval of Council. Council shall be joined as a party whose consent is required for any amendments to easements for rights of carriageway, utility services, inter-allotment drainage and the like, but not nominated as a beneficiary.

C2. A drainage easement giving drainage rights to the benefited lot shall be created where a stormwater drainage line and/or an existing line is proposed to be utilised through adjoining property, including inter-allotment drainage within new land subdivisions. Consideration shall be given to the overland flow path taken by stormwater during storm events that generate runoff in excess of the design pipe capacity up to the 1% AEP storm event (overland flow paths) and system blockage.

C3. Where overland flows could result in flood damage on adjoining properties, the pipe and collection system shall be designed to accommodate runoff generated by the 1% AEP storm event. The erection of buildings/permanent structures, retaining walls and/or dividing brick walls and filling over easements shall not be permitted if they will alter the performance and function of the easement to the detriment of the site or adjoining properties. Council does not permit the above structures over public easements.

C4. Drainage easements shall be accessible for maintenance of stormwater drainage line and allow for stormwater overland flow paths.

C5. Where easements are required to be created over the adjoining property, provide written confirmation from the affected property owners that they are willing to participate in the negotiation of an easement with the development application. If an existing easement is to be utilised the applicant shall submit proof from the Department of Lands that the site benefits from such an easement. Proof of registration of the easement, at the Department of Lands, will be required prior to the issue of the construction certificate .

C6. The width of private drainage easements shall be in accordance with Table 3 below:

Table 3- Width of drainage easements

Nominal Pipe Diameter	Easement Width
≤ 150mm	1.0m
> 150mm and ≤ 300mm	1.25m
> 300mm and ≤ 750mm	2.5m
> 750mm	Width required for maintenance, but not less than width of conduit plus 2.0m and not less than 2.8m. Final width to be determined after receipt of the stormwater drainage design.

Notes

- Easement widths may need to be wider to accommodate overland flows up to the 1% AEP storm event.
- Wider easements shall be provided for multiple pipes. In this regard a minimum increase in width of 1.2 multiplied by the additional pipe diameter is required.

- Consideration may be given to a localised reduction in the easement width when considering the impact of existing structures, such as dwellings and garages. However the reduction in width shall take into consideration overland flow path and future maintenance requirements.

C7. Where a Council drainage structure is required across privately-owned land, a drainage easement benefiting Council shall be provided over all Council drainage structures, whether trunk or local, for the conveyance of runoff from public owned land, including parks and roads. Where such a public drainage easement is to be created as a condition of development consent, all costs associated with the creation shall be borne by the applicant.

This requirement is based upon Council's powers under the Local Government Act 1993 to require the creation of an easement in its favour for the purpose of undertaking any of its functions as defined by the Act. To that end, the wording of the easement instrument shall be in accordance with schedule 4A of the Conveyancing Act 1919.

C8. Drainage easements benefiting Council shall:

- have a minimum 2.5 metre width;
- for drainage structures greater than 0.5 metres in width, have a width of 2.0 metres plus the width of the relevant drainage structure, rounded up to the next 0.1m;
- be located such that the drainage structure is located centrally within the easement boundaries.

Note: Where there is existing encroachment onto a Council drainage easement or structure that is unsuitable (as described by C37 above), this shall be removed at no cost to Council as a condition of development consent for the relevant property.

Note: Where an easement is required for Council drainage, only Council shall be empowered to release, vary or modify any restriction or covenant. Documents giving effect to the creation of the restriction and covenant shall be submitted to Council for approval prior to construction.

7.5. Water Sensitive Urban Design (WSUD)

Water Sensitive Urban Design (WSUD) is a multidisciplinary approach for integrating land use and water management (water supply, stormwater and wastewater) planning, with the aim of minimising the impacts of urban development on the natural water cycle. This is achieved by optimising the use/re-use of grey water and rainwater falling on the urban area, while minimising the amount of water lost when it is transported away from the catchment, and reducing the demand for potable water.

Objectives

O1. To protect and enhance natural water systems (creeks, rivers, wetlands, estuaries, lagoons, groundwater systems etc.).

O2. To protect and enhance water quality, by improving the quality of stormwater runoff from urban catchments.

O3. To minimise harmful impacts of urban development upon water balance and surface and groundwater flow regimes.

O4. To avoid impacts on downstream drainage infrastructure, and minimise the need for amplification of the existing stormwater drainage system.

O5. To integrate stormwater management systems into the landscape in a manner that provides multiple benefits, including water quality protection, protection & enhancement of natural ecosystems, stormwater retention and detention, public open space and recreational and visual amenity.

O6. To reduce potable water demand by using stormwater and greywater as a resource.

Development Controls

C1. Development of sites of 2,500m^2 or more in area are to implement water sensitive urban design principles through the provision of appropriate water quality devices, such as:

- rainwater tanks and use;
- stormwater detention basins;
- greywater tanks and reuse;
- gross pollutant traps;
- oil/grit and oil/water separators;
- sand and gravel filter beds;
- wetland ponds;
- retention trenches and basins;
- water gardens;
- vegetated buffer strips;
- grass swales;
- natural drainage systems; and
- natural stream profiles.

C2. All development applications for sites of 2,500m^2 or more in area must be supported by a Water Sensitive Urban Design Strategy, prepared by a qualified civil engineer with suitable experience, containing the following information:

- Background information – a summary of any background information available such as previous or concurrent studies, mapping data and the like;
- Site context – identifying catchments, drainage lines and receiving environments (both within and downstream of the site), the ecological values of the site and its receiving waters;
- Proposed development – describing briefly the proposed development of the site, including site boundaries, proposed land uses , densities, infrastructure and staging;
- WSUD objectives and targets – identifying the objectives and targets that apply to the proposal;
- Constraints and opportunities – identifying the key constraints and opportunities for water management on the site, including flooding. This should include the identification of natural watercourses and other sensitive environments within the site that should be preserved and/or remediated by the development;
- Water conservation – demonstrating how the potable water will be conserved through the use of roofwater, treated stormwater and/or waste water;
- Stormwater management – demonstrating how the stormwater quality and flow targets will be met. It should include stormwater quality and flow modelling results and identify the location, size and configuration of stormwater treatment measures proposed for the development;
- Water table management – indicating the impact on the local water table, including its level or quality, and how this is to be managed, and
- Operation and Maintenance Plan – outlining the inspection and maintenance requirements required to ensure the proposed measures remain effective.

C3. Development for the subdivision of sites of 2,500m^2 or more in area must achieve the stormwater flow targets indicated in Table 4, 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.

Receiving environment	Measure	Target
First, second or third order stream	N/A	Minimise the impervious areas that are directly connected to the stormwater system.
	Waterway stability	Stream Erosion Index between 3 and 5.
Natural bushland	Erosion control	Potential for erosion within downstream areas of natural bushland is minimised.
Natural wetland	Wetland hydrology	Changes to hydrological features identified as critical for the specific wetland type are minimised.

Table 4 Stormwater flow targets and actions for subdivision of sites 2,500m^2 & greater in area

Note: Stream Erosion Index (SEI) is defined as the ratio of the post-development duration of flows exceeding the critical threshold value to the pre-development duration of that flow. The threshold value (or critical flow) is defined as the following percentage of the 2 year Annual Recurrence Interval flow rate estimated for the catchment under pre-development conditions: 10% = cohesion-less (e.g. sandy) bed and banks; 25% moderately cohesive bed and banks; 50% = cohesive (e.g. stiff clay) bed and banks.

C4. Development of sites of 2,500m^2 or more in area, other than subdivision, must minimise the impervious areas that are directly connected to the stormwater system and should minimise the Stream Erosion Index for receiving waters (other than concrete lined drains, fourth or greater order streams and estuarine or tidal waters), ideally to less than 3 but in all cases

to less than 6. Details of compliance must be included in the Water Sensitive Urban Design Strategy supporting the development application.

C5. Development of sites of 2,500m^2 or more in area must treat stormwater leaving the site, through the use of appropriate devices (such as those listed in C1), to reduce pollutants in accordance with Table 5. Such treatment must achieve the targets indicated in Table 6. Details of compliance must be included in the Water Sensitive Urban Design Strategy supporting the development application.

Table 5 Pollutant reduction requirements for various development types – sites 2,500m^2 & greater in area:

Development type	Litter	Coarse sediment	Nutrients	Fine particles	Cooking oil & grease	Hydro-carbons
Low density residential subdivision (sites ≤5ha)	YES	YES	YES	NO	NO	NO
Low density residential subdivision (sites >5ha)	YES	NO	NO	YES	NO	YES
Medium & high density residential	YES	NO	NO	YES	NO	YES
Commercial & retail	YES	NO	NO	YES	NO	YES
Industrial	YES	NO	NO	YES	NO	YES
Food & drink premises	YES	YES	NO	NO	YES	NO
Service stations, car washes & other automotive uses	YES	NO	NO	YES	NO	YES

Table 6 Stormwater quality targets for sites 2,500m^2 and greater in area

Pollutant	Description	Reduction in Load[1]
Litter e.g. cans, bottles, wrapping materials, food scraps	All anthropogenic materials with a minimum dimension >5mm	70%
Coarse sediment	Coarse sand and soil particles (<0.5mm diameter)	80%
Nutrients	Total phosphorus & nitrogen	45%
Fine particles	Coarse sand and soil particles (<0.05mm diameter)	50%
Cooking oil & grease	Free floating oils that do not emulsify in aqueous solutions	90%
Hydrocarbons inc. motor fuels, oils & greases	Anthropogenic hydrocarbons that can be emulsified	90%

8. Flood Prone Land

Objectives

O1. To provide prescriptive controls on the use and development of land subject to various flood risk exposures, which reflect the probability of the flood occurring and the potential hazard within different areas.

O2. To provide clear objectives and performance criteria for a "merit-based approach" to be taken to development decisions which takes account of social, economic and ecological, as well as flooding considerations.

O3. To control development and other activity within each of the individual floodplains within Holroyd LGA, having regard to the characteristics and level of information available for each of the floodplains, in particular the availability of Floodplain Risk Management Studies and Floodplain Risk Management Plans prepared in accordance with the Floodplain Development Manual.

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 issued by the NSW Government.

8.1. Assessment: Three Step Process and Merit Based Approach

Three Step Process

Note:

The criteria for determining applications for proposals potentially affected by flooding are structured in recognition that different controls are applicable to different land uses and levels of potential flood inundation and hazard.

The process to determine what controls apply to proposed development involves:

i) identify the land use category of the development (see Section 6.4 Table 6.1 below);

ii) determine which floodplain and what part of the floodplain the land is located within (refer to Sections 6.3 and 6.5 below and the relevant mapping at Council's website and

iii) apply the relevant controls outlined under Sections 6.6 to 6.9 below.

Merit Based Approach

Due to the variable nature of both site specific flood management and land uses, it is important to provide for merit-based assessment when considering the appropriate approach to manage flooding.

For planning purposes, a merit-based assessment will be required for all sites within a Flood Risk Precinct. Development in all circumstances will need to comply with both the relevant objectives and performance criteria within this plan. In the majority of cases the prescriptive controls shall be complied with. However, variation may be considered in certain situations where the objectives and performance criteria have been shown to be met.

Where a proposal does not comply with the prescriptive controls within this DCP, Council may use its discretion to:

a) Consider alternative flood management approaches for the development, provided that the primary objectives of the DCP are proven by the developer to have been met; or

b) Modify the proposal through the application of conditions so that it is consistent with the provisions of this DCP; or

c) Defer determination of the application and consult with the applicant to achieve consistency with the requirements of this DCP; or

d) Refer the application to an approved Floodplain Management Consultant for a report (at the expense of the applicant); or

e) Refuse the application.

8.2. Additional Information Required

In addition to the general requirements for development applications, applications for development upon Flood Prone Land or potentially Flood Prone Land must address the additional matters listed below (as applicable).

Objective

O1. To ensure that an application for development upon Flood Prone Land provide adequate information to allow proper assessment of the impact of the proposal upon flood flows and vice-versa.

O2. To ensure that an application for development upon land that may be flood prone provides adequate information regarding any flood details (e.g. extent, depth and velocity) on the land or in its vicinity.

Controls

C1. Applications for minor additions to an existing dwelling on Flood Prone Land (see Table 7 below) shall be accompanied by documentation from a registered surveyor confirming existing floor levels to Australian Height Datum (AHD).

C2. Development applications affected by this plan shall be accompanied by a survey plan showing:

a) The position of the existing building/s or proposed building/s;

b) The existing ground levels to AHD around the perimeter of the building and contours of the site; and

c) The existing and proposed floor levels to AHD.

C3. Applications for earthworks, filling of land and subdivision shall be accompanied by a survey plan (with a contour interval of 0.5m) showing relative levels to AHD. On flat sites, the contour interval shall be 0.1m AHD.

C4. For large scale developments, or developments where hydraulic hazard circumstances warrant it, particularly where an existing catchment based flood study is not available, a flood study using a fully dynamic one or two dimensional computer model will be required. For smaller developments the existing flood study may be used if available and suitable (e.g. it contains sufficient local detail), or otherwise a model or estimation of flood analysis accepted in the current edition of Australian Rainfall will be required. From this study, the following information shall be submitted in plan form:

a) water surface contours;

b) velocity vectors;

c) velocity and depth product contours; and/or points

d) delineation of flood risk precincts relevant to individual floodplains.

This information is required for the pre-developed and post-developed scenarios. Analysis shall be up to the 1%AEP flood event.

C5. Where the controls for a particular development proposal require an assessment of structural

soundness during potential floods, the following impacts must be addressed:

a) hydrostatic pressure;
b) hydrodynamic pressure;
c) impact of debris; and
d) buoyancy forces.

Foundations need to be included in the structural analysis.

C6. Where flood modelling or an assessment of potential flood impacts is required, this shall be provided by a NPER-3 certified engineer performing within their area of expertise.

C7. Where Council's flood mapping indicates that the land may potentially be affected by flooding, at the discretion of Council's engineering staff and dependent upon the nature of the development proposed, a development application must be accompanied by a local flood study confirming:

- the extent and nature of any flooding of the site and/or adjoining land and adjacent properties; and
- the proposed development will not increase flood levels, velocities or depths.

8.3. Land Use Categories

All land uses permissible in the Holroyd Local Environmental Plan 2013 have been classified into different categories. These categories are representative of similar uses with similar impacts and approaches to management.

Ten major categories have been utilised and are identified in a table in Table 7 below. Where a land use is not identified in the table, the use will be categorised by Council, depending on its impacts and the perceived best approach for flood management.

Table 7: Landuse Categories for Development upon Flood Prone Land

Where a land use is not identified in the table, the use will be categorised by Council, depending on its impacts and the perceived best approach for flood management.

Sensitive Uses & Facilities	Critical Utilities & Uses	Subdivisions	Filling	Residential or Community Use
• Community use or public building which may provide an important contribution to the notification & evacuation of the community during flood events; • Hospital; and Seniors Housing, including Residential Care Facilities ; • Child care centre; • Educational establishment; & • Institution.	• Gas holder; Liquid fuel depot; Hazardous storage establishment; some Offensive storage establishments; • Public utility undertaking works (including generating works and Water supply system) which may cause pollution of waterways during flooding, are essential to evacuation during periods of flood, or if affected during flood events would unreasonably affect the ability of the community to return to normal activities after flood events; • Telecommunication facilities.	• Subdivision of land which involves the creation of new allotments.	• The net importation of fill material onto a site, except where: • Final surface levels are raised no more than 100mm over no more than 50% of the site; or • Filling is no more than 800mm thick beneath a concrete building slab only • Compensatory earthworks, involving cut & fill, is not considered to be filling provided that: • There is no net importation of fill material onto the site; & • There is no net loss of flood storage at all flood levels.	• Apartment building; Boarding house; • *Camp or caravan park site – long term sites only; • Community use (other than sensitive uses & facilities); • Dual occupancy • Dwelling house; • Family day care; • Home-based child care; • Home industry; • Home occupation; • Integrated housing; • Group Home ; Hostel ; • Medium density housing; • Shop top housing ; Professional consulting room; • Residential flat building; • Recreation establishment; • Backpackers' accommodation ; & • Utility installation (other than critical utilities).

Table 7: Landuse Categories for Development upon Flood Prone Land (cont.)

Commercial or Industrial or Special Uses	Tourist Related Development	Open Space or Non-Urban Uses	Minor Alterations or Additions	Redevelopment
Abattoir; Advertising structure; Amusement centre ;; Animal boarding or training establishment ; Bulky goods premises ; Business premises ; Church; Crematorium ; Entertainment facility ; Food and drink premises ; Freight transport facility ;; Funeral chapel; Hazardous industry; Hazardous storage establishment; Health consulting rooms; Heliport; Hotel accommodation ; Industry; Landscape and garden supplies ; Light industry; Materials recycling or recovery centre ; Medical centre; Offensive industry; Offensive storage establishment; Office premises ; Passenger transport facility ; Place of worship; Pub ; Public administration buildings (other than an essential community facility); Recreation facility (indoor); Registered club ; Restaurant ; Restricted premises; Retail premises (except kiosks, roadside stalls); Roadside stalls; Sawmill; Self-storage units; Service station; Sex services premises ; Shop; see next page	* Camp or caravan sites – short term sites only & Tourist facilities.	Agriculture; Extractive industry; Forestry; Helipad; Mine; Mineral sand mine; Recreation areas & minor ancillary structures (e.g toilet blocks or kiosks); & Stock & sale yard. Open car parks.	These involve an acceptably small (see below for limits) addition or alteration to an exiting development that will cause no significant increase in potential flood losses or risks or adverse impact on adjoining properties. In the case of single unit dwellings, the maximum size of a development is: a once-only addition or alteration to an existing dwelling of no more than 10% or 30m² (whichever is the lesser) of the habitable floor area which existed at the date of commencement of this DCP; or the construction of an outbuilding with a maximum floor area of 20m². In the case of other development categories, the maximum size is a once-only addition to existing premises of no more than 10% of the floor area which existed at the date of this DCP.	This includes sites that have been previously developed and major redevelopment is proposed under the same land zoning. Redevelopment includes 'change of use'. Redevelopment that would normally not be permitted may be permitted on the merits of the case particularly where the economic consequences of not permitting redevelopment would be significant. See Section 6.8 below for further information on Redevelopment.

Table 7: Landuse Categories for Development upon Flood Prone Land (cont.)

Commercial or Industrial or Special Uses	Tourist Related Development	Open Space or Non-Urban Uses	Minor Alterations or Additions	Redevelopment
Timber & Building Supplies; Transport depot ; Truck depot; Vehicle body repair station; Vehicle repair station .; Vehicle Sales or Hire Premises; Vehicle showroom & Warehouse or distribution centre				

*As defined by the Local Government (Caravan & Camping Grounds) Transitional Regulation 1993.

Note: Any fencing that forms part of a proposed development is included in that development's Land Use Category and is subject to the relevant planning considerations applicable to that Land Use Category.

8.4. Flood Risk Precincts

Each of the floodplains within the local government area can be divided into precincts based on different levels of potential flood risk. The relevant Flood Risk Precincts (FRPs) for each of the floodplains are outlined below.

High Flood Risk Precinct

This has been defined as the area of land below the 1% AEP flood that is either subject to a high hydraulic hazard (in accordance with the provisional criteria outlined in the Floodplain Development Manual) or where there are potential evacuation difficulties. Development within this Precinct is extremely restricted, as it is very hard to ensure the safety and protection of both person and property during a critical storm event.

Medium Flood Risk Precinct

This has been defined as land below the 1% AEP flood subject to low hydraulic hazard (in accordance with the provisional criteria outlined by the Floodplain Development Manual). Development within this Precinct is possible, however appropriate flood management measures must be implemented, to ensure the safety and protection of both person and property during a critical storm event.

Low Flood Risk Precinct

This has been defined as all other land within the floodplain (i.e. within the extent of the probable maximum flood) but not identified as either a high flood risk precinct or medium flood risk precinct, where risk of damages are low for most land uses. Development within this Precinct is possible, however consideration for development is needed to ensure that property is protected.

The boundaries of each precinct have been mapped to the extent and to a level of accuracy as current knowledge of flood behaviour allows. The mapping is adjusted, as improved knowledge becomes available. The "Precinct" advised to applicants will represent the most accurate information available at the time of issue of flood advice.

The precinct advised by Council is the highest category applicable to the site. It may only cover part of the site and a lower category may cover other parts of the site. The prescriptive controls applicable to each Precinct apply only to the part of the site so affected.

Note: See Section 8.6 for further information on:

- Freeboard
- "Redevelopment"
- Flood compatible materials.

8.5. Broad Considerations for Development on Flood Prone Land

When assessing proposals for development or other activity on Flood Prone Land, Council will take into consideration the following specific matters.

Objective

O1. To ensure that the development of Flood Prone Land minimises its impact on the ecology and use of waterways; and

O2. To ensure that the development of Flood Prone Land minimises its impact on the amenity of adjoining localities.

Development Controls

C1. Ensure the proposal does not have a significant detrimental impact on:

a) water quality;
b) native bushland vegetation;
c) riparian vegetation;
d) estuaries, wetlands, lakes or other water bodies;
e) aquatic and terrestrial ecosystems;
f) indigenous flora and fauna; or
g) fluvial geomorphology.

C2. Undertake development to mitigate the potential impact of flooding (e.g. house-raising) in a manner which minimises the impact upon the amenity and character of the locality.

C3. Do not constrain the orderly and efficient utilisation of the waterways for multiple purposes.

C4. Do not adversely impact upon the recreational, ecological, aesthetic or utilitarian use of the waterway corridors.

C5. Where possible, provide for the enhancement of the waterway corridors, in accordance with Ecologically Sustainable Development principles.

C6. Ensure that proposals for house-raising provide appropriate documentation, including:

a) a report from a suitably qualified engineer, to demonstrate that the raised structure will not be at risk of failure from the forces of floodwaters; and
b) details such as landscaping and architectural enhancements which ensure that the resultant structure will not result in significant adverse impacts upon the amenity and character of an area.

8.6. Significant Development on Flood Prone Land

The type and stringency of controls have been graded relative to the severity and frequency of potential floods and have been categorised into high, medium or low risk in Section 6.5. The general intent of planning controls in Flood Risk Precincts is to ensure minimal risk of damage by flood to both people and property.

This section applies to all development upon Flood Prone Land, with the following exceptions:

- Exempt development, as indicated in State Environmental Planning Policy (Exempt and Complying Development) 2008 and in Part 3 and Schedule 2 of Holroyd Local Environmental Plan 2013;
- Minor alterations and additions, and
- Fences and public domain works, not carried out with other development on Flood Prone Land.

Objectives

O1. To ensure the proponents of development and the community in general are aware of the potential flood hazard and consequent risk associated with the use and development of land within the floodplain.

O2. To require all development to be raised above the flood planning level (being the 1% AEP + freeboard) or (in certain development only) to be designed such that it will be protected up to

the flood planning level.

O3. To require development of high sensitivity to flood risk (e.g. critical public utilities) to be sited and designed such that they are subject to an acceptably minimal risk from flooding.

O4. To allow development with a lower sensitivity to the flood hazard to be located within the floodplain, subject to appropriate design and planning controls, provided that the potential consequences which could still arise from flooding, remain acceptable having regard to the New South Wales Flood Prone Land Policy and the likely expectations of the community.

O5. To prohibit any intensification of the land uses located within the high hazard precinct, and wherever appropriate and possible, allow for their conversion to natural waterway corridors.

O6. To ensure that design and planning controls required to address the flood hazard do not result in unreasonable impacts upon the amenity, economy or ecology of an area.

O7. To ensure that development does not result in any increased risk to human safety but does endeavour to reduce such risks.

O8. To ensure that the additional economic and social costs which may arise from damage to property from flooding is not greater than that which can reasonably be managed by the property owner, property occupants and general community.

O9. To ensure that redevelopment mitigates the extent of the flood effect to new buildings or existing buildings to be refurbished.

O10. To reduce flood damage to inundated areas such as the part of a building below the flood planning level.

Development Controls

C1. The proposal shall only be permitted where reliable access is available for the evacuation of an area potentially affected by floods. Evacuation shall be consistent with any relevant flood evacuation strategy where in existence.

C2. Development shall not detrimentally increase the potential flood affectation on other development or properties, either individually or in combination with the cumulative impact of development that is likely to occur within the same floodplain.

C3. Development shall, to the fullest extent practicable, maintain the site's flood storage capacity and preserve and improve flood flow capacity through the site.

C4. Development shall not result in significant impacts upon the amenity of an area by way of unacceptable overshadowing of adjoining properties, privacy impacts (e.g. by unsympathetic house-raising) or by being incompatible with the streetscape or character of the locality.

C5. Development shall comply with the prescriptive controls relevant to the appropriate Flood Risk Precinct and Land Use Category indicated in Table 8.

Note: All prescriptive development controls relating to development within Flood Risk Precincts, other than those related to minor additions and alterations, fences and public domain works, have been tabulated within Table 8. Various matters referred to in Table 8 are explained in detail in subsequent sections of this Part.

General Controls

Land use categories see table 1 / Planning Consideration	Flood Risk Precincts (FRPs)																												
	Low Flood Risk										Medium Flood Risk										High Flood Risk									
	Sensitive Uses and Facilities	Critical Utilities and Uses	Subdivisions	Filling	Residential	Commercial or Industrial	Tourist Related evelopment	Open Space or Non-Urban	Re-development	Minor Additions	Sensitive Uses and Facilities	Critical Utilities and Uses	Subdivisions	Filling	Residential	Commercial or Industrial	Tourist Related evelopment	Open Space or Non-Urban	Re-development	Minor Additions	Sensitive Uses and Facilities	Critical Utilities and Uses	Subdivisions	Filling	Residential	Commercial or Industrial	Tourist RelatedDevelopment	Open Space or Non-Urban	Re-development	Minor Additions
Design Floor Level	3	3			2,5	2,5	2,5			4					2,5	2,5	2,5	1	5,6	4								1	5,6	4
Building Components	2	2													1	1	1	1	1	1								1	1	1
Structural Soundness	2	2													1	1	1	1	1	1								1	1	1
Flood Effects	2	2	2	1	2	2	2						1		2	2	2	2	1	2								1	1	2
Evacuation	2,4	2,4	3,4		4	3,4	3,4						3,4		3,4	3,4	3,4	1	3,4	3,4								1	3,4	3,4
Management and Design	4	2,4	1										1		3	4	4	3,4	4,5	3,4								3,4	4,5	3,4

Not relevant Unsuitable Land Use

NOTES:
Terms are defined in Part K of the DCP.

Filling
Filling of the site, where acceptable to Council, may change the Flood Risk Precinct considered to determine the controls applied in the circumstances of individual applications.

Freeboard
Freeboard to habitable floor level equals an additional height of 500mm.
For sites subject to local overland flooding only, the freeboard to habitable floor level can be reduced to the following:
i) Upstream catchment area <2ha – freeboard 200mm minimum;
ii) Upstream catchment area >16ha – freeboard 500mm minimum;
iii) Upstream catchments between 2 to 16ha – freeboard may vary linearly between 200mm to 500mm.

Design Floor Level
1. All Floor Levels shall be equal to or greater than the 20% AEP flood level plus freeboard unless justified by site specific assessment.
2. Habitable floor levels shall be equal to or greater than the FPL (1% AEP flood plus freeboard).
3. All Floor Levels shall be equal to or greater than the PMF event.
4. Floor levels shall be as close to the design floor level as practical & no lower than the existing floor level when undertaking alterations or additions.
5. Floor levels of open car parking areas and garages shall be 150mm above the 1% AEP flood. This may be achieved with an suspended floor which allows the continued passage of flood waters or filling if justified by a site specific assessment, (subject to "Flood Effects" and other controls below new line). Basement car parking must be protected from the 1% AEP flood plus freeboard of 500mm, except where, in Council's view, it is impractical to do so, but freeboard shall not be less than 150mm.
6. Habitable floor levels of residential, commercial and industrial re-development shall be protected to the FPL (1% AEP flood level plus freeboard). For Commercial/Industrial sites where it is impractical to achieve this (and subject to Council approval) the building is to be effectively flood proofed to FPL and the floor level is to be as high as practical.

Building Components & Method
1. All structures to have flood compatible building components below or at the FPL (1% AEP flood level plus freeboard).
2. All structures to have flood compatible building components below or at the PMF event level.

Structural Soundness
1. Engineers report to demonstrate and certify that any structure can withstand the forces of floodwater, debris & buoyancy up to & including the FPL (1% AEP flood plus freeboard).
2. Engineers Report to demonstrate and certify that any structure can withstand the forces of floodwater, debris & buoyancy up to & including a PMF event.

Flood Effects
1. Engineers report required to demonstrate and certify that the development will not increase flood effects elsewhere.
2. The impact of the development on flooding elsewhere shall be considered.

Note: When assessing flood effects, the following must be considered:
- loss of storage area in the floodplain;
- changes in flood levels & velocities caused by alteration of conveyance flood waters; and
- cumulative impacts of the development.

Evacuation
1. Reliable egress for pedestrians required during a 20% AEP flood.
2. Reliable egress for pedestrians and vehicles to an area refuge on or off site that is above the PMF level is required during a PMF event.
3. Reliable egress for pedestrians to the lowest habitable floor level is required from the building to an area refuge above the PMF level, either on-site or off-site.
4. Applicant to demonstrate that the development is to be consistent with any relevant flood evacuation strategy or similar plan.

Management and Design
1. Applicant to demonstrate that potential development as a consequence of a subdivision proposal can be undertaken in accordance with this Plan.
2. Site Emergency Response Flood plan required (except for single dwelling-houses) where floor levels are below the design floor level.
3. Applicant to demonstrate that area is available to store goods above the FPL (1% flood plus freeboard).
4. No external storage of materials below the FPL (1% flood plus freeboard) which may cause pollution or be potentially hazardous during any flood.

5. The applicant is to prepare an Economic Analysis of Flood Losses (See Appendix 1). The applicant to submit a Flood Preparedness Loss Minimisation Plan.

Freeboard

C6. Buildings within a Flood Risk Precinct are required to be built above the 1% AEP flood level, with an additional height known as freeboard, which is applied to take into account the impact of possible localised blockages or wave action that may occur, during a flood event.

C7. Freeboard requirements can vary depending on the size of the upstream catchment or the proposed use of the building or utility. In some cases determining the appropriate freeboard will occur through the development application assessment process, however for specific uses, namely residential, commercial and industrial uses the freeboard has been set as shown in the following table:

C8. General requirements for freeboard:

Residential	500mm
Commercial and Industrial	500mm (or effectively flood proofed to that level)
Open car parking and garages	150mm
Basement car parking entrances	500mm (where practical, but not less than 150mm)
Storage areas	500mm

Note: Regardless of the use (i.e. commercial/industrial or basement car parking) some locations will not be allowed to use the Redevelopment Category, due to the nature of the floodway in localised areas. The decision to permit use of the Redevelopment Category will be at the discretion of Council.

"Redevelopment" Land Use Category

Note: Redevelopment includes 'change of use'.

C9. To enable redevelopment of previously developed sites which are flood affected, where it can be demonstrated that the social, economic or environmental consequences of not permitting development would on balance be undesirable, the site may be redeveloped to the same land use with lesser prescriptive controls than would apply to a greenfield site or to a site rezoned to a higher use.

C10. Such an approach will only be permitted where it is impracticable to meet the full controls, as ongoing management will be required. The onus will be on the applicant to prove that this course of action is both necessary and effective in the long term.

C11. Where it is proposed to use flood-proofing, flood-proof the building such that it is eliminates flood damage to the interior. Flood-proofing shall extend to the same height as the flood planning level.

C12. Ensure the redevelopment design incorporates to the fullest extent practical, design features and measures to substantially reduce the existing potential for flood losses and personal risks.

C13. Ensure that redevelopment avoids any adverse flooding impacts on adjoining properties. The development must not obstruct or divert floodwaters.

C14. Ensure that development preserves flood storage to the fullest practical extent.

C15. Ensure, wherever possible, that redevelopment increases the capacity of overland flow paths or flood ways, provided there are no undesirable downstream consequences.

Flood compatible materials

C16. Ensure that the part of a building below the flood planning level uses flood compatible materials, as well as the careful location of electrical equipment, services and stored goods. These requirements can be found in Tables 9 and 10 below, which aim to reduce flood damage to inundated areas.

Table 9 Flood Compatible Materials

Building Component	Flood Compatible Material	Building Component	Flood Compatible Material
• Flooring and Sub-floor Structure	• Concrete slab-on-ground monolith construction • Suspension reinforced slab	• Doors	• Solid panel with water proof adhesives • Flush door with marine ply filled with closed cell foam • Painted metal construction. • Aluminium or galvanised steel frame
• Floor Covering	• Clay tiles • Concrete, precast or in-situ • Epoxy, formed-in-place • Rubber sheets or tiles with chemical-set adhesive • Silicone floors formed-in–place • Vinyl sheets or tiles with chemical-set adhesive • Ceramic tiles, fixed with mortar or chemical-set adhesive • Asphalt tiles, fixed with water resistant adhesive	• Wall & Ceiling Linings	• Fibro-cement board • Brick, face or glazed • Clay tiles glazed in waterproof mortar • Concrete • Concrete block • Steel with waterproof applications • Stone, natural solid or veneer, waterproof grout • Glass Blocks • Glass • Plastic sheeting or wall with waterproof adhesive
• Wall Structure	• Solid brickwork, blockwork, reinforced, concrete or mass concrete	• Insulation • Windows	• Foam (closed cell types) • Aluminium frame with stainless steel rollers or similar corrosion & water resistant material
• Roofing Structure (for situations where the relevant flood level is above the ceiling	• Reinforced concrete construction • Galvanised metal construction	• Nails, Bolts, Hinges & Fittings	• Brass, nylon or stainless steel • Removable pin hinges • Hot dipped galvanised steel wire nails or similar

Table 10: Flood Compatible Building Components & Equipment

Electrical & Mechanical Equipment For dwellings constructed on land to which this Policy applies, the electrical & mechanical materials, equipment and installation shall conform to the following requirements.	**Heating & Air Conditioning Systems** Heating and air conditioning systems shall, to the maximum extent possible, be installed in areas and spaces of the house above the relevant flood level. When this is not feasible every precaution shall be taken to minimise the damage caused by submersion according to the following guidelines.
Main Power Supply Subject to the approval of the relevant authority the incoming main commercial power service equipment shall be located above the relevant flood level. Means shall be available to easily disconnect the dwelling from the main power supply.	**Fuel** Heating systems using gas or oil as a fuel shall have a manually operated valve located in the fuel supply line to enable the cut-off.
Wiring All wiring, power outlets, switches, etc shall, to the maximum extent possible be located above the relevant flood level. All electrical wiring installed below the relevant flood level shall be suitable for continuous submergence in water and shall contain no fibrous components. Earth core linkage systems (or safety switches) are to be installed. Only submersible type splices should be used below the relevant flood level. All conduits located below the designated flood level shall be so installed that they will be self-draining if subjected to flooding.	**Installation** The heating equipment and fuel storage tanks shall be mounted on an securely anchored to be a foundation pad of sufficient mass to overcome buoyancy and prevent movement that could damage the fuel supply line. All storage tanks shall be vented to an elevation of 600 millimetres above the relevant flood level.
Equipment All equipment installed below or partially below the relevant flood level shall be capable of disconnection by a single plug and socket assembly.	**Ducting** All duct work located below the relevant flood level shall be provided with openings for drainage and cleaning. Self draining may be achieved by constructing the ductwork on a suitable grade. Where ductwork must pass through a water-tight wall or floor below the relevant flood level, the ductwork shall be protected by a closure assembly operated from above relevant flood level.
Reconnection If any electrical device and/or part of the wiring be flooded it should be thoroughly cleaned or replaced and checked by an approved electrical contractor before reconnection.	

Economic Analysis of Flood Loss

C17. Where the full prescriptive controls are not met, ensure that an economic assessment, as found in Appendix 1, is submitted with any development application for a flood prone business. This also applies to proposals in the Redevelopment category, including Change of Use.

C18. Notations on Title

C19. Sites where flood-proofing is implemented, require notations on Certificates of Land Title to ensure the longevity of flood proofing. These notations will be required as a condition of development consent.

8.7. Minor Alterations and Additions

Note: "Minor alteration and additions" to all uses (as defined in Section 8.6, Table 7) are permissible with consent within Flood Risk Precincts. However, Council will seek to ensure that the proposed works do not significantly increase the building footprint (thus not impacting on the flood), or that the works potentially increase the risk to property or person in a flood event. It should be noted that these prescriptive controls only relate to increases in building footprint and not general increases in overall floor area (i.e. first floor additions, etc).

Objectives

O1. To ensure that alterations and additions may be carried out without meeting the full requirements imposed on more major development.

O2. To ensure that the proposed minor alterations and additions do not significantly increase the building footprint (thus not impacting on the flood).

O3. To ensure that such alterations and additions are limited in scale and do not potentially increase the risk to property or person in a flood event.

Development Controls

C1. For existing dwellings on flood-prone land, ensure that a once-only alteration or addition to the building footprint achieves a maximum area of 10% or 30m² (whichever is the lesser) of the habitable floor area which existed prior to 1990. This is the year when the major flood studies for Holroyd occurred.

C2. Ensure that a proposal for one (in total) enclosed, detached outbuilding (e.g.: shed/garage) achieves a maximum floor area of 20m² on flood-prone land.

C3. For commercial and industrial proposals on flood-prone land, ensure that a once-only alteration or addition to the building footprint achieves a maximum area of 10% or 30m² (whichever is the lesser) of the habitable floor area which existed prior to 1990. This is the year when the major flood studies for Holroyd occurred.

C4. For all other uses, merit assessment will be used to determine what alterations and additions are permissible.

8.8. Fences and Public Domain Works

Note: It is essential to ensure clear passage of the floodway, as blockages can create increased flood hazard for people and properties. For this reason, special consideration must be given to elements which can potentially block flood paths. This includes public domain works and fencing. Other works with similar characteristics and impacts on the flood way may also require assessment under these same objectives. Council approval is required for these types of works within the Medium and High Flood Risk Precincts.

Objectives

O1. To ensure that fencing and public domain works do not result in the undesirable obstruction of the free flow of floodwaters.

O2. To ensure that fencing and public domain works do not become unsafe during floods and potentially become moving debris, which threatens the integrity of structures or the safety of people.

Development Controls

C1. Fencing and public domain works are to be constructed in a manner, which does not affect the flow of floods to detrimentally increase flood affection on surrounding land.

C2. For developments in High and Medium Flood Risk Precincts, a suitably qualified engineer must certify that the proposed fencing or public domain work is adequately constructed to withstand the forces of floodwaters, or collapse or open in a controlled manner to prevent the undesirable impediment of flood waters.

C3. Fencing within a High Hazard Flood Risk Precinct is not permissible, except for permeable security, or safety fences of a type approved by Council. Hinged gates are not considered suitable.

C4. Council requires a Development Application for all new solid (non-porous) and continuous fences above 0.6m high, in a High Hazard Flood Risk Precinct.

C5. An applicant must demonstrate that a proposed fence will create no impediment to the flow of floodwaters. Appropriate fences must satisfy the following:

a) Open, pool type fence;
b) Fencing panels may be attached by galvanised or other screws, bolts, tech screws, etc, or be attached to a swivel system capable of being opened up during times of flooding;
c) Not less than 90% in High Hazard Flood Risk Precincts and 50% in Medium Flood Risk Precincts of all fence panels shall be permanently open or capable of opening to allow the flow of flood waters; and
d) Any other fence type and design and siting criteria as prescribed by Council.

Council will consider other forms of fencing on merit.

9. Managing External Road Noise and Vibration

Note: This section applies only to land beside certain roads identified under section 8.2 and /or identified below, or any land impacted by road or rail noise and vibration as defined by State Environmental Planning Policy (Infrastructure) 2007 clauses 86, 87, 102 and 103.

All proposed site sensitive buildings are required to comply with the NSW Department of Planning and Infrastructure's (DP&I) *Development Near Rail Corridors And Busy Roads – Interim Guideline*, and the Rail Infrastructure Corporation *Interim Guideline for Applicants, Consideration of Noise and Vibration in the Planning Process.*

Sensitive developments include residences, educational establishments, child care centres, and other sensitive uses such as hospitals, seniors housing and places of worship. The Infrastructure SEPP requires an acoustic/vibration report to accompany development applications for these site sensitive proposals.

The Infrastructure SEPP applies only to those roads "with an annual average daily traffic volume of more than 40,000 vehicles" (based on Roads and Maritime Services daily traffic volume data published on the website of the RMS). However, Council identifies other roads used by heavy vehicles which do not generate the 40,000 vehicle daily average, but which are subjected to vehicle noise and vibration regularly in excess of criteria in NSW Road Noise Policy (EPA 2011) and Assessing Vibration: a technical guideline (EPA 2006). These roads are listed below.

Objectives

O1. To ensure the protection of sleep and amenity of residents and occupiers.

O2. To ensure that consent is not granted to development on land if, in the opinion of Council, it will be affected by noise and vibration to an unacceptable level, unless the development will incorporate attenuation measures to the satisfaction of Council.

O3. To ensure development immediately adjacent to a Classified Road* and certain unclassified roads, mitigate, through the use of appropriate building materials and/or effective design and articulation, the impact of external noise on the amenity of the residential and commercial buildings to an acceptable level.

O4. To ensure development adjacent to, or within, 60 metres of a railway line complies with the Rail Infrastructure Corporation *Interim Guideline for Applications, Consideration of Rail Noise and Vibration in the Planning Process.*

Development Controls

C1. Ensure an acoustic/vibration report is provided as a part of the planning documentation for development proposals adjacent to a Classified Road* and certain unclassified roads (as described below**), or within 60 metres of a railway line.

C2. Development proposal within 60 metres of any railway line and/or adjacent to a Classified Road* and certain unclassified roads (as described below**), must provide a report, to be submitted with the development application, demonstrating that the development will comply with the following criteria. The report shall be prepared by an acoustic consultant having the technical eligibility criteria required for membership of the Association of Australian Acoustical Consultants (AAAC) and/or grade membership of the Australian Acoustical Society (MAAS).

C3. In the report, demonstrate that the development will comply with requirements for vibration and noise levels identified in the NSW DP&I's *Development Near Rail Corridors And Busy Roads – Interim Guideline* (and Rail Infrastructure Corporation *Interim Guideline for Applicants,*

Consideration of Rail Noise and Vibration in the Planning Process, if necessary).

C4. Prior to issuing of an Occupation Certificate, a noise compliance report shall be submitted to the Principal Certifying Authority (PCA) confirming that new building(s) comply with the noise criteria following. The

C5. The report shall be prepared by an acoustic consultant, other than the consultant responsible for the preliminary/design report, having the technical eligibility criteria required for membership of the AAAC and/or grade membership of MAAS.

C6. Floor vibration levels in habitable rooms should comply with the criteria in British Standard BS6472: 1992 Evaluation of Human Exposure to Vibration in Buildings (1Hz to 80 Hz). This is the vibration standard recommended by the NSW DP&I and the NSW EPA.

*Note: "Classified Road" has the same meaning as in the Roads Act 1993, and includes "Highway", "Main", and "Secondary" roads. For the purposes of this clause, it also includes "Regional" roads- a term used to identify unclassified roads which are described as regional under the terms of the State/Regional/Local management arrangement. This clause applies to the following roads within Holroyd, although Council reserves the right to identify new roads as the volume or nature of traffic change , and applicants are advised to consult with Council's Environmental Health Officers for clarification.

Table 10- Classified Roads	
Burnett Street	Greystanes Road
Centenary Road	Hawksview Street
Cornelia Lane	McCredie Road (Fowler to Fairfield Roads)
Cornelia Road	Merrylands Road
Cumberland Highway (Jersey Road) – part Emert St, Freame St, Warren Road (south of Sturt St)	Neil Street
Fairfield Road	Pitt Street
Fowler Road	Sherwood Road
Gipps Road	Toongabbie Road (Great Western Highway to & including Portia Road)
Great Western Highway / M4	Treves Street
	Woodpark Road (Fairfield to Sherwood Roads)

**In addition, the following unclassified roads are considered heavy collector roads

Bridge Road	Ettalong Road
Cumberland Road (north of Merrylands Road)	Targo Road
Dunmore Street	

10. Safety and Security

Objectives

O1. To reduce crime risk and minimise opportunities for crime.

O2. To increase and contribute to the safety and perception of safety in public and semi-public spaces.

O3. To apply crime prevention principles when designing and siting buildings and spaces.

O4. To design dwelling layouts that facilitate safety and encourage interaction and recognition between residents.

O5. To assess and reduce the risk of crime associated in particular with large developments .

Development Controls

C1. A site management plan and formal crime risk assessment (Safer by Design Evaluation) involving the NSW Police Service may be required for large developments which, in Council's opinion, would create a crime risk.

C2. Design new development to reduce the attractiveness of crime by minimising, removing or concealing crime opportunities. The design of development should increase the possibility of detection, challenge and apprehension of persons engaged in crime.

C3. Incorporate and/or enhance opportunities for effective natural surveillance by providing clear sight lines between public and private places, installation of effective lighting, and the appropriate landscaping of public areas.

C4. Minimise opportunities for crime through suitable access control. Use physical or symbolic barriers to attract, channel and/or restrict the movement of people. Use landscaping and/or physical elements to direct people to destinations, identify where people can and cannot go and restrict access to high crime risk areas such as carparks.

C5. Incorporate design elements in public spaces that reflect local character and local values associated with open space, and thus contribute to a sense of community ownership of public spaces. Encouraging people to gather in public spaces through appropriate design techniques, helps to nurture a sense of responsibility for the use and condition of a place.

C6. Clearly define the boundaries between public and private spaces as a method of territorial reinforcement. Methods other than gates, fences and enclosures are encouraged.

C7. When incorporating crime prevention measures in the design of new buildings and spaces, apply subtle design techniques to blend into façades and places, and to be sympathetic with the quality of the streetscape.

C8. Provide non-slip pavement surfaces for public pedestrian areas within developments as well as communal accessways within multi- unit developments.

11. Waste Management

Objectives

O1. To meet the objectives of the Waste Avoidance and Resource Recovery Act 2001.

O2. To control the management of waste by all proposals for demolition.

O3. To control the management of waste by all development (including alterations and additions) requiring consent under Holroyd LEP 2013 and the EP&A Act1979, including but not limited to:

- i) Dwelling houses;
- ii) Medium density housing (including dual occupancy, integrated housing and residential flat buildings);
- iii) Professional Consulting Rooms and Child Care Centres;
- iv) Commercial development (including fit-outs);
- v) Residential development within or adjacent to commercial areas;
- vi) Industrial development (including fitouts);
- vii) Any other application involving construction or fitting out of a premise.

O4. To reduce the demand for waste disposal.

O5. To maximise reuse and recycling of building/construction materials, household generated waste and industrial/commercial waste;

O6. To require source separation and other design and location standards which complement waste collection and management services offered by Council and private providers;

O7. To encourage building designs and construction techniques which will minimise waste generation;

O8. To minimise the overall environmental impacts of waste;

O9. To provide advice to intending applicants on how to prepare Site Waste Minimisation and Management Plans (SWMMP), detailing actions to minimise waste generation and disposal;

O10. To provide advice to applicants on matters to be considered when assessing the waste implications of the variety of applications made under the Environmental Planning and Assessment Act;

O11. To ensure that waste storage facilities are located appropriately and do not impact negatively on the streetscape.

O12. To provide advice to intending applicants on how to reduce and handle waste during the demolition and construction phase; and

O13. To assist in achieving Federal and State Government waste minimisation targets.

11.1. Site Waste Minimisation and Management Plan

C1. All applications for development, as listed above under Objective 03 i) to vii), shall be accompanied by a Site Waste Minimisation and Management Plan (SWMMP).

C2. In the Site Waste Minimisation and Management Plan, outline measures to minimise and manage

waste generated during:

a) Demolition;
b) Construction; and
c) Ongoing use of the site/premises.

C3. Nominate in the Site Waste Minimisation and Management Plan:

a) Volume and type of waste and recyclables to be generated;
b) Storage and treatment of waste and recyclables on site;
c) Disposal of residual waste and recyclables; and
d) Operational procedures for ongoing waste management once the development is complete.

C4. State in the Site Waste Minimisation and Management Plan:

a) the method of recycling or disposal, and
b) the waste management service provider.

Note: See Appendix A for a template for the compilation of a Site Waste Minimisation and Management Plan.

11.2. Demolition of Buildings

Objectives

O1. To promote improved project management through the minimisation of waste generation and maximised re-use and recycling of materials.

O2. To encourage waste minimisation (source separation, re-use and recycling) and ensure appropriate storage and collection waste.

O3. To enforce compliance with Council's Asbestos Cement Policy.

Development Controls

C1. Complete the Demolition section of the Site Waste Minimisation and Management Plan (at Appendix A) satisfactorily, and provide details of onsite storage on plans.

C2. Maximise re-use and recycling of material .

C3. Minimise waste disposal.

C4. Where applicable, give details of asbestos management and disposal , consistent with Council's Asbestos Cement Policy.

Note: See Schedules 2 (Exempt) and 3 (Complying) of Holroyd LEP 2013 for conditions of placement of waste containers, shipping containers and skips on private property or roads.

11.3. Residential Land Use Waste Management

Objectives

O1. To promote improved project management, minimise waste generation and maximise re-use

and recycling.

O2. To encourage waste minimisation (source separation, reuse and recycling) and ensure efficient storage and collection of waste and quality design of facilities.

O3. To ensure that where Council garbage trucks are required to enter the site for the collection of residential waste, developments are designed to accommodate on-site truck movement.

Development Controls

C1. Provide a Waste Cupboard or other appropriate storage area, within the dwelling (probably in the kitchen), of sufficient size to hold a single day's waste and to enable source separation of garbage, recyclables and compostable material.

C2. Provide each dwelling with a Waste Storage and Recycling Area within the dwelling for temporary storage of recyclables and garbage.

C3. Provide each building with Waste Storage and Recycling Areas capable of accommodating the number and type of Council's standard garbage and recycling containers (see Appendix C for details).

C4. Ensure the Waste Storage and Recycling Area has unobstructed access to Council's usual Collection Point.

C5. For dwelling houses, dual occupancies, integrated housing and medium density housing, ensure the waste storage area and composting facilities are located within the rear yard to avoid visual clutter. Where this is impractical and/or inaccessible, waste containers can be stored within the garage or carport if appropriately screened from view of the street.

Note: The occupants of individual dwellings take responsibility for on street placement of garbage and recycling containers.

C6. Ensure that residential flat buildings and shoptop housing have a communal Garbage and Recycling Room located in the basement of the building. This area should:

a) be capable of accommodating Council's required number of standard waste containers and should be designed in accordance with the standards provided at Appendix D.

b) provide, where such an area is proposed, additional space for the storage of bulky waste, such as clean-up materials awaiting placement at the kerb, or recycling.

C7. For large scale proposals, consider providing a number of such Rooms.

C8. At appropriate times, transport waste from the rooms to this Area for collection. In each case the onus is upon the body corporate to ensure on-street placement.

C9. In multi- storey buildings containing more than three storeys, provide a system for the transportation of garbage from each floor level to the Garbage and Recycling Room(s). This may be a garbage chute system. Where such facilities are utilised, provide space on each floor for storage of recyclables, preferably adjacent to the lift well. Because, ongoing management is a significant issue, provide detail in the Development Application. See Appendix F for more detail on garbage chute systems.

C10. In normal circumstances, there will not be a reduction in area requirements where such volume reduction equipment is proposed. This is because Council considers that area requirements should allow for possible changes in onsite waste management arrangements. Similarly, where

Food Waste Disposal Units are provided within units there will not be a reduction in the area/ facility requirements.

C11. Nominate on the site of Residential Flat Buildings and shoptop housing an area for communal composting. While the operation of such a facility will depend upon the attitudes of unit holders and their management, the potential should exist. It is appropriate for this area to be incorporated in the landscaping plans for the development. Design communal composting with the following features:

a) locate with consideration of proximity to units (including adjoining development), odour and location of the drainage system;

b) purpose-build the facility. There are a variety of techniques available and advice on this and public health considerations can be obtained from Council; and

c) carefully signpost the facility, and make it the responsibility of the body corporate (or managing agent).

Council will require the property owner(s) to enter into an indemnity agreement where onsite collection is required.

C12. Where Council garbage trucks are required to enter the site for the collection of residential waste, design developments to accommodate on-site truck movement. See Appendix E for details. Speak with Council's Waste Management Team Leader about the design of such developments. Services will not be provided where there are undue risks.

C13. Provide adequate space for on-site composting.

Note : Where it is considered necessary, provide compactors and other volume reduction equipment in the Garbage and Recycling Room. Such equipment could save space on site where design is difficult and should be considered for all buildings greater than 3 storeys. Do not use volume reduction equipment on recyclables, because removing contaminants from compacted recyclables is almost impossible, and compacted loads containing any contaminants will be rejected by markets.

11.4. Shops, Offices and Restaurants

Objectives

O1. To encourage waste minimisation (source separation, reuse and recycling) and ensure efficient storage/collection of waste and quality design of facilities.

O2. To provide a system for waste management that is compatible with collection service(s).

O3. To facilitate on-site source separation.

O4. To appropriately design and efficiently locate a Waste Storage and Recycling Area and/or Garbage and Recycling Room on-site.

O5. To provide clear access for staff and collection services.

O6. To carefully site and design waste storage and recycling facilities.

O7. To make acceptable administrative arrangements for ongoing waste management (see Appendix G).

Development Controls

Communal Facilities (for Shops, Offices and Restaurants)

C1. Provide communal waste storage and recycling facilities where multiple occupancy, such as a series of shops or an office complex, is proposed, taking into consideration if communal facilities may be necessary. For instance:

- **a)** where the design makes it difficult for all units to have ready access to a Collection Point; and
- **b)** where site characteristics restrict entry of vehicles.

C2. Design a Waste Storage and Recycling Area to ensure each separately tenanted or separately occupied area within the building or complex is provided with a designated and clearly identified space for the housing of sufficient commercial containers to accommodate the quantity of waste and recyclable material generated. Advice on anticipated generation rates is provided at Appendix B. In all cases source separation (e.g. for recyclables) is required.

C3. Consider the use of volume reduction equipment as appropriate where space is a problem. In normal circumstances, there will not be a reduction in area requirements where such equipment is proposed. Council considers that area requirements should allow for changes in onsite management arrangements.

Multi-Level Buildings (Shops, Offices and Restaurants)

C4. Provide a building of Class 5 or 6 (for office or retail) containing more than three storeys with an acceptable method for transporting waste from each level to a Garbage and Recycling Room. This could be a goods lift, a chute system (designed in accordance with Appendix F), or some other means, provided that direct and convenient internal access is available to all levels and tenants. Where such facilities are utilised, space must be provided per floor for temporary storage of waste material and recyclables. Ongoing management is a significant issue – detail is required in the Development Application.

Paper and Cardboard

C5. For offices and commercial premises, provide for paper and cardboard recycling by:

- **a)** source separation at the Waste Storage and Recycling Area or at the Garbage and Recycling Room;
- **b)** education of staff; and
- **c)** arranging regular paper and cardboard collection services.

Alterations & Refurbishment of Shops, Offices and Restaurants

C6. Where a development application is required for alterations or refurbishment of a premises, and waste material is generated , complete a Site Waste Minimisation and Management Plan.

Food, Restaurants and Refrigerated Garbage

C7. Pay special attention to food scrap generation. Provide specialised containment and regular/ daily collection service arrangements.

C8. Provide refrigerated garbage rooms when large volumes of perishables (such as seafood) and infrequent collection is proposed.

C9. Provide grease traps external to the building where there is a likelihood of liquid waste going through plumbing. Make contact with Sydney Water to obtain their trade waste requirements.

Special Waste (such as medical wastes)

C10. Where special waste material is to be generated (such as medical wastes) special arrangements will be required. Make contact with the Council and the NSW Environment Protection Authority for advice on these matters .

C11. Safely store all medical waste within the building until removed by a medical waste transporter holding a current licence to transport medical waste as issued by the Department of Environment and Conservation. Store all used sharps in purpose designed containers to prevent needle stick injury.

C12. Remove medical waste from the premises at regular intervals .

11.5. Residential development in and adjacent to Commercial Areas

Site servicing is required to improve the amenity within a development. It is important that site servicing in commercial areas is achieved with minimal impact between the residential uses in adjoining buildings or shop-top housing and the commercial buildings.

- Site servicing facilities include:
- Garbage storage and collection areas; and
- Ventilation stacks from shops and basements.

Objectives

O1. To provide adequate servicing to the building and all uses within the development.

O2. To minimise the impact of site servicing access on pedestrians and the retail activity by locating site servicing areas to the rear of properties.

O3. To ensure site servicing does not interfere with pedestrian access and retail frontage.

O4. To minimise the noise impact of site services on adjoining buildings and the residential and commercial components of the development.

Development Controls

C1. Facilities must be provided for the separation of waste and recyclable materials. Such facilities must be located away from openable windows to habitable rooms to avoid amenity issues related with smells.

C2. Where garbage chutes are provided in a building, the provision of recycling rooms must also be incorporated into the development. Recycling 'shoots' are not permissible.

C3. Locate waste service areas where they are screened from adjoining properties and the public view, are safe and accessible for residents and still practically accessible for servicing vehicles.

C4. Service access is to be provided, where possible, from rear lanes, side streets or right of ways.

11.6. Industry

General Controls

Objectives

O1. To encourage waste minimisation (source separation, reuse and recycling).

O2. To ensure efficient storage and collection of waste.

O3. To ensure quality design of facilities.

Development Controls

General

C1. Ensure the system for waste management is compatible with available collection service(s).

C2. Provide sufficient space for careful separation and storage of recyclables and garbage on site.

C3. For multi-use industrial units, provide one Waste Storage and Recycling Area per unit, or and Area in communal space(s), and designed to allow for future change of use.

C4. Ensure the Area is easily accessible from each unit and from the Collection Point.

C5. Provide clear access for collection vehicles.

C6. Ensure facilities are carefully sited and well-designed.

C7. Make acceptable administrative arrangements for ongoing waste management (see Appendix G).

Hazardous Waste

C8. Production of hazardous wastes requires particular attention. Contact should be made with the NSW Environment Protection Authority or its equivalent for advice on this matter.

Single Use Operations

C9. Provide every building with a Waste Storage Area, designed and constructed to meet the requirements of Appendix G, capable of providing source separation of paper, metal, plastics, putrescible and liquid waste and flexible in size and layout to cater for future changes of use.

C10. Calculate the size of the Waste Storage Area on the basis of waste generation rates and proposed bin sizes.

C11. Base the calculation of waste generation rates on industry standards and discussion with the collection service provider. In all cases, source separation (e.g. for recyclables) is required.

C12. Include the operation of staff kitchen facilities.

C13. Where possible, provide access from the rear of the property. In all cases, access to normal collection points should be unimpeded. For large developments, include a Collection Area within the design.

Factory Units

C14. Factory-unit developments are less predictable than single-use operations. A number of basic decisions and assumptions need to be made up-front. For example, decide:

a) between individual or communal facilities*;

b) the degree of source separation; and

c) how to estimate generation rates (and therefore area requirements).

Communal Facilities

C15. In some circumstances waste management responsibility can be internalised, with each unit having its own bins (garbage and recycling) and individual unit holders taking responsibility for putting them out for collection.

C16. Provide a communal area in the following circumstances:

a) where the design makes it difficult for all units to have ready access to a collection point; and

b) where site characteristics restrict entry of vehicles.

C17. Design the Waste Storage and Recycling Area to enable each separately tenanted or separately occupied area within the building or complex to be provided with a designated and clearly identified space.

C18. Ensure this space can house sufficient commercial containers to accommodate the quantity of waste and recyclable material generated.

C19. Ensure the Area(s) are sufficiently flexible in design so as to allow for future changes of use of the units; and where provided outside the building, the Area(s) should be suitably screened.

C20. Ensure Storage areas are within the building line, car parking spaces or vehicle manoeuvring areas.

C21. Consider the use of volume reduction equipment as appropriate where space is a problem. In normal circumstances there will not be a reduction in area requirements where such equipment is proposed. Council considers that area requirements should allow for possible future changes in onsite management arrangements. Also, do not use Volume reduction equipment on recyclables, as removing contaminants from compacted recyclables is almost impossible, and compacted loads containing any contaminants will be rejected by markets.

12. Services

Objectives

O1. To provide public utilities to each allotment, within road reserves, in an efficient and cost-effective manner.

O2. To maximise the opportunities for shared (common) trenching and reduced restrictions on landscaping within road reserves.

O3. To ensure residential, industrial and business areas are adequately serviced in a timely, cost-effective, coordinated and efficient manner.

O4. To ensure the timely arrangement for electricity connections.

O5. To ensure allotments have met Sydney Water's requirements in relation to the provision of water and sewerage services.

Development Controls

C1. Ensure the design, construction and location of utility services conform to Council's stormwater standards and the specific standards of the relevant servicing authority.

C2. Design should take into account existing services to avoid any unnecessary alterations or diversions.

C3. Where possible, coordinate compatible public utility services in common trenching to minimise cost.

C4. Reform areas affected by construction works to appropriate grades, covered with 100mm of topsoil and then grassed.

Electricity

C5. Easements required in connection with the provision of electricity shall be arranged in consultation with Integral Energy or the equivalent authority, and shall be created by transfer or otherwise depending upon the circumstances.

C6. In order to ensure the timely arrangement for connections and the relevant electricity supply company's forward planning, including the progressive undergrounding of assets, the applicant is advised to make satisfactory arrangements with the relevant supply company for the connection of electricity prior to the lodgement of application with Council.

Water and Sewerage

C7. To ensure allotments have met Sydney Water's requirements in relation to the provision of water and sewerage services, Sydney Water requires the applicant to obtain a Section 73 Compliance Certificate for their development from an authorised Water Servicing Coordinator (WSC) under of the Sydney Water Act 1994. Obtaining such a certificate will be a condition of any Council approval. In addition to the S.73 Compliance Certificate requirement, the approved plan must also be submitted to a 'Quick Check Agency' accredited by Sydney Water to assess whether the development will affect Sydney Water's sewer and water mains, stormwater drains and/or easements, and if further requirements need to be met. For further information including a list of WSCs and Quick Check Agencies, may be accessed via Sydney Water's

Website.

Postal Services

C8. Applicants are advised to discuss with Australia Post the provision of postal services to their developments. Where a multi-unit industrial or residential development is proposed, Council may require applicants to consult with Australia Post. Please note that Australia Post has a standard for post boxes which is available from the Post Office.

12.1. Telecommunications Facilities

Note : The NSW Telecommunications Facilities Guideline Including Broadband provides principles and measures to control telecommunications facilities.

The heads of consideration that Council can address under this section of the DCP relate to:

- those telecommunications facilities defined as "Not Low Impact Facilities", including mobile telephone base stations and towers, overhead cabling, etc. See this Part for a complete list; and
- those facilities not defined by the Infrastructure SEPP 2007 as Exempt (Schedule 3A, Part 1); and
- those facilities not defined by the Infrastructure SEPP 2007 as Complying (Schedule 3A, Part 2); and
- those facilities on land comprising, or on which there is, a heritage item (natural & built heritage).

For a list of which telecommunications facilities require Council consent, see the end of Appendix I.

For definitions of terms specific to this section, see Appendix I.

Objectives

O1. To preserve the visual character and amenity of Holroyd.

O2. To minimise the visibility and visual impact of telecommunications towers by restricting their siting in relation to residential areas, public areas and significant landscape features.

O3. To design telecommunication facilities to minimise their visibility and visual impact, and within the local context to take account of colour, texture, form, bulk and scale.

O4. To minimise the visual impact of telecommunications facilities on the urban landscape by encouraging, where technically feasible, the sharing and collocation of facilities by carriers.

O5. To encourage the location of facilities emitting electro-magnetic radiation away from community sensitive locations .

Development Controls

Health & Safety

C1. Comply with industry standards recognised by the ACA as a standard for use in that industry. 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.

C2. Submit an annual statement of compliance with the ARPANSA Standard for radiation emissions from towers.

C3. Identify with clearly visible signage any microwave radiation emitting facilities (including mobile base station sites) and provide them with appropriate details: i.e. owner of a telecommunications facility or a mobile base station site, emergency contact number and radiation warning signs to the Council's satisfaction.

C4. 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.

Note: Under the Deployment of Mobile Phone Network Infrastructure, the Carrier is required to assess the need for physical barriers.

Siting

C5. Take all reasonable steps to co-locate with existing facilities, while ensuring that the cumulative impact of EMR remains safe, has minimal visual & noise impact, does not compromise the structural integrity of the facilities. Co-location is particularly favoured in Industrial, business, recreational and special uses zones.

C6. Where co-location is an option that has been rejected, the carrier must explain to Council the reason for that decision.

C7. Avoid locations in which the facility visually dominates a visually sensitive landscape.

C8. Give evidence of negotiation with stakeholders to find a mutually acceptable location.

C9. 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.

C10. Do not locate a tower within 6m of any property boundary within a residential zone, to minimise visual impact.

C11. Do not locate a tower within 6m of any residential building, to minimise visual impact.

C12. 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.

C13. 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.

C14. A rooftop antenna or dish should only be located on a building within industrial, business, recreational and special uses zones.

C15. 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 Heritage Local Environmental Plan;
- the antennae and dishes are visible from the fronting road at pedestrian eye level;
- the rooftop faces the street;
- within residential areas, the dishes must not be above 1.2m in diameter &/or 1.8m above the ridgeline.

C16. Antennas and dishes should not be located in the front setback of a residential property, to minimise visibility and visual impact.

Aesthetics

C17. Ensure the design, materials, and colour of facilities are consistent with the surrounding architecture and environment. Where attached to a building, integrate facilities 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, and their 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.

Note: Council will give preference to innovative approaches aimed at disguising the presence of a telecommunication facility (i.e. within or behind existing signage).

C18. Advertising signs or messages of any type, including corporate logos and night illumination, shall not be included on towers and associated facilities.

C19. Landscape around towers, where in the opinion of Council, such landscaping would serve to screen or soften the visual impact of the proposed tower when viewed from any public place. Associated equipment and structures may also require screening or softening with appropriate planting of trees and shrubs at Council's discretion, having regard to the context and setting of the particular proposal.

C20. Minimise visual impacts on any dwelling, residential land, school, child care centre, boarding house, hospital, or aged care accommodation.

C21. Facilities must have no negative impact on the streetscape associated with a heritage item or conservation area. For example, 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.

C22. Towers should wherever possible be a self supporting "slimline monopole" construction in an existing landscape dominated by vertical elements (i.e. trees, poles, chimneys, etc). In order to minimise visual intrusion in the given locality or on a streetscape, the height of a tower shall not be excessive.

Environment

C23. Undertake site analysis to respond to site conditions.

C24. Minimise cut and fill on construction sites to avoid problems associated with erosion, sedimentation and disturbance to natural topography and vegetation.

C25. Comply with Council requirements regarding tree protection, erosion and sedimentation control.

C26. Street furniture, paving or other existing facilities removed or damaged during construction should be reinstated (at the telecommunications carrier's expense) to at least the same condition as that which existed prior to the telecommunications facility being installed.

C27. Minimise impacts on flora and fauna during construction, maintenance and operation of facilities.

C28. Where ecosystems may be disturbed, regenerate the understorey in conservation areas to increase overall viability and robustness.

C29. A telecommunications facility that is no longer required is to be removed and the site restored, as far as practical, to its original state.

C30. Locate microwave base stations and structures of similar bulk and scale preferably above the 1% Annual Exceedance Probability flood level.

C31. 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.

C32. 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.

C33. Likewise, 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.

C34. Comply with that section of this DCP that controls Tree Management in Holroyd.

C35. Noise levels should be consistent with acoustic requirements for day and night as measured by the NSW Noise Guide for Local Government.

Note: A telecommunications tower, mast, pole, antenna, dish, external equipment shelter, pillar, roadside cabinet and/or pedestal is classified as a Class 10b structure, and as such is controlled by the Building Code of Australia (BCA). As a consequence, these structures must meet the relevant deemed-to-satisfy provisions of the BCA.

Appendix A- Site Waste Minimisation and Management Plan Template

Applicant and Project Details (All Developments)

Applicant Details	
Application No.	
Name	
Address	
Phone number(s)	
Email	
Project Details	
Address of development	
Existing buildings and other structures currently on the site	
Description of proposed development	
This development achieves the objectives set out in the Waste DCP. The details on this form are the provisions and intentions for minimising waste relating to this project.	
Name	
Signature	
Date	

Construction Design (All Types of Developments)

Outline how measures for waste avoidance have been incorporated into the design, material purchasing and construction techniques of the development:

- **Materials**

- **Lifecycle**

General Controls

Demolition (All Types of Developments)
Address of development:_____

Most favourable			Least favourable	
	Reuse	**Recycling**	**Disposal**	
Type of waste generated	Estimate Volume (m^3) or Weight (t)	Estimate Volume (m^3) or Weight (t)	Estimate Volume (m^3) or Weight (t)	Specify method of on site reuse, contractor and recycling outlet and /or waste depot to be used
Timber (specify)				
Concrete				
Bricks/pavers				
Tiles				
Metal (specify)				
Glass				
Furniture				
Fixtures and fittings				
Floor coverings				
Packaging (used pallets, pallet wrap)				
Garden organics				
Containers (cans, plastic, glass)				
Paper/cardboard				
Residual waste				
Hazardous/special waste e.g. Asbestos (specify)				
Other (specify)				

Construction (All Types of Developments)

Address of development:_____

Refer to Section 10 of this DCP for objectives regarding construction

Most Favourable			Least Favourable	
	Reuse	**Recycling**	**Disposal**	
Type of waste generated	Estimate Volume (m^3) or Weight (t)	Estimate Volume (m^3) or Weight (t)	Estimate Volume (m^3) or Weight (t)	Specify method of on site reuse, contractor and recycling outlet and /or waste depot to be used
Excavation material				
Timber (specify)				
Concrete				
Bricks				
Tiles				
Metal (specify)				
Glass				
Plasterboard (offcuts)				
Fixtures and fittings				
Floor coverings				
Packaging (used pallets, pallet wrap)				
Garden organics				
Containers (cans, plastic, glass)				
Paper/cardboard				
Residual waste				
Hazardous/special waste (specify)				

Ongoing Operation (Residential, Multi- Unit, Commercial, Mixed Use and Industrial)

Address of development:_____
Show the total volume of waste expected to be generated by the development and the associated waste storage requirements.

	Recyclables		Compostables	Residual waste*	Other
	Paper/ Cardboard	Metals/ plastics/ glass			
Amount generated (L per unit per day)					
Amount generated (L per development per week)					
Any reduction due to compacting equipment					
Frequency of collections (per week)					
Number and size of storage bins required					
Floor area required for storage bins (m^2)					
Floor area required for manoeuvrability (m^2)					
Height required for manoeuvrability (m)					

* Current "non-recyclables" waste generation rates typically include food waste which may be further separated for composting.

Detail the arrangements that would be appropriate for the ongoing use of waste facilities as provided in the development. Identify each stage of waste transfer between residents' units/commercial tenancies and loading into the collection vehicle, detailing the responsibility for and location and frequency of, transfer and collection.

Plans And drawings (All Developments)

The following checklists are designed to help ensure SWMMPs are accompanied by sufficient information to allow assessment of the application.
Drawings are to be submitted to scale, clearly indicating the location of and provisions for the storage and collection of waste and recyclables during:

- Demolition
- Construction
- Ongoing operation

Demolition
Refer to Section 10 of this DCP for specific objectives and measures.
Do the site plans detail/indicate:

	Tick Yes
Size and location(s) of waste storage area(s)	
Access for waste collection vehicles	
Areas to be excavated	
Types and numbers of storage bins likely to be required	
Signage required to facilitate correct use of storage facilities	

Construction
Refer to Section 10 of the DCP for specific objectives and measures.
Do the site plans detail/indicate:

	Tick Yes
Size and location(s) of waste storage area(s)	
Access for waste collection vehicles	
Areas to be excavated	
Types and numbers of storage bins likely to be required	
Signage required to facilitate correct use of storage facilities	

Ongoing Operation
Refer to Section 10 of the DCP for specific objectives and measures.
Do the site plans detail/indicate:

	Tick Yes
Space	
Size and location(s) of waste storage areas	
Recycling bins placed next to residual waste bins	
Space provided for access to and the manoeuvring of bins/equipment	
Any additional facilities	
Access	
Access route(s) to deposit waste in storage room/area	
Access route(s) to collect waste from storage room/area	
Bin carting grade	
Location of final collection point	
Clearance, geometric design and strength of internal access driveways and roads	
Direction of traffic flow for internal access driveways and roads	
Amenity	
Aesthetic design of waste storage areas	
Signage – type and location	
Construction details of storage rooms/areas (including floor, walls, doors, ceiling design, sewer connection, lighting, ventilation, security, wash down provisions etc)	

Potential Reuse/Recycling Options

These potential reuse/recycling options are provided as examples only. There are many other reuse and recycling opportunities available and applicants are not limited to those listed below.

MATERIAL	REUSE/RECYCLING POTENTIAL
Concrete	Reused for filling, levelling or road base
Bricks and Pavers	Can be cleaned for reuse or rendered over or crushed for use in landscaping and driveways
Roof Tiles	Can be cleaned and reused or crushed for use in landscaping and driveways
Untreated Timber	Reused as floorboards, fencing, furniture, mulched or sent to second hand timber suppliers
Treated Timber	Reused as formwork, bridging, blocking and propping, or sent to second hand timber suppliers
Doors, Windows, Fittings	Sent to second hand suppliers
Glass	Reused as glazing or aggregate for concrete production
Metals (fittings, appliances and wiring)	Removal for recycling
Synthetic Rubber (carpet underlay)	Reprocessed for use in safety devices and speed humps
Significant Trees	Relocated either onsite or offsite
Overburden	Power screened and used as topsoil
Garden Waste	Mulched, composted
Carpet	Can be sent to recyclers or reused in landscaping
Plasterboard	Removal for recycling, return to supplier or used in landscaping

Appendix B- Waste/Recycling Generation Rates

Construction Waste

'Rule of Thumb' for renovations and small home building

- Timber 5-7% of material ordered
- Plasterboard 5-20% of material ordered
- Concrete 3-5% of material ordered
- Bricks 5-10% of material ordered
- Tiles 2-5% of material ordered

Source: Waste Planning Guide for Development Application, Inner Sydney Waste Board, 1998

Ongoing Operation

PREMISES TYPE	WASTE GENERATION	RECYCLABLE MATERIAL GENERATION
Backpackers' Hostel	40L/occupant space/week	20L/occupant space/week
Boarding House, Guest House	60L/occupant space/week	20L/occupant space/week
Food premises: Butcher Delicatessen Fish Shop Greengrocer Restaurant, Café Supermarket Takeaway food shop	 80L/100m² floor area/day 80L/100m² floor area/day 80L/100m² floor area/day 240L/100m² floor area/day 10L/1.5m² floor area/day 240L/100m² floor area/day 80L/100m² floor area/day	 Variable Variable Variable 120L/100m² floor area/day 2L/1.5m² floor area/day 240L/100m² floor area/day Variable
Hairdresser, Beauty Salon	60L/100m² floor area/week	Variable
Hotel, Licensed Club, Motel	5L/bed space/day 50L/100m² bar area/day 10L/1.5m² dining area/day	1L/bed space/day 50L/100m² bar area/day 50L/100m² dining area/day
Offices	10L/100m² floor area/day	10L/100m² floor area/day
Shop less than 100m² floor area Shop greater than 100m² floor area	50L/100m² floor area/day 50L/100m² floor area/day	25L/100m² floor area/day 50L/100m² floor area/day
Showroom	40L/100m² floor area/day	10L/100m² floor area/day
Multi-Unit Dwellings[1]	80L/unit/week	40L/unit/week

Sources: Adapted from Waverley Council Code for the Storage and Handling of Waste.

[1] Appendix A, Better Practice Guide For Waste Management In Multi-Unit Dwellings 2007

Appendix C- Council's Standard Garbage and Recycling Containers and Indicative Bin Sizes

The waste service requirements for residential developments are as follows:

DWELLING TYPE		NUMBER OF GRABAGE BINS REQUIRED	NUMBER OF RECYCLING BINS REQUIRED
Single		1 x 240L	1 x 240L
Villa or townhouse		1 x 240L	1 x 240L
RFB	1-20 units	1 x 240L bin per 2 units plus 1 additional bin per 10 units	1 x 240L bin per 3 units
	20+ units	1 x 1100L bin per 8 units	1 x bin per 3 units

Note: Council will consider alternative options to the above for developments exceeding 30 units.

Indicative Bin Sizes

BIN TYPE	HEIGHT	DEPTH	WIDTH
120L	940mm	560mm	485mm
240L	1088mm	735mm	580mm
1100L	1465mm	1220mm	1360mm

These dimensions are only a guide and differ slightly according to manufacturer, if bins have flat or dome lids and are used with different lifting devices.

Appendix D- Waste Recycling/Storage Rooms In Multi–Unit Dwellings

Building Code of Australia

Waste/recycling storage rooms must be constructed in accordance with the requirements of the Building Code of Australia (BCA).

Location and appearance

- Waste/recycling storage rooms must be integrated into the design of the overall development. It is preferable that such rooms be located behind the front building line. Wherever possible, the room should be in a basement location within the main building envelope (rather than being a separate stand-alone structure). Materials and finishes which are visible from outside should be similar in style and quality to the external materials used in the rest of the development.
- Waste/recycling storage rooms must be located and designed in a manner which reduces adverse impacts upon the inhabitants of any dwellings on the site and upon neighbouring properties. The location and design of the room should minimise adverse impacts associated with:
  - the proximity of the room to any dwellings;
  - the visibility of the room;
  - noise generated by any equipment located within the room;
  - noise generated by the movement of bins into and out of the room;
  - noise generated by collection vehicles accessing the site; and
  - odours emanating from the room.

Size

- Waste/recycling storage rooms must be of adequate size to comfortably accommodate all waste and recycling bins associated with the development.
- In the case of multi-unit housing and residential flat buildings, the waste/recycling storage room must be able to accommodate bins at the rate described at Appendix E Garbage Truck Dimensions for Residential Waste Collection and Appendix F Garbage Chutes.

Layout

The gradient of waste/recycling storage room floors and the gradient of any associated access ramps must be sufficiently level so that access for the purpose of emptying containers can occur in accordance with WorkCover NSW Occupational Health and Safety requirements.

Within waste/recycling storage rooms, containers used for the storage of recyclable materials should be kept separate from (but close to) general waste containers – so that the potential for contamination of recyclable materials is minimised.

Appendix E- Garbage Truck Dimensions for Residential Waste Collection

This page includes information regarding the dimensions of garbage trucks which are typically used for the collection of residential waste. Developments which require Council garbage trucks to enter the site for the collection of residential waste must be designed so as to accommodate on-site truck movement.

Requirements regarding vehicle turning circles and driveway width/gradient are contained in Australian Standard 2890.2 2002/Planning Facilities – off street commercial vehicles.

It is recommended that an applicant speak with Council's Waste Management Team Leader in regards to the design of development proposals which involve garbage trucks entering the site. Services will not be provided where there are undue risks.

TYPICAL COUNCIL GARBAGE TRUCK USED FOR DOMESTIC WASTE COLLECTION	
Length overall	8.0 metres
Width overall	2.5 metres
Operational height	4.3 metres
Travel height	4.3 metres
Weight (vehicle and load)	22.5 tonnes
Weight (vehicle only)	13 tonnes
Turning Circle	25.0 metres

Appendix F- Garbage Chutes

Garbage chute design

- Garbage chutes must be constructed in accordance with the requirements of the Building Code of Australia (BCA).
- Garbage chutes must be located and insulated in a manner which reduces noise impacts.
- Chutes, service openings and charging devices must be constructed of material (such as metal) which is smooth, durable, impervious, non-corrosive and fire resistant.
- Chutes, service openings and charging devices must be capable of being easily cleaned.
- Chutes must be cylindrical and should have a diameter of at least 500mm.
- There must not be any bends (or sections of reduced diameter) in the main shaft of the chute.
- Internal overlaps in the chute must follow the direction of waste flow.
- Chutes must deposit rubbish directly into a bin or compactor located within a waste/ recycling storage room.
- A cut-off device must be located at or near the base of the chute so that the bottom of the chute can be closed when the bin or compacting device at the bottom of the chute is withdrawn or being replaced.
- The upper end of a chute should extend above the roof line of the building.
- The upper end of a chute should be weather protected in a manner which doesn't impede the upward movement of air out of the chute.

Garbage chute service room design

- The service opening (for depositing rubbish into the main chute) on each floor of the building must be located in a dedicated service room.
- The charging device for each service opening must be self closing and must not project into the main chute.
- Branches connecting service openings to the main chute are to be no more than 1m long.
- Each service room must include containers for the storage of recyclable materials. Signage regarding the materials which can be recycled should be displayed near these containers.
- Each service room must be located for convenient access by users and must be well ventilated and well lit.
- The floors, walls and ceilings of service rooms must be finished with smooth, durable materials which are capable of being easily cleaned.
- Service rooms must include signage which clearly describes the types of materials which can be deposited into the garbage chute and the types of materials which should be deposited into recycling bins.

Management

- Garbage chutes are not to be used for the disposal of recyclable materials. Signage to this effect should be displayed near service openings.
- Arrangements must be in place for the regular maintenance and cleaning of garbage chutes and any associated service rooms, service openings and charging devices.

Arrangements must be in place for the regular transferral of recyclable materials (which are stored in service rooms) to the main waste/recycling storage room.

Appendix G- Commercial/Industrial Waste and Recycling Storage Areas

Building Code of Australia

- Waste/recycling storage areas must be constructed in accordance with the requirements of the Building Code of Australia (BCA).

Location and appearance

- Waste/recycling storage areas must be integrated into the design of the overall development. Materials and finishes which are visible from outside should be similar in style and quality to the external materials used in the rest of the development.
- Waste/recycling storage areas must be located and designed in a manner which reduces adverse impacts upon neighbouring properties and the streetscape. The location and design of the areas should minimise adverse impacts associated with:
  - the proximity of the area to dwellings;
  - the visibility of the area;
  - noise generated by any equipment located within the area;
  - noise generated by the movement of bins into and out of the area;
  - noise generated by collection vehicles accessing the site; and
  - odours emanating from the area.

Size

- Waste/recycling storage areas must be of adequate size to comfortably accommodate all waste and recycling bins associated with the development.
- Waste/recycling storage areas must be able to accommodate separate general waste bins and recycling bins which are of sufficient volume to contain the quantity of waste generated (at the rate described in Appendix B) between collections.

Layout

- The gradient of waste/recycling storage area floors and the gradient of any associated access ramps must be sufficiently level so that access for the purpose of emptying containers can occur in accordance with WorkCover NSW occupational health and safety requirements.
- Within waste/recycling storage areas, containers used for the storage of recyclable materials should be kept separate from (but close to) general waste containers – so that the potential for contamination of recyclable materials is minimised.

Access: waste/recycling collection

- The development must be designed to allow for access by collection vehicles used by the nominated waste contractor. Wherever possible, the site must be configured so as to allow collection vehicles to enter and exit the site in a forward direction and so that collection vehicles do not impede general access to, from and within the site. Access driveways to be used by collection vehicles must be of sufficient strength to support such vehicles.
- Servicing arrangements for the emptying of bins must be compatible with the operation of

any other loading/unloading facilities on-site.

- Access for the purpose of emptying waste/recycling storage containers must be able to occur in accordance with WorkCover NSW Occupational Health and Safety requirements.

Access: general

- In commercial development, public buildings and industrial development, there must convenient access from each tenancy to the waste/recycling storage area/s. There must be step-free access between the point at which bins are collected/emptied and the waste/recycling storage area/s.
- Arrangements must be in place so that the waste/recycling storage area is not accessible to the general public.
- Vermin must be prevented from entering the waste/recycling storage area.

Surfaces

- Waste/recycling storage areas must have a smooth, durable floor and must be enclosed with durable walls/fences which extend to the height of any containers which are kept within.

Doors/gates

- Doors/gates to waste/recycling storage areas must be durable. There must be a sign adjacent to the door/gate which indicates that the door/gate is to remain closed when not in use. All doors/gates are to be openable from both inside and outside the storage area and must be wide enough to allow for the easy passage of waste/recycling containers.

Services

- Waste/recycling storage areas must be serviced by hot and cold water provided through a centralised mixing valve. The hose cock must be protected from the waste containers and must be located in a position which is easily accessible when the area is filled with waste containers.
- The floor must be graded so that any water is directed to a sewer authority approved drainage connection located upon the site. In the Sydney Metropolitan area this is Sydney Water.

Signage

- Waste/recycling storage areas must include signage which clearly describes the types of materials which can be deposited into recycling bins and general garbage bins.

Management

- Arrangements must be in place for the regular maintenance and cleaning of waste/recycling storage areas. Waste/recycling containers must only be washed in an area which drains to a sewer authority approved drainage connection. In the Sydney Metropolitan Area this is Sydney Water.
- The Better Practice Guide for Waste Management in Multi-Unit Dwellings gives detailed information about waste recycling/storage rooms and facilities like garbage chute design. The 2008 edition is available on the NSW EPA website (www.environment.nsw.gov.au). Further updates will be published as further information from social research and waste stream audits becomes available.

Appendix H - Economic Analysis of Flood Loss

An indication of flood losses can be obtained by calculating the annual average flood damage costs for a range of flood intensities and summing these to give a total annual average figure which is then converted to a net present worth cost. This Guideline shows how to do this.

Flood losses can be categorised as tangible and intangible costs. Tangible Flood Losses in the Commercial or Industrial Sector result from either direct or indirect damages. Direct damages involves clean up costs, loss or damage to tools, equipment and stock within the building and damage to stock, equipment and vehicles stored in the grounds (if applicable). Indirect damages result from disruption costs e.g. down-time (for clean up and repair), lost wages, loss of profit, Intangible costs may include stress, worry or injury to staff as a consequence of the flood. Intangible costs are difficult to calculate and are not required as part of this analysis.

Example: consider a commercial development which has a floor level just below the 20% AEP (1in 5 year ARI) flood. By knowing what and how the tools, floor coverings, stock and equipment are affected by the different flood heights, various damage costs can be estimated. To make this calculation, it is necessary to know the height of all the assets subject to damage to the same datum as used for the flood levels – i.e. Australian Height Datum (AHD). Similarly, time in working hours resulting from lost production or sales e.g. machines sent off for repairs, staff idle time during clean up, shop closed etc and consequent loss of profit can also be estimated as indirect costs. The various costs in this example are set out in Table 11.

The Annual Average Damages is an annual series and it is necessary to convert these damages into a Net present Value to enable comparison to the cost of any flood proofing measures which would reduce or eliminate these costs. A 7% discount factor has been commonly used in these applications, this results in a conversion factor of 14.3 as shown in Table 11.

These results then allow calculation of the Benefit Cost Ration (BCR) for a given extent of flood proofing works as shown in Table 12. The benefit savings in flood damages compared to the case of taking no precautions against flood loss. Depending on the results, a series of analyses would be undertaken progressively increasing the extent of flood proofing measures. This would allow for the most cost effective level to be determined. Normally flood proofing would be considered in the range whether the BCR is greater than 1, although the optimum extent of flood proofing depends on the decision maker's circumstances.

In many existing developments only limited flood proofing may be practical, however, it should be evaluated ad details provided to assist Council in its assessment. A blank form is available as Table #.3 to facilitate assessment by the applicant. The attached letter must be returned to Council together with the completed tables(s). The letter also contains an acknowledgment and acceptance by the applicant of the risks associated with developing in an area subject to flooding. In particular,

- The calculations are based on the probability of a flood occurring, and the method averages the costs out on an average basis. However, there is also the chance that the 1% AEP flood or higher may occur within the first week or month of operation and the business may need to be prepared for this high loss.
- The applicant acknowledges that all risks associated with occupying the site are with the applicant. Council does not accept any responsibility for flood damages in approving development.

Table 11 - Example of Annual Average Flood Damages (no flood proofing)								
(1) A.R.I FLOOD	(2) A.E.P FLOOD	(3) INDIRECT DAMAGES ($)	(4) INDIRECT DAMAGES ($)	(3)+(4) = (5) TOTAL DAMAGES	(6) AVERAGE DAMAGES ($)	(7) PROBABILITY FACTOR	(8) DIFFERENCE IN PROBABILITY	(7) ANNUAL DAMAGES (6) X (8)
100	1%	35,000	18,000	53,000	41,000	.01	.01	410
50	2%	19,000	10,000	29,000	23,000	.02	.03	690
20	5%	11,000	6,000	17,000	12,500	.05	.05	625
10	10%	5,000	3,000	8,000	5,000	.10	.10	500
5	20%	1,250	750	2,000	1,000	.20	.30	300
2	50%	Nil	nil	nil		.50		
					TOTAL ANNUAL AVERAGE DAMAGES			**$2,525**

NET PRESENT VALUE OF ANNUAL AVERAGE DAMAGES – 14.3 x $2,525 = $36,107

Using a 7% discount factor the net present value of the annual series is

Table 12 - Example of Annual Average Flood Damages (with one flood proofing option)

(1) A.R.I FLOOD	(2) A.E.P FLOOD	(3) INDIRECT DAMAGES ($)	(4) INDIRECT DAMAGES ($)	(3)+(4) = (5) TOTAL DAMAGES	(6) AVERAGE DAMAGES ($)	(7) PROBABILITY FACTOR	(8) DIFFERENCE IN PROBABILITY	(7) ANNUAL DAMAGES (6) X (8)
100	1%	20,000	9,000	29,000	24,000	.01	.01	240
50	2%	12,000	7,000	19,000	15,000	.02	.03	450
20	5%	7,000	4,000	11,000	6,750	.05	.05	337
10	10%	1,600	900	2,500	2,050	.10	.10	205
5	20%	1,000	600	1,600	800	.20	.30	240
2	50%	Nil	nil	nil		.50		
					TOTAL ANNUAL AVERAGE DAMAGES			**$1,472**

Using 7% discount factor, the Net Present Value of Flood Damages = 14.3 x $1,472 = $21,050

Savings in Flood Damages = $36,107 - $21,050 = $15,057

The above example considers the use of special racks that ensure stock is a minimum of 500mm above ground level. These racks cost an additional $11,000 to those which would normally be required.

Consequently BCR = Savings in Flood Damages ÷ cost of Floodproofing = $\frac{\$15,057}{\$11,000}$ = 1.37

Various other options could also be considered, e.g. higher racks, a levee around the property to prevent water entry etc so that a range of tables are prepared.

General Controls

FLOOD PROOFING OTIN:……
……

PROPERTY ADDS:……
……DA:……/……

Table 13 - Annual Average Flood Damages

(1) A.R.I FLOOD	(2) A.E.P FLOOD	(3) INDIRECT DAMAGES ($)	(4) INDIRECT DAMAGES ($)	(3)+(4) = (5) TOTAL DAMAGES	(6) AVERAGE DAMAGES ($)	(7) PROBABILITY FACTOR	(8) DIFFERENCE IN PROBABILITY	(7) ANNUAL DAMAGES (6) X (8)
100	1%					.01	.01	
50	2%					.02	.03	
20	5%					.05	.05	
10	10%					.10	.10	
5	20%					.20	.30	
2	50%					.50		
					TOTAL ANNUAL AVERAGE DAMAGES			

Using 7% discount factor, the Net Present Value of Flood Damages = 14.3 x $
= $

Savings in Flood Damages = Losses if nothing is done – losses if this option applied
= $ - $ = $

Cost of Flood Proofing = $ therefore BCR = Savings in flood damages
=

Cost of flood proofing

General Controls

The General Manager
Holroyd City Council
PO Box 42
MERRYLANDS NSW 2160

DA ……/……

Attention: Environmental & Planning Services

Re: Change of Use at ……..

I refer to my application for change of use at the above property to ……

……
……
……

I (will/will not) be undertaking any flood-proofing. Provide details including relevant table(s) if required.

……
……
……
……
……
……

The flood damage calculations enclosed represent an accurate assessment of the damages associated with the proposed business for the various flood levels.

I acknowledge that the property may be flooded at any time including the 1% AEP flood or higher, and that I am prepared to accept the risks associated with this for my development and absolve Holroyd City Council, or any its officers, of any responsibility for any flood damages at this property.

Signature: …… on behalf of ……...

Position: …… Date: ……

Appendix 1 - Telecommunications Terms

Administrative authority
(a) the holder of an office; or
(b) an authority of a State or a Territory; or
(c) a local government body;
performing administrative functions under a law of a State or a Territory.

Applicant
Applies to infrastructure providers and their agents.

Area of environmental significance
If it is registered under a law of a State or a Territory relating to heritage conservation [among other categories]. E.g. State Heritage Register. E.g. heritage item under LEP (protected by NSW Heritage Act, 1977). E.g. Environmentally sensitive area under LEP.

Carrier
The holder of a carrier licence [the owner of a network unit that is used to supply carriage services].
Applies to:
(a) a constitutional corporation; or
(b) an eligible partnership [of corporations]; or
(c) a public body [see public authority].

Commercial area
If its principal designated use is for commercial purposes.

Co-located facilities one or more facilities on or within an original facility or a public utility structure

Community sensitive site
Includes residential areas, child care centres, schools, aged care centres, hospitals, playgrounds and regional icons. Also included are environmentally sensitive lands (Telecommunications Code of Practice 1997, clause 2.17.4)

Co-location
The siting of a number of telecommunication facilities, often owned by different carriers, in one location

Cumulative impact
The impact of radiation from various sources or over time.

Designated overhead line
(a) that is suspended above the surface of:
(i) land (other than submerged land); or
(ii) a river, lake, tidal inlet, bay, estuary, harbour or other body of water; and
(b) the maximum external cross section of any part of which exceeds:
(i) 13 mm; or
(ii) if another distance is specified in the regulations—that other distance.

Electromagnetic radiation (EMR)
The radiation in the microwave and radiofrequency band of the electromagnetic spectrum EME

Electromagnetic energy
Industrial area
An area is an industrial area if its principal designated use is for industrial purposes.

Low impact facility (LIF)
A facility that is exempted from state and council local planning laws under the Telecommunications (Low-impact Facilities) Determination 1997. In particular, see whatever is not listed under "Not a low-impact facility".

Negotiations
(a) the submission of an application for approval; and
(b) pursuing an application for approval.

Not a low-impact facility
By implication, a facility not exempted from state and council local planning laws. See the list of "Not Low Impact Facilities" at the end of this Appendix. They include:

- designated overhead lines (>13mm);
- a tower that is not attached to a building;
- a tower attached to a building and more than 5 metres high;
- an extension to a tower that has previously been extended;
- an extension to a tower, if the extension is more than 5 metres high;
- any extension in a residential or commercial zone;
- any structure proposed in an area of environmental significance;
- any structure proposed in an "area of heritage conservation".

Note: certain Radio Terminal Antennas and Dishes above given sizes in certain zones require Council consent under State legislation, and so effectively are also considered to be 'not a low-impact facility'.

Public authority
(a) a public or local authority constituted by or under an Act, or
(b) a government Department, or
(c) a statutory body representing the Crown, or
(d) a chief executive officer within the meaning of the Public Sector Management Act 1988 (including the Director-General), or
(e) a statutory State owned corporation (and its subsidiaries) within the meaning of the State Owned Corporations Act 1989 [see SOC], or
(f) a chief executive officer of a corporation or subsidiary referred to in paragraph (e), or
(g) a person prescribed by the regulations for the purposes of this definition.

Radiocommunications facility
A base station or radiocommunications link, satellite-based facility or radiocommunications transmitter.

Relevant local government authority
For an activity in a State or Territory, means an authority of the State or Territory responsible for the

local government of the area where the activity happens or is to happen.

Residential area
(1) If its principal designated use is for residential purposes.
(2) A part of a built-up area is a residential area if it cannot otherwise be described as a commercial, industrial or rural area.
RF
Radiofrequency.

State owned corporation
or SOC means a company for the time being specified in Schedule 1[none], or a corporation for the time being specified in Schedule 5 [energy & water corporations].

Subscriber
for a carrier, includes a proposed or potential subscriber [customer].

Subscriber connection
An installation for the sole purpose of connecting premises to a line forming part of a telecommunications network.

Telecommunications facility
Any part of the infrastructure of a Telecommunications Network. It includes any telecommunications line, equipment, apparatus, telecommunications tower, mast, antenna, tunnel, duct, hole, pit, pole or other structure or thing used, or for use in connection with a Telecommunications Network.

Telecommunications Network
A system, or series of systems, that carries, or is capable of carrying, communications.
Tower
a tower, pole or mast. (n.b.: reference to a tower does not include a reference to an antenna)

FACILITIES SUBJECT TO COUNCIL CONSENT:

1. Not Low-impact Facilities:
(as defined by the Telecommunications (Low Impact Facilities) Determination 1997); and

2. Not Exempt or Complying Facilities:
(as defined by the State Environmental Planning Policy (Infrastructure) 2007).

Facility	Conditions under which the facility requires Council Consent.	
	Telecommunications (Low Impact Facilities) Determination 1997	State Environmental Planning Policy (Infrastructure) 2007
Co-location (on electricity poles or underground)		Exempts all
New Tower	Non-industrial zone: * if not attached to a building; or * attached to a building & >5m high. Industrial zone: * >100m from R zone; or * 100-150m from R- >25m high * >150m from R- >30m high	
Replacement Tower	Residential zone: * increase in height; or * >10m from original Non-Residential zone: * increase in height; or * >20m from original; or * closer to R zones.	
Tower extension of any size	If in Residential zones; or If previously extended; or Commercial zones: *>7.5m high; & * not for co-location purposes.	
Overhead lines (designated)	* cabling >13mm	
Array of omnidirectional antennas	* >8.5m high; or * outrigged >500mm from base.	
Panel antenna (especially mobile phone antennas)	* >2.8m long. & * if attached to a structure—protruding by > ~~3~~ 8m & *colour not matching background or approved.	

Facility	Telecommunications (Low Impact Facilities) Determination 1997	Infrastructure SEPP 2007	Exempt & complying SEPP 2007	SEPP4 - Development Without Consent
Radiocommunications dish - Subscriber connection (Residential)	* > 1.2 m diam.; & *colour not matching background or approved.	* >900mm diam.; * not above ridge (or 1.2m above flat roof). * on ground > 1.2m high.	* >900mm diam. on roof; * >1.8m above ridgeline; * on ground > 1.8m high.	
Radiocommunications dish - Subscriber connection (Commercial/Industrial)		* >1.8m diam; * above roof >2.4m. * on ground >2.4m high.		* >1.8m diam.; * >1.8m above ridgeline
Pit, Manhole and/or Underground equipment shelter or housing	Surface area >2m^2.			
Underground conduit or cable, deployed by bore or directional drill hole [not co-located]	* cabling < 600mm below surface; & * >150mm wide.			
Equipment installed inside a structure, including an antenna concealed in an existing structure	Residential zones			
Pillar, Roadside cabinet and/or Pedestal	* > 2m high; & * base area >2m^2.			
External equipment shelter	*> 2.5m high; and * base area >5m^2.			
External equipment shelter, used solely to house equipment used to assist in providing a radio service by means of a panel, terminal, antennae, Microcell installation, tower extension or dish	*> 3m high; and * base area >7.5m^2.			
Microcell installation	* cabinet > 1m^3 in volume; & * separate antenna >1m long.			

Appendix J - Tree Retention Assessment

Visual Tree Assessment (VTA) is used by Arborists worldwide to determine a tree's health and conditions by viewing the different sections of a tree from the ground. Other diagnostic techniques and equipment are also used to provide a more detailed assessment. These include:

- Aerial assessment
- Hazard assessment
- Picus Sonic Tomography (assesses the internal components of a tree)
- Ground Penetrating Radar (GPR - locates live and dead tree roots)

In considering the retention of a tree, several factors require close examination and assessment. These are:

1) Tree Health Assessment
2) Assessmen of Other Factors
3) Landscape Significance

Note:

- Dead trees with nests and/or hollows should be assessed for their significance in providing habitat for native wildlife.

Tree Health Assessment

The assessment of a tree's health and its longevity involves the close examination of many different factors, including:

- Overall vigour (includes canopy cover and new growth)
- Signs of stress (such as epicormic growth, dieback and deadwood)
- Pests & diseases (causing damage to a tree)
- Structural defects (exisitng or signs of defects include cracks, inclusions, wounds, decay, hollows)
- Stability of a tree (check for exposed roots, root damage and lean of a tree and its canopy)

A. Very good health and canopy form

- A tree with a complete live canopy (70-100% foliage cover). Trees with no obvious signs of structural defects, pest and diseases, previous pruning works, minimal deadwood and/ or stress growth.

B. Good health and canopy form

- Trees with a live canopy (up to 70% foliage cover). Trees exhibiting moderate deviations such as crown distortion/ suppression, minor signs of structural defects, pests and diseases, previous pruning works, some deadwood and / or stress growth.

C. Fair health and canopy form

- Trees with a live canopy (up to 50% foliage cover). Trees exhibiting high deviations such as crown

distortion/ suppression, moderate signs of structural defects, pests and diseases, previous poor pruning works, moderate deadwood and stress growth and/ or over maturity.

D. Declining / poor health

- Trees with minimal canopy cover (under 50% foliage cover). Trees declining due to age, pest and disease attack, changed growing conditions / environment, poor pruning practices (e.g. lopping), and excessive deadwood.

2. Assessment of Other Factors

Though a tree many be rated in good growing health and condition, other mitigating factors may be present that could determine that the tree cannot be adequately retained. Some of these factors are:

- Tree's location - the trees location is poor leading to potential property damage and inadequate space to grow.
- Property damage - the tree is causing significant damage to property foundations or house servuices that cannot be adequately repaired while retaining the existing tree.
- Tree species, age and future growth - The of of tree is considered unsuitable because of its vigorous growth habit and / or its current location will not adequately accommodate it future growth.
- Tree parts causing allergic reaction to person/s - if proven be a relevant medical specialist that a person residing at the property has an allergic reaction to a part/s of the tree.
- Potential hazard - the tree is developing a structural defect or has storm damage (e.g. lighting stricke) creating a potential hazard for the future.
- Amenity issues - excessive shading leading to growth of lichens and / or internal mould affecting an occupant's loving conditions.

Note: Dead trees with nests and / or hollows should be assessed for their significance in providing habitat for native wildlife.

Landscape Significance

Significant

- Tree is listed as a heritage item under Holroyd LEP 2013
- A tree forms part of the curtilage of a heritage item
- A tree is a commemorative planting
- Tree comes under the threatened species act of environmental Protection and biodiversity conservation act
- The tree is a remnant tree- in existence prior to the development of the area
- The tree has a very large live crown size (exceeding 300m^2)
- The tree is visually prominent in a view from surrounding areas- could be considered a landmark

Very High

- The tree has a strong association with a heritage item in its vicinity
- Representative of original vegetation in the area.
- The tree has a very large live crown size (exceeding 200m^2)

High

- The tree has a large live crown size (exceeding 100m^2)
- Known or suspected historical association with a heritage item or landscape
- Representative of original vegetation in the area.

Moderate

- The tree has a very large live crown size (exceeding 40m^2)
- Fair representative of its species
- Fair impact on the amenity and visual character of the area
- Not visually prominent
- Known or suspected historical association

Low

- The tree has a small live crown size (less than 40m^2)
- Poor representative of its species
- Not visible from surrounding properties
- Negative impact on the amenity and visual character of the area.

Appendix K- Locations Subject to Road Widenings and Splay Corners

Land subject to road widening, road closures and splay corners in Guildford

Map 1

*All locations are indicative only.

Land subject to road widening and splay corners in Merrylands

LEGEND

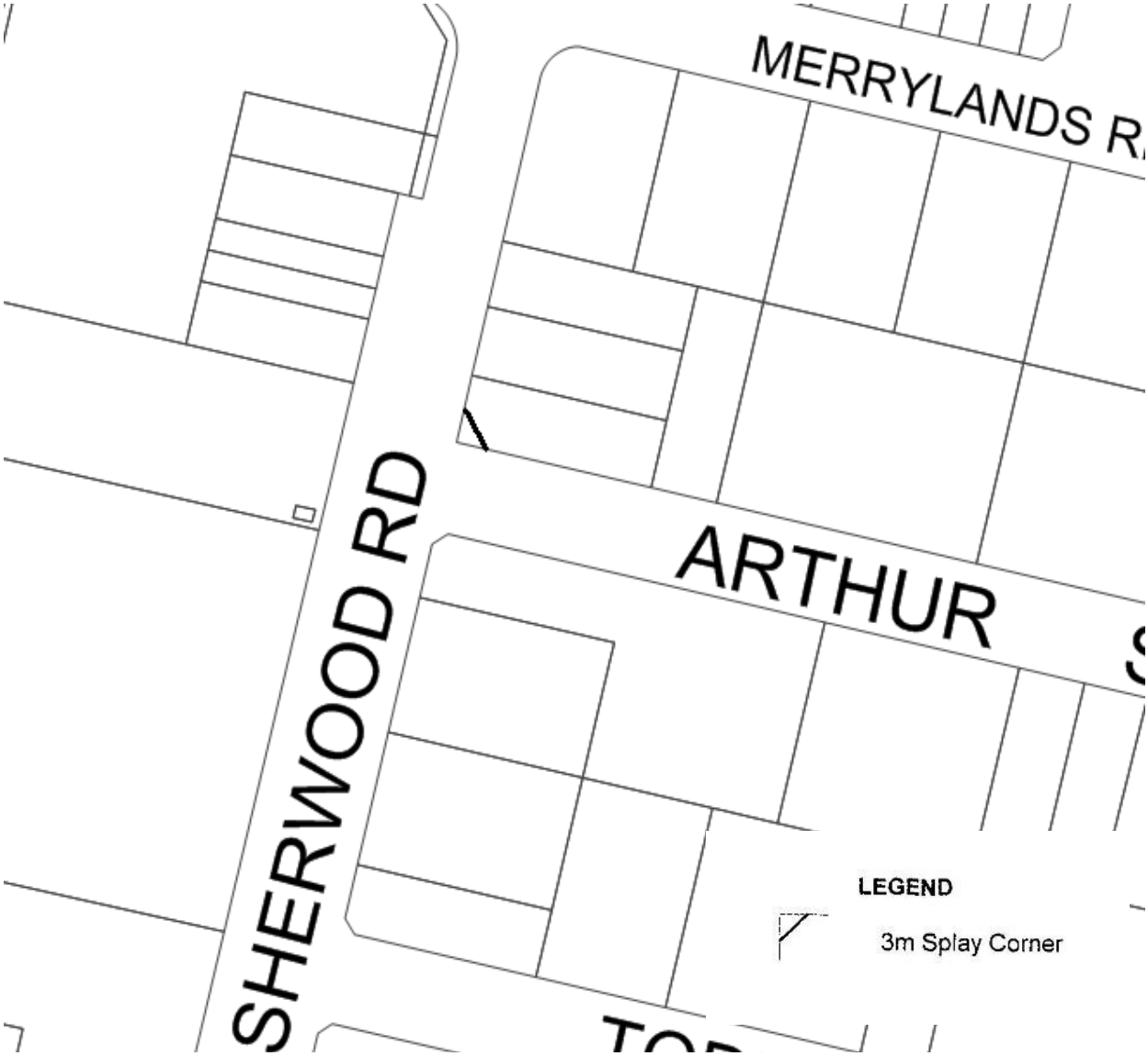
1.5m Road Widening

3m Splay Corner

Map 2

*All locations are indicative only.

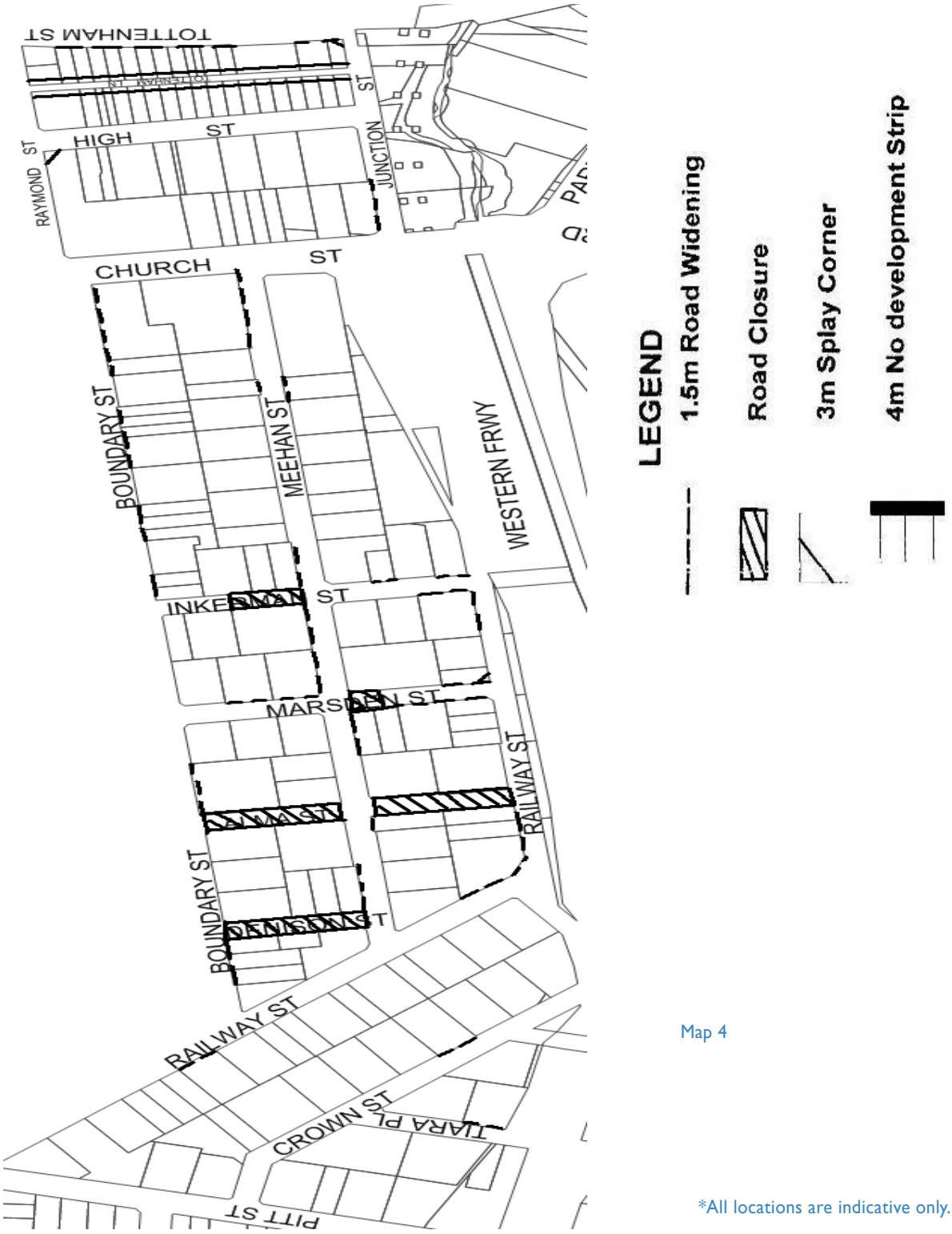
Land subject to a splay corner in Merrylands West



Map 3

*All locations are indicative only.

Land subject to road widening, road closures and splay corners in Parramatta



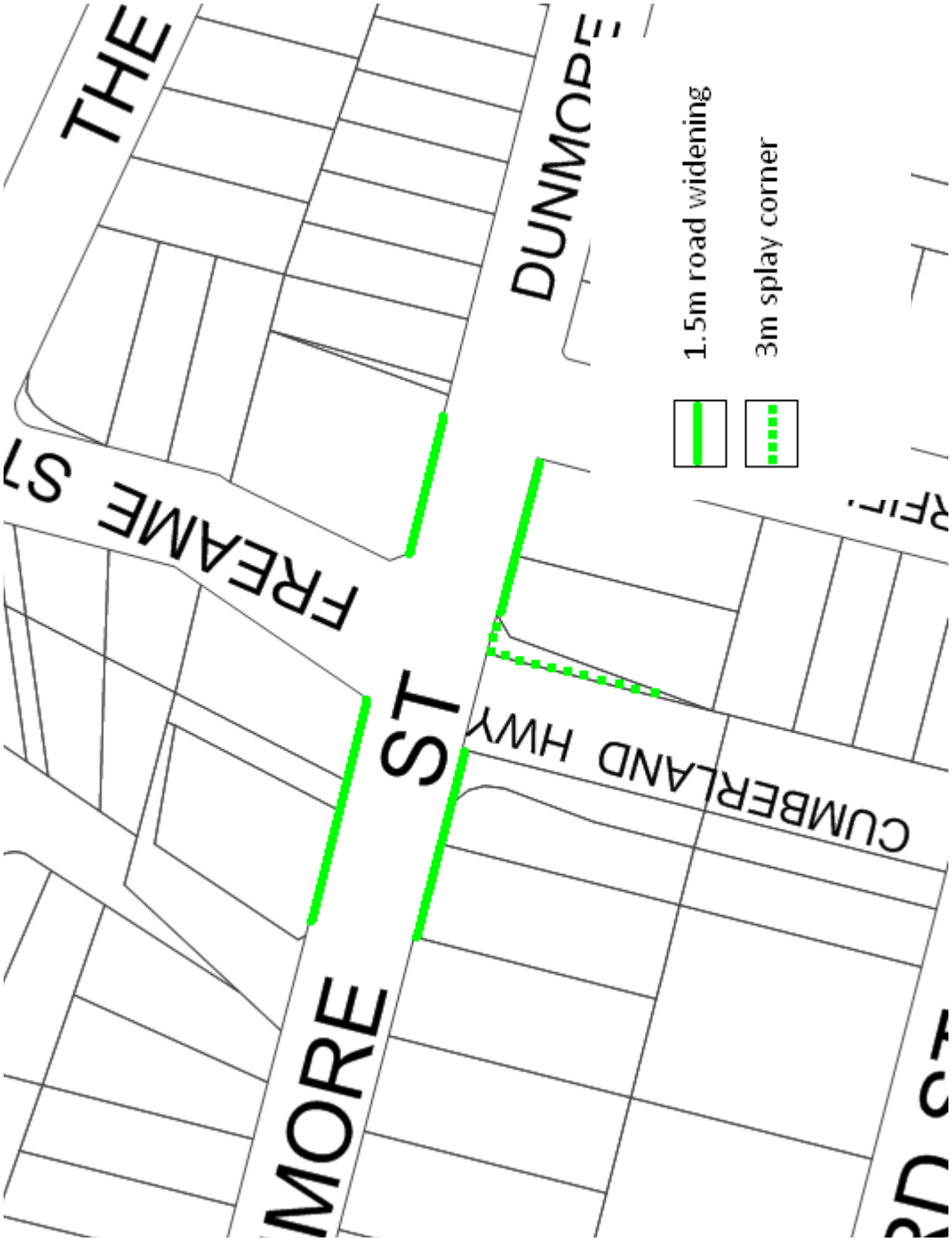
Map 4

*All locations are indicative only.

Land subject to road widening and splay corners in Westmead

Map 5

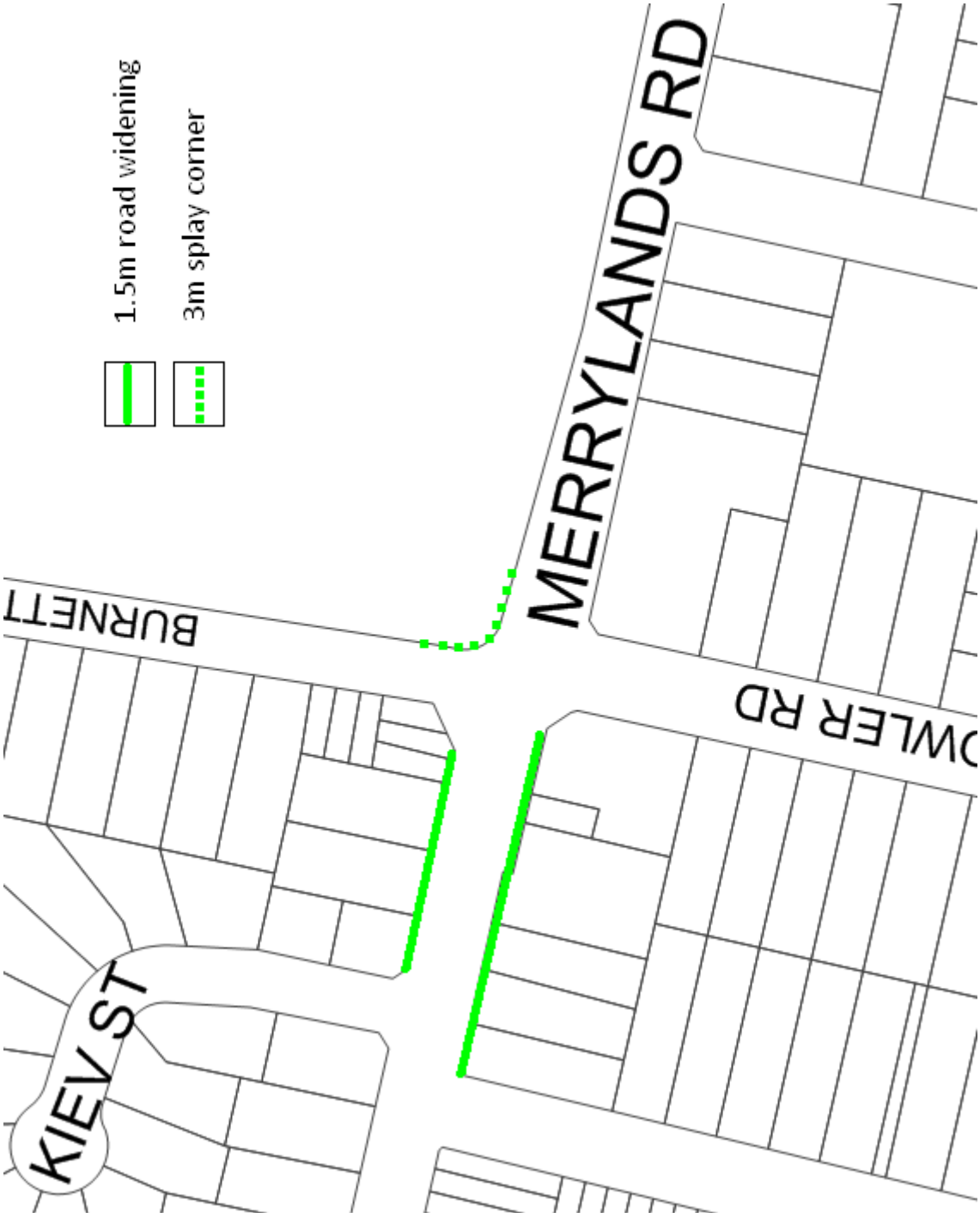
*All locations are indicative only.



Map 6

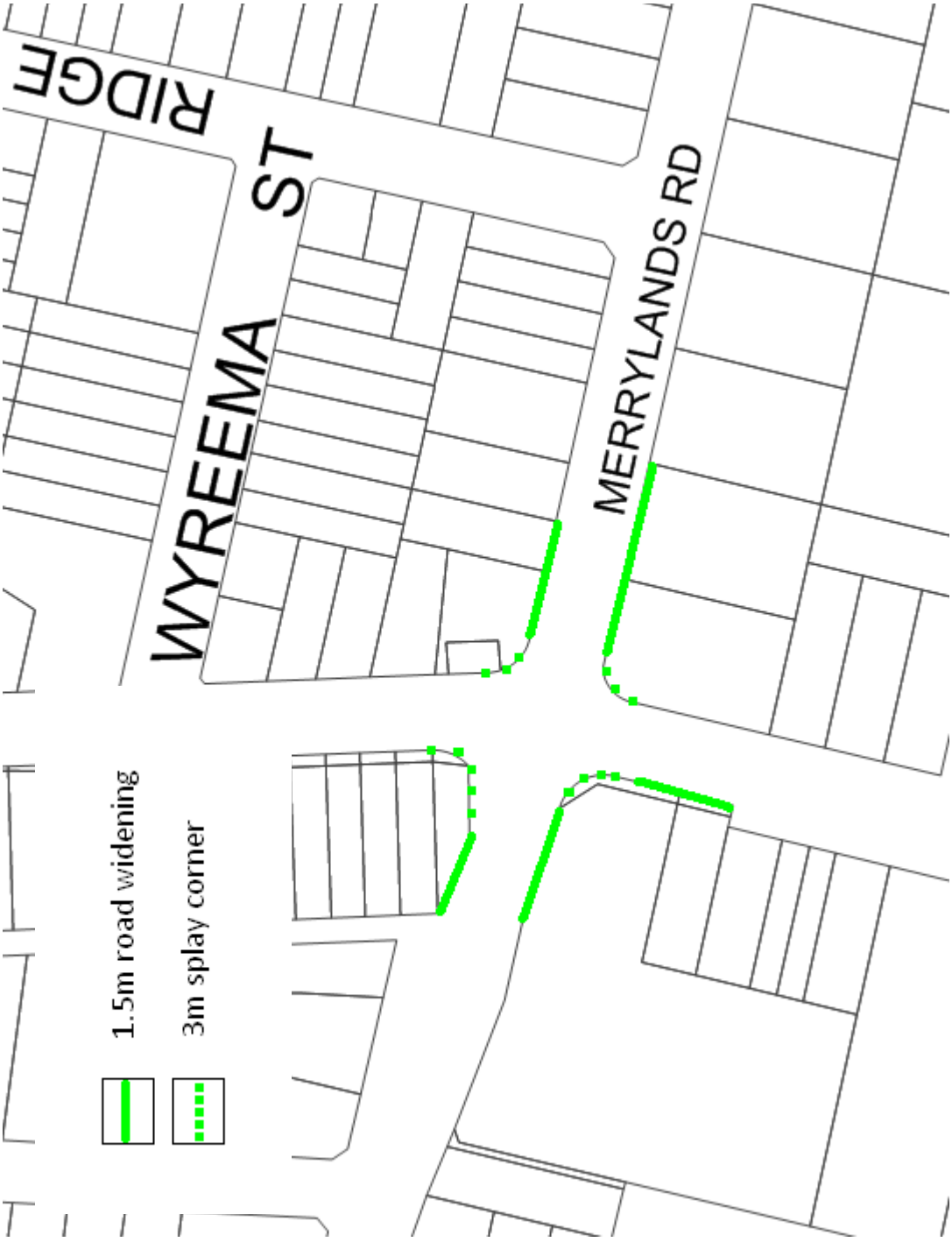
*All locations are indicative only.

General Controls



Map 7

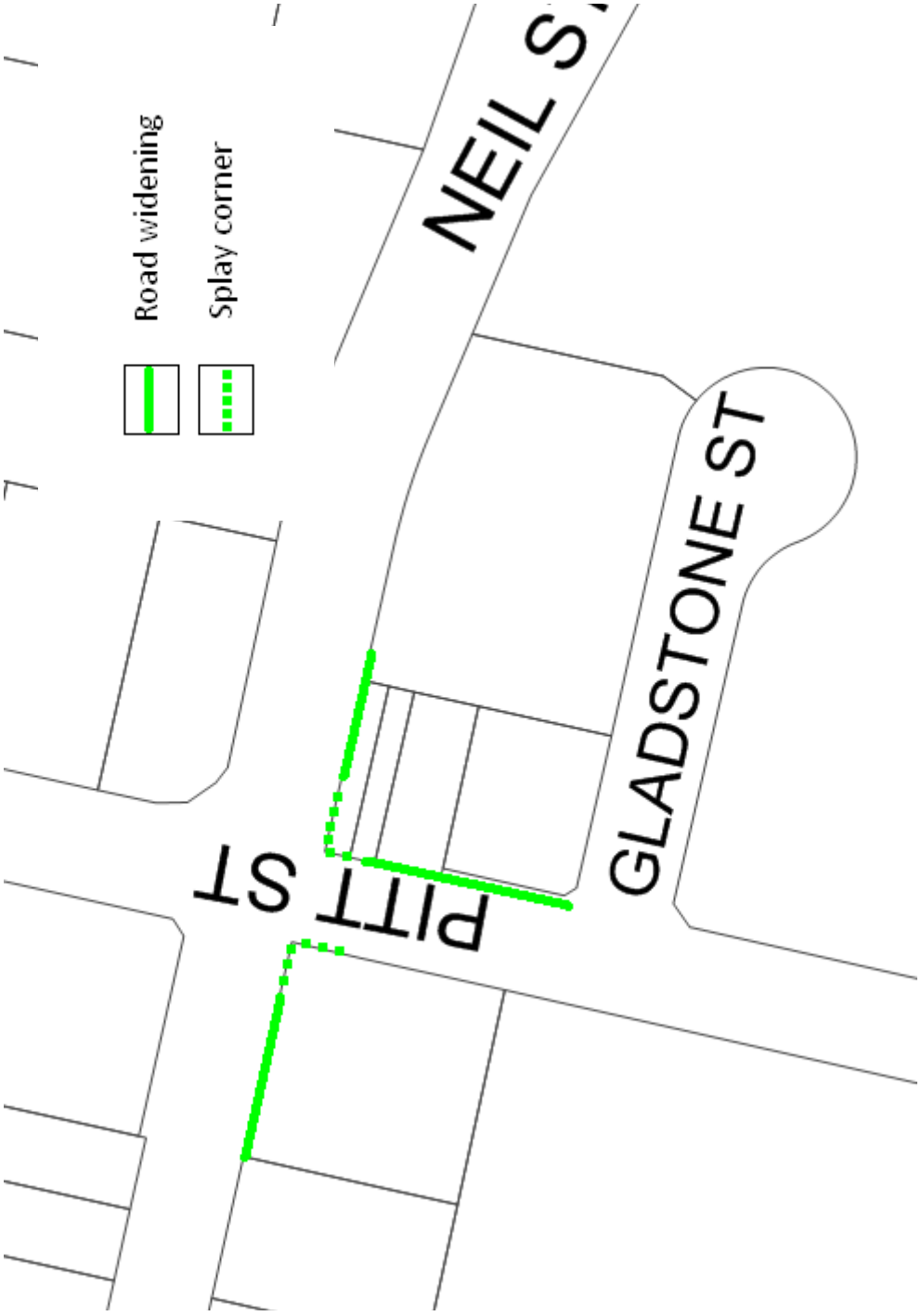
*All locations are indicative only.



Map 8

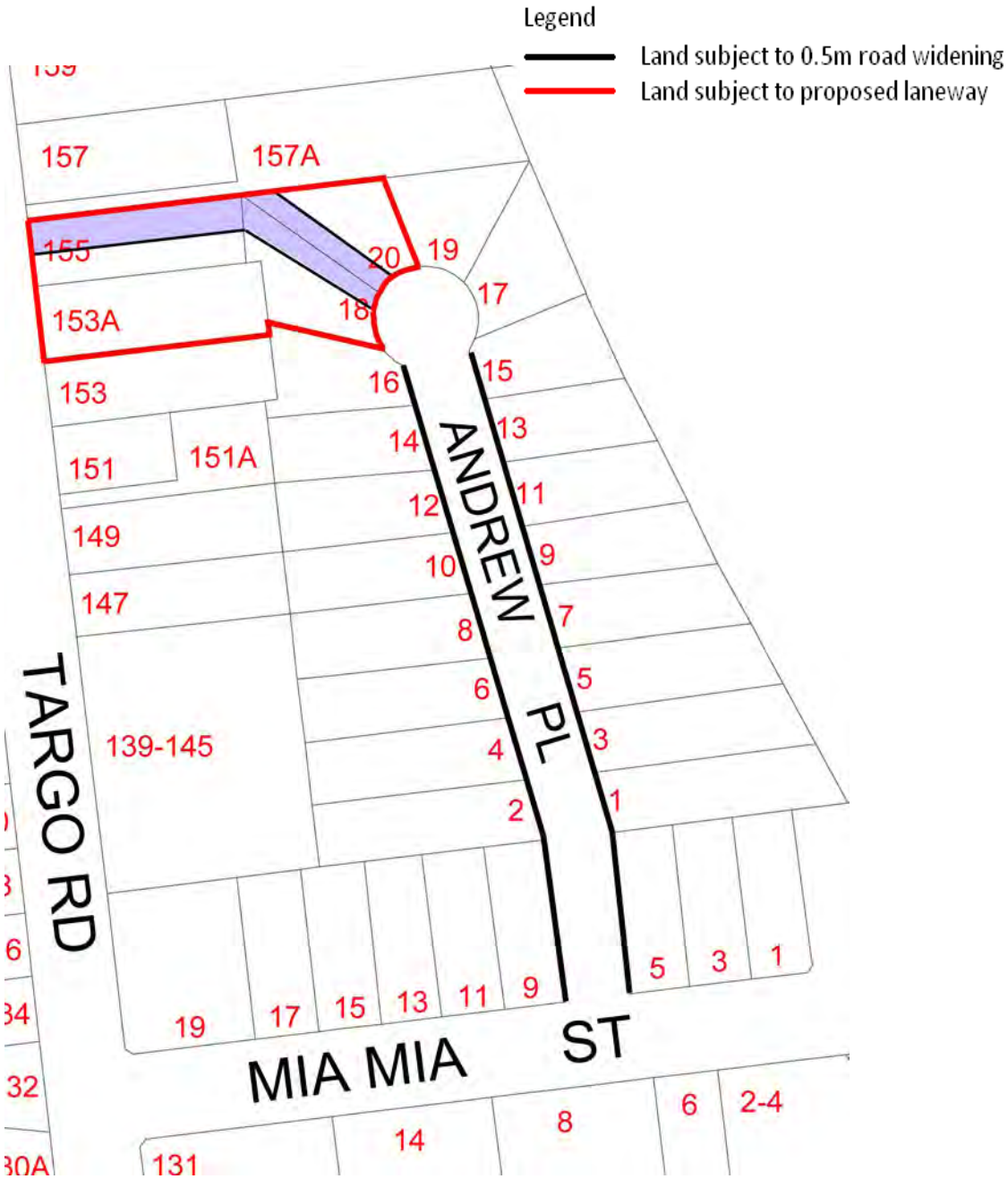
*All locations are indicative only.

General Controls

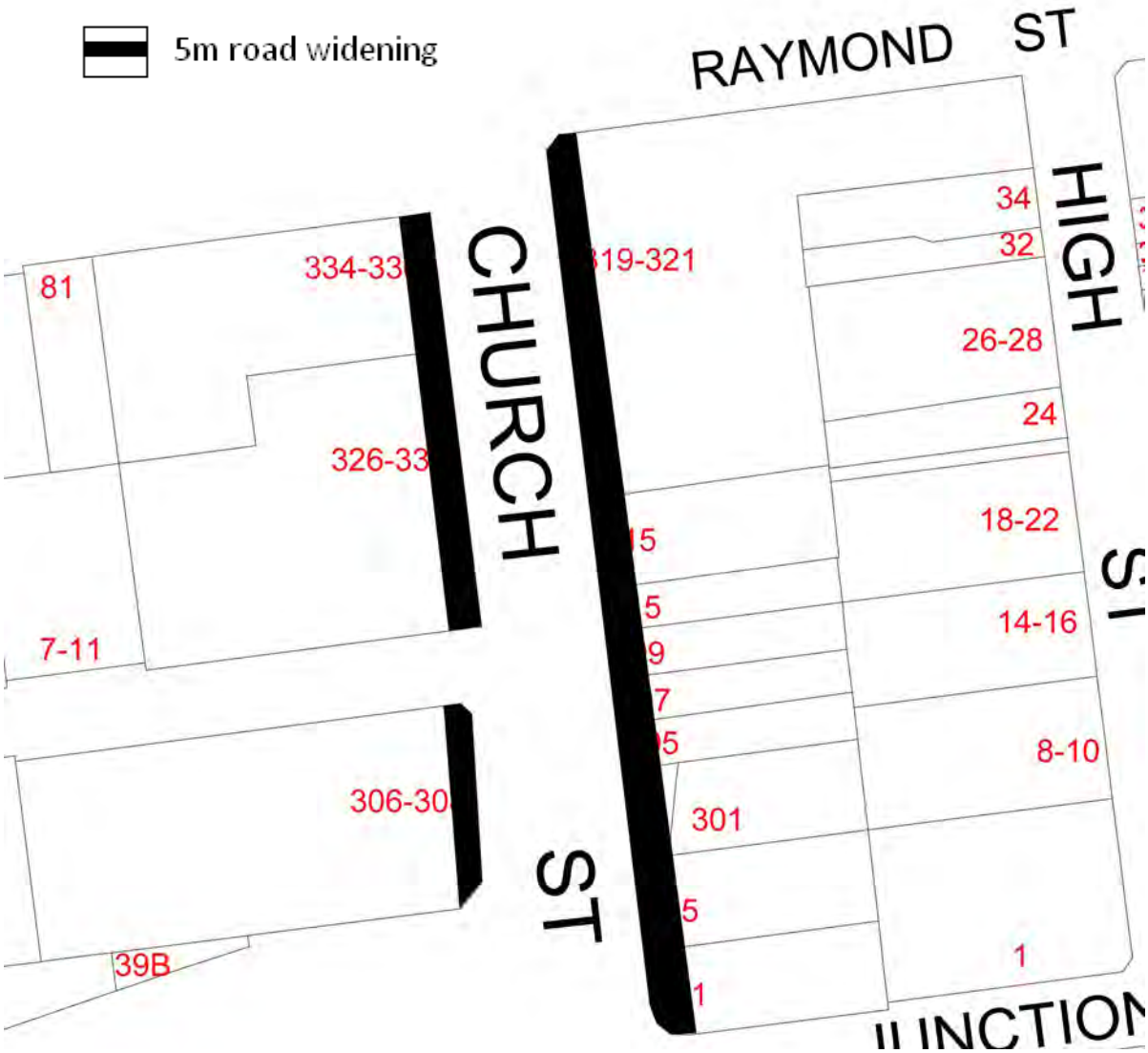


Map 9

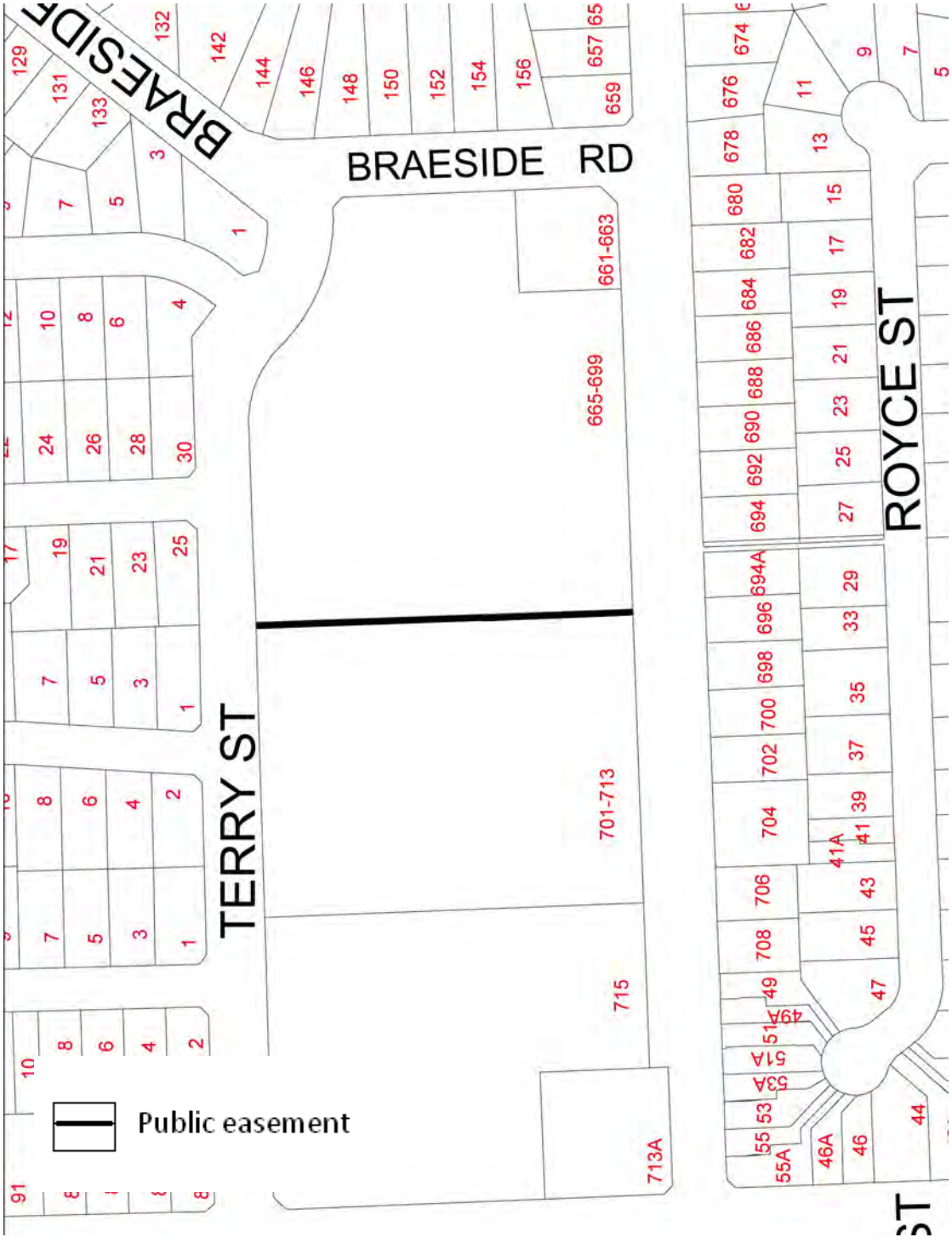
*All locations are indicative only.


Legend
Land subject to 0.5m road widening
Land subject to proposed laneway
157
157A
155
153A
153
151
151A
149
147
139-145
TARGO RD
ANDREW PL
MIA MIA ST
20
19
18
17
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1
19
17
15
13
11
9
5
3
1
14
8
6
2-4
131

Map 10


5m road widening
RAYMOND ST
CHURCH ST
HIGH ST
81
334-33
326-33
7-11
306-30
39B
319-321
15
5
9
7
5
301
5
1
34
32
26-28
24
18-22
14-16
8-10
1
JUNCTION

Map 11



Map 12

Appendix L- Salinity Management Response Checklists

Level One Salinity Management Response Checklist

Single lot developments in localities with a moderate salinity potential, based on the DIPNR Salinity Potential Map (2002), should address the following management requirements in the development application. To identify the levels of salinity potential in the locality of your site please refer to the salinity maps in Council's LEP.

When completing the following checklist please refer to the guidelines that accompany the salinity potential map and the references in Section 12 of the Western Sydney Salinity Code of Practice, both of which are available on Council's website.

Salinity Potential areas

- Local variations in salinity potential can occur and therefore some sites may experience a greater potential than that identifiable at the regional scale using the Salinity Potential Map. Are you satisfied that there is only a moderate salinity potential on this site? Are you satisfied you do not need to conduct site specific investigations?

Water inputs

- Infiltration of stormwater avoided.
- Permanent water storage (e.g. water features, ponds, dams) lined and regularly maintained to limit infiltration.
- Underground water carrying pipes and any on-site sewerage system properly installed to eliminate leaks, (on established sites existing pipes and systems checked for damage/ leaks).
- Consideration given to salinity when designing and installing swimming pools.

Drainage

- Disturbance of natural drainage patterns minimised.
- Slab, foundations and retaining walls all designed to allow good drainage and minimise water logging.
- Remediation of existing areas of waterlogging and poor drainage.
- Design and layout of retaining walls, driveways and service connections reduces cut, minimises impediment of natural groundwater flows and provides for good drainage.
- Guttering and down pipes properly connected and maintained.

Vegetation

- Areas of established vegetation maintained.
- Landscaping plans apply Waterwise gardening principles.
- Gardens designed so that they are not adjacent to the property.
- Irrigation properly installed to avoid leakage and 'smart' sprinkler systems considered.

Building/ Engineering

- Damp Proof Courses properly installed and maintained throughout construction,
- landscaping and finishing.
- Susceptible construction materials avoided, e.g. Seconds, porous material
- Consideration given to the need for salt resistant bricks and construction materials

Level Two Salinity Management Response Checklist

Single lot developments in localities with a high salinity potential, based on the DIPNR Salinity Potential Map (2002), should address the following management requirements in the development application. To identify the levels of salinity potential in the locality of your site please refer to the salinity maps in Council's LEP.

When completing the following checklist please refer to the guidelines that accompany the salinity potential map and the references in Section 12 of the Western Sydney Salinity Code of Practice, both of which are available on Council's website.

Hazard areas

- Local variations in salinity potential can occur and therefore some sites may experience a greater potential than that identifiable at the regional scale using the Salinity Potential Maps. Are you satisfied that there is only a moderate salinity potential on this site? Are you satisfied you do not need to conduct site specific investigations?
- Areas of existing salinity identified and remediation/ management strategies considered.

Water inputs

- Infiltration of stormwater eliminated.
- Water features and permanent water bodies lined to eliminate infiltration.
- Underground water carrying pipes properly installed to eliminate leaks and on established sites existing pipes checked for damage/ leaks.
- Swimming pools designed to eliminate leakage and an on-going maintenance plan developed.

Drainage

- Disturbance of natural drainage patterns avoided.
- Areas of cut and fill on sites restricted to building envelope.
- Necessary slab, foundations and retaining walls all must be designed for good drainage and to avoid water logging.
- Existing areas of waterlogging and poor drainage avoided or remediated, with consideration of shrink swell hazard.
- Stormwater management eliminates infiltration.
- Retaining walls, driveways and service connections designed to avoid cut, minimises impediment of natural groundwater flows and provides for good drainage.
- Guttering and down pipes properly connected and maintained.

Vegetation

- Areas of established vegetation maintained.
- Landscaping plans - apply Waterwise gardening principles.
- Gardens designed so that they are not adjacent to the property.
- Erosion/disturbance minimised and revegetated with appropriate species.
- Irrigation properly installed to avoid leakage and 'smart' sprinkler systems used.

Building/ Engineering

- Damp Proof Courses properly installed and maintained throughout construction, landscaping and finishing.
- Damp Proof membrane installed under slab.
- Reduce the exposure of materials to corrosive soils, e.g. raised slab or pier and beam designs, with consideration of shrink swell hazard.
- Construction techniques minimise site disturbance and the exposure of sensitive soil material.
- Soil management plan addresses the management of saline and sodic soil
- Susceptible construction materials avoided, e.g. porous material
- Utilise appropriate salt resistant bricks and construction materials
- Design and layout of drives and service connections minimises disturbance and exposure of susceptible soil and uses corrosive resistant material
- Disturbance of soil on the site minimised and properly rehabilitated

Level Three Salinity Management Response Checklist

A comprehensive Salinity Management Plan should be based on site specific investigation and address the following:

- Description of site, including geology, soils, hydrogeology, topography and climate.
- Description of proposed development.
- Summary of investigations undertaken (see DIPNR Site Investigations for Urban Salinity).
- Interpretation of results, including potential for impacts on buildings, not just vegetation and the likely impact of the development on local and regional salinity processes.
- Mapping of site to show salinity potential, areas of existing salinity, recharge/ discharge areas.
- Identification and discussion of salinity processes potentially occurring on the site now and in the future.
- Discuss and model the water cycle processes on the site and including natural drainage systems and groundwater conditions, especially perched or raised watertables.
- Discuss and model potential cumulative impacts and cross-boundary issues.
- Water cycle management strategies (including potable water use, stormwater management techniques, water demand levels, changes to local flow regimes, groundwater interactions and the maintenance of a natural water balance).
- Soil management strategies (including management of sensitive soil materials, corrosivity,

dispersability, pH and Erodibility)

- Groundwater management strategies (including how to decrease the hydrological load and maintain a natural water balance)
- Vegetation management strategies
- Salinity issues addressed in site design and layout, covering the long-term impact on development, recharge/discharge and the mobilisation of salts. Should include location of roads, stormwater management structures, dwellings, community facilities, recreation areas and vegetation reserves.
- Salinity issues addressed in road/ infrastructure planning and design, including impacts on road life, recharge/ discharge and the mobilisation of salts.
- Strategies that address the exposure of building materials to corrosive soils and salinity.
- On-going salinity management options for the site
- On-going monitoring of soil and groundwater salinity, for the impact of the development and success of management strategies, including a plan to realise this.
- Remediation plans for areas of existing salinity, erosion and poor drainage
- Implementation plan for the life of the development, including training and induction of all the teams involved, including sub-contractors.

The Salinity Management Plan should be accompanied by the full salinity investigations undertaken. It may be preferable on some sites to address salinity as part of an integrated planning process, rather than develop a separate salinity plan. However, the same issues would need to be addressed. The strategies developed in the salinity management plan should be reflected in other plans associated with the on-going development, e.g. DCP, master plan, designs, etc. For large developments individual precincts may need specific investigations and plans.

Part B

Residential Controls

Holroyd Development Control Plan 2013

Holroyd City

Residential

Contents

Residential

Introduction

Land covered by this Part

This Part applies to development types detailed within this Part and for the development of land zoned Residential under Holroyd Local Environmental Plan 2013.

Relationship of Part B Residential to Holroyd Development Control Plan 2013

Part B of Holroyd DCP 2013 shall be read in conjunction with the following Parts of Holroyd DCP 2013, which contain objectives and development controls that may relate to development in this Part:

Part A - General Controls

Part C - Commercial, Shop Top Housing and Mixed Use Development Controls

Part D - Industrial Controls

Part E - Public Participation

Part F - Advertising and Signage Controls

Part G - Places of Public Worship Controls

Part H - Heritage and Conservation Controls

Part I - Child Care Centre Controls

Part J - Site Specifc Controls

Part K - Holroyd Gardens Controls

Part L - Town Centre Controls

Part M - Merrylands Centre Controls

Part N - Transitway Station Precinct Controls

Part O - Guildford Pipehead Site Controls

Part R- Definitions

1. General Residential Controls

1.1. Building Materials

Objectives

O1. To ensure detailing and materials of residential development maintain and enhance the character of the locality.

O2. To consider the predominant colours and materials of surrounding buildings when constructing new dwellings or additions to dwellings but to also allow emerging character areas to establish a predominant building material and colour theme.

O3. To ensure materials suitable for the purpose of residential development used within residential developments.

O4. To ensure that building materials do not interfere with the amenity of residents in the locality.

O5. That the future maintenance and short and long term appearance of materials proposed for residential development are considered.

O6. That consideration is given to any environmental impacts of building materials.

Development Controls

C1. Building materials for new residential development and for additions to existing residential development must be compatible with the streetscape and character of its locality.

C2. Building materials and colours used for additions should integrate/blend with the original structure. This may require the upgrading of the materials of the original structure in order to enable quality additions.

C3. The use of light coloured galvanised iron and other reflective materials is discouraged due to its ability to cause glare. If these materials are proposed, applicants are required to demonstrate to Council that the materials will not adversely affect residents' enjoyment of their neighbourhood.

C4. Use of black roof tiles within residential developments is not permitted.

Note:

- Building materials should be durable and cost effective.
- A schedule of colours and finishes for proposed residential dwellings shall be provided as part of a development application.

1.2. Fences

Objectives

O1. To define the boundaries and edges between public and private land and between areas of different function.

O2. To ensure fences complement and conserve the visual character of the street and neighbourhood.

O3. Protect the privacy and amenity of residents through appropriate fencing, whilst maintaining the streetscape presentation of the development.

O4. To ensure that front fencing does not interrupt views from the street to front setbacks and facades.

O5. To provide safe and effective sight lines for pedestrian and vehicular movements.

O6. To require fencing at a human scale by avoiding long continuous walls.

O7. To ensure that fencing is at a form and scale that does not lead to the disjoining and fragmentation of the streetscape.

O8. To encourage use of front gardens by residents for informal social interaction.

O9. Provide appropriate fencing where noise attenutation is required.

O10. Provide fencing on corner lots that is robust, long lasting and is not easily vandalised.

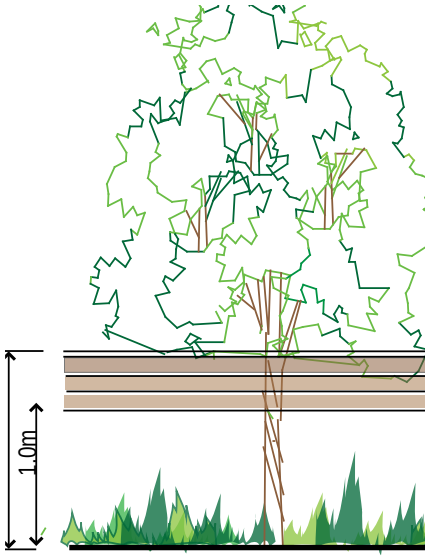


Figure 1. Front fence height.

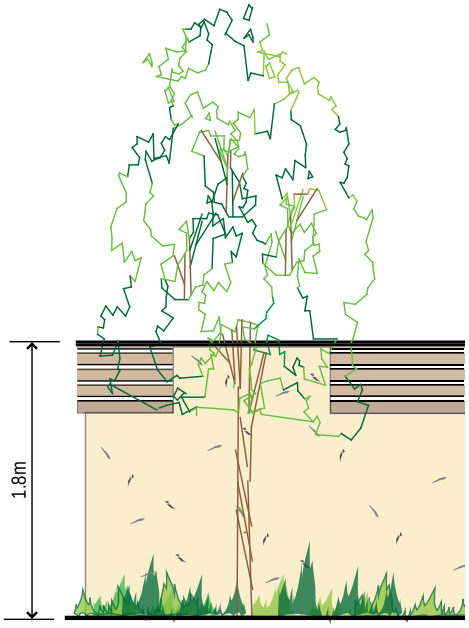


Figure 2. Front fence- noise attentuation

Development Controls

Note: State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 may apply in some instances.

General

C1. Proposed fencing styles and characteristics shall be associated with housing styles that characterise different areas of Holroyd.

C2. The design of fences should relate to and be integrated with the design of the residential development.

C3. Fencing must not contain barbed wire, chain wire, razor wire, broken glass or be electrified.

C4. Where fences are required to accommodate overland flow paths, they must be provided with ground clearances or hinged gates.

C5. Fences should be stepped with the topography of the site.

C6. All fencing is to be constructed so that it does not prevent or impede the natural flow of stormwater drainage and/or surface flows.

Note:

- Proponents are advised to talk to all adjoining neighbours at an early stage and consult the Dividing Fences Act 1991. Matters and disputes regarding boundary fencing are not within Councils jurisdiction of compliance.
- Proposed fencing for heritage items shall comply with Part H of this DCP.
- Detailed flood construction development controls are within Part A of this DCP.

Front Fences

C7. Front fences should be low and transparent and shall be sympathetic with the prevailing materials and detailing of surrounding properties.

C8. Sheet metal fencing or pool style fencing is not to be used at the street frontage, forward of the building line or in locations that have an interface with the public domain.

C9. The articulation and/or detailing of front fences through material variation, pillar and post design and use of transparency are encouraged in front fences to provide visual interest.

C10. Front fences are to be no higher than 1.5 metres above existing ground level, between the building line and the street. Support posts are permitted to extend to 1.8 metres (Figure 1).

C11. Front fences are permitted to be solid up to a height of 1 metre and are to be at least 50% transparent to 1.5metres.

C12. Council will accept the use of planting or planter boxes within a front fence design.

C13. Where noise attenuation or protection of amenity requires a higher fence, front fences are permitted to a maximum height of 1.8 metres with appropriate integration with landscaping (Figure 2). Such fences are permitted on the following roads:

- Cumberland Highway
- Great Western Highway

Note: Variations to the front fence standards may be considered in high traffic or noise areas where it can be

Figure 3. Side and corner lot fencing

demonstrated that use of suitable building materials and internal layout will not reduce the noise to a satisfactory level. An acoustic report carried out by a suitably qualified acoustical engineer will be required to be submitted in such cases.

C14. Gates located on the front fence shall be of materials that are consistent with the front fence and shall not open onto a roadway or public space.

C15. Continuous blank walls shall be avoided.

Side and Rear Fences

C16. Council requires the construction of side and rear fences for developments, where a suitable fence does not exist, or the current fence in the opinion of Council, is in poor condition. For Multi dwelling and Residential Flat developments, Council requires the construction of new side and rear fencing.

C17. Side and rear fencing for residential development should be a minimum height of 1.5 metres and a maximum height of 2.1 metres above existing ground level, as agreed with adjoining property owner/s.

C18. Side fences forward of the front building line are to be no higher than 1.5 metres. (Figure 3)

C19. In situations where the boundary fence is proposed on top of a retaining wall, the height of the fence shall not exceed a maximum of 2.4 metres as measured from the lower adjacent ground level.

C20. Rear and side private open space areas shall be enclosed by a fence with a minimum height of 1.8 metres or as otherwise agreed with the adjoining owners.

Corner lot and Secondary Street Fences

C21. Sheet metal fencing (i.e. colorbond) is not permitted for corner lot and secondary street fencing.

C22. Side fences located forward of the front façade are to be a maximum height of 1.5 metres.

C23. Fencing shall be constructed of durable materials and may include opportunities for planting or planter boxes to be incorporated within the fence design.

C24. For corner sites, the maximum construction height for walls, fences and landscaping must be 900mm at the street corner of the allotment in an area measuring 1.5 metres x 1.5 metres from the corner. This will assist sight lines for pedestrian and vehicular movements.

Swimming Pool Fencing

C25. Swimming pool fencing must comply with the Swimming Pools Act 1992 and Australian Standard 1926.

Note: Further detailed controls for swimming pool and spa pool fencing are contained within Section 2.8 of this Part.

On Site Detention System Fencing

C26. The fencing of On Site Detention basins (OSD) in front setbacks is not permitted.

1.3. Views

Objectives

O1. To have regard, wherever possible, for the obstruction of existing significant and district views from adjoining buildings when developing/redeveloping for the purposes of residential uses.

O2. To protect public views and vistas from streets and public places.

O3. To design development in a way which will maintain, or create access to significant and district views enjoyed from other buildings or public places and allow for appropriate view sharing.

Development Controls

C1. Where significant and/or district views are currently enjoyed, or where views may be reasonably created, the design of development shall be designed to minimise the obstruction of such views.

C2. Where the height and bulk of a development is likely to block a significant and/or district view, amendments to residential development proposals will be required, to retain, at least part of that view.

Note:

- The retention of views, however, should not preclude reasonable development rights.
- Building setbacks, gaps between buildings and minimal floor to ceiling heights should be used in order to minimise the obstruction of views.

1.4. Privacy

Objectives

O1. To provide a high level of visual and acoustic privacy for residents and neighbours in dwellings and private open spaces.

O2. To provide personal and property security for residents and visitors.

O3. To ensure that building design practises overcome overlooking problems.

O4. To ensure that the design of dwellings and the use of specific building materials provide acoustic privacy.

O5. To require special consideration of the impact of both visual and acoustic privacy for developments located near railway lines and busy roads.

O6. To require specific sources of noise within a development, such as parking and driveway areas, are designed to mitigate any potential privacy impacts.

O7. To implement landscaping measures that to increase visual privacy.

O8. To require, where necessary, acoustic reports to be provided, and their findings implemented in the design of development.

Development Controls

Visual Privacy

C1. The windows of dwellings are to be located so they do not provide direct and close views into the windows of habitable rooms and private open spaces of adjoining dwellings.

C2. With the exception of residential flat buildings, Window sills of upper floor habitable rooms (excluding bedrooms) shall have a minimum height of 1500mm.

C3. Window sills shall have a maximum height of 1500mm are required in ground floor living areas located higher than 1 metre above existing ground level and within 6 metres of the property boundary.

Note:

- The placing of windows shall be based on the detailed site analysis prepared for the development proposal.
- The use of windows which are narrow, translucent or obscured for upper floors and bathrooms is recommended.
- Further design controls for screening residential flat buildings are contained in section 6 of this Part.

C4. Building design elements shall be used to increase visual privacy. Elements include: recessed balconies and/or vertical screens or fins between adjacent balconies, fencing, vegetation, louvres and pergolas which limit overlooking both horizontally and vertically to habitable rooms and/or private open space (Figure 4).

C5. Where a proposed deck overlooks outdoor living areas of adjacent dwellings, suitable screening is to be provided, at a minimum height of 1500mm.

C6. Landscaping shall be designed to provide screening and filtering for control of privacy and to reduce overlooking of dwellings.

C7. Attics are only permitted in dwellings where attics are located to face the street, directly face another element of the public domain such as a park, face onto an internal roadway within a development (i.e. multi dwelling housing development) or face onto a laneway and do not impact neighbouring properties.

C8. Any proposed attic windows are not to overlook

Figure 4. Visual privacy for balconies

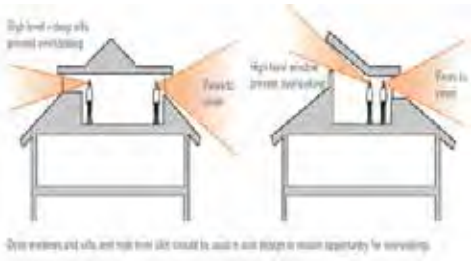


Figure 5. Dormer windows in attics

windows of adjacent dwellings or their private open spaces. An outlook to the street should be provided from attic windows where appropriate (Figure 5).

C9. Where a dormer window is proposed to face an internal roadway, sill heights are to be 1500mm high.

Acoustic Privacy- General

Note: All development shall comply with the requirements of the Building Code of Australia (BCA) which deal with noise transmission.

C10. Developments shall utilise the site and building layout to maximise the potential for acoustic privacy by providing adequate building separation within the development and from neighbouring buildings.

C11. Where a property is adjacent to a railway or arterial road, an acoustic report conducted by a suitably qualified acoustic consultant is required to be submitted to Council. The acoustic report shall provide measurements of noise impacts upon proposed dwellings and make specific recommendations for the attenuation of noise to currently recognised levels conductive to reasonable residential amenity. Compliance with the maximum design sound levels recommended by the revelant Australian Standard. Recommended design sound levels and reverberation times for building interiors, as follows:

- Recreation areas- 40dB(A)
- Sleeping areas- 35dB(A)
- Other habitable rooms- 40dB(A)

Note: Additional information and/ or reports may be required for development adjoining a railway line. Applicants are advised to contact State Rail or the Rail Infrastructure Corporation for further information on their requirements.

C12. Where dwellings or dwelling additions are proposed within close proximity to busy roads and rail corridors, entries, halls, storage rooms, bathrooms and laundries should be located on the noise affected side of each dwelling and should be able to be sealed off by doors from living areas and bedrooms where practicable, whilst maintaining good housing design and building appearance.

C13. Where dwellings are proposed within close proximity to busy roads and rail corridors, appropriate materials with acoustic properties should be incorporated such as solid core doors with seal vents and insulation, suitably treated glazing and enclosed balconies.

C14. Communal courtyards and paved areas (e.g. vehicle driveways) shall be designed to minimise reflected noise.

C15. Air conditioners, swimming pool pumps and the like are not to exceed 5dba above background noise levels and should not be audible from habitable rooms of neighbouring dwellings.

Note: Air conditioners, swimming pool pumps and the like shall comply with the protection of the environment operations act and noise regulation.

Acoustic privacy- Multi dwelling housing and Residential flat buildings

C16. Terraces, townhouses, villas and apartments shall be arranged within a development to minimise noise transition between dwellings by:

- Locating busy, noisy areas next to each other and quieter areas next to other quiet areas (i.e.

living rooms with living rooms, bedrooms with bedrooms).

- Using storage or circulation zones within an apartment to buffer noise from adjacent apartments, mechanical services or corridors and lobby areas.
- Minimising the amount of party (shared) walls with other dwellings/apartments.

C17. Internal apartment layout shall be designed to separate noisier spaces from quieter spaces by grouping uses within an apartment (i.e. bedrooms with bedrooms and service areas like kitchen, bathroom, and laundries together).

C18. Conflicts between noise, outlook and views shall be resolved by using design measures including:

- Double glazing;
- Operable screened balconies;
- Continuous walls to ground level courtyards where they do not conflict with streetscape or other amenity requirements.

C19. Balconies are permitted along side boundaries of residential flat buildings, as long as they meet the minimum separation distances as required in this DCP.

C20. Reduce noise transmission from common corridors or outside the building by providing seals at entry doors.

C21. The maximum amount of planting and grassed areas should be provided around the dwelling where a large amount of hard paving is necessary in connection with driveways, turning or parking areas, such should, if practicable, be broken up by planting and grassing.

Note:

- Noisy walking surfaces such as suspended timber, metal decks and tiling, and reflective internal surfaces to hallways or other communal areas are to be avoided.
- Plumbing noise between dwellings and between buildings should be eliminated.

C22. Developments shall be designed to locate driveways, carports or garages away from bedrooms.

Balconies and decks (excluding Residential Flat Buildings)

C23. Balconies shall not extend beyond the required setback.

C24. Balconies to the side and rear facades are permitted in Single dwellings, Attached Dwellings and dual occupancies, where they are a maximum of 2.5 metres wide and 12m^2 in area.

C25. Balconies to the rear facades of attached dwellings may be permitted, where they are a maximum of 2 metres wide, 10m^2 in area.

C26. All balconies and decks higher than 800mm above existing ground level shall incorporate privacy measures to ensure that the privacy of surrounding residents is not unduly reduced,

Note:

Privacy measure may include (but are not limited to:)

- screening in the form of walls, screens or lourves
- landscape planting
- lattice or similar on top of side and rear fencing

1.5. Landscaping and Open Space

Objectives

O1. To maintain and enhance the existing streetscape and landscaped character of the residential neighbourhoods in Holroyd local government area and encourage the planting of appropriate vegetation for aesthetic, ecological and practical reasons.

O2. To retain existing trees wherever possible.

O3. To ensure that landscaping and private open space provided for dwellings is defined, has good solar access, optimises usablity, privacy, accessibility, neighbours amenity and provides a central uninhibited area for passive and active recreation.

O4. To provide privacy and shade for residential developments.

O5. To minimise hard paved surfaces and promote rainwater infiltration.

O6. To ensure landscape design builds on the existing site's natural and cultural features to contribute to a developments positive relationship to its context and site.

O7. To ensure that consideration is given the practical establishment and long term management of landscaping.

O8. To ensure private open space does not impact on the visual privacy and amenity of neighbouring properties.

O9. To require adequate access to private open space for its maintenance.

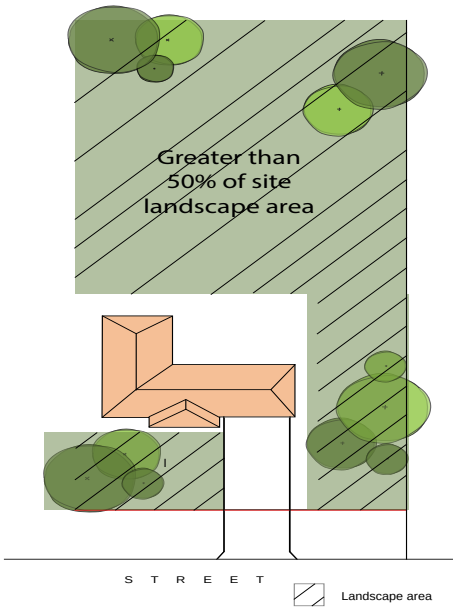


Figure 6. Location of landscaped area

Figure 7. Contigous landscape areas

Development Controls

Note: Refer to Part A for general landscape and tree management controls.

C1. Landscaped area shall be a minimum of 2 metres wide and is to be, where possible, at ground level.

C2. Compliance with landscaped area controls in this section shall not be compromised through the erection of a secondary dwelling (granny flat).

C3. No more than 50% of the provided landscaped area shall be forward of the front building line.

C4. The majority of the provided landscape area for residential flat developments shall be provided as consolidated area at the rear of the building.

C5. Only hard paved areas for the purposes of driveways and pathways will be permitted within the front setback area, and shall be kept to a minimum. Hard paved areas shall not cover the entire front setback area.

C6. Where an access driveway is located on the side boundary or where an internal roadway is to be provided, a landscape strip of 1 metre shall be provided.

C7. Landscape areas, at least in part, shall adjoin the landscape areas of neighbouring properties, so as to provide for contiguous area of deep soil and vegetation.

C8. All developments should address and align landscaped area with any public open space and/ or bushland on their boundary.

C9. All podium areas and communal open space areas, which are planted, should be provided with a water efficient irrigation system.

Note: Grey water reuse for irrigation, as well as toilet flushing and washing machine use is encouraged in all developments . Refer to NSW Health guidelines Grey water Reuse in Sewered Single Domestic Premises or The Management for private recycled water schemes.

Landscaped area

C10. The % of the total site area to be provided as landscape area for each residential development type shall be as follows:

- **20**%- Dwelling house, dual occupancy and attached housing development on lots less than 600m^2, and multi dwelling housing.
- **25**% -Dwelling house, dual occupancy, attached housing development on lots greater than 600m^2.
- **30**%-Residential Flat Buildings.

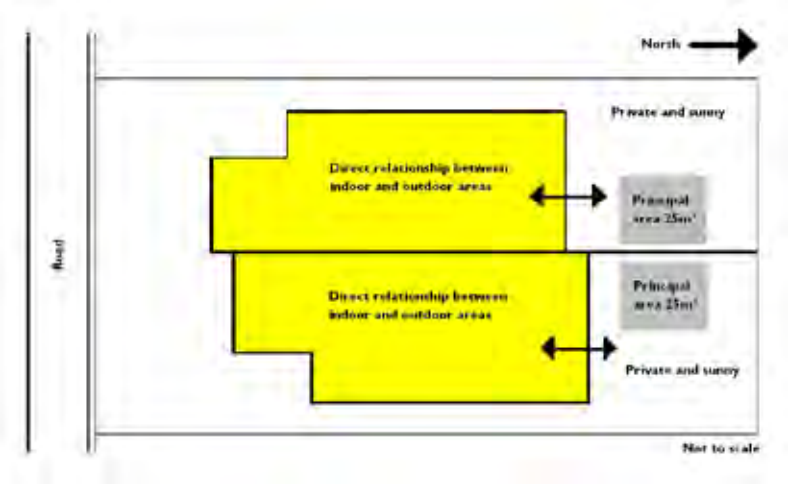


Figure 8. Private open space directly accessible from living areas

Note: Council may consider concessions to the development control standards contained within this DCP in order to encourage the retention of existing mature trees. This should be discussed with Council prior to proceeding too far with development plans.

Private Open Space

C11. Private open space shall:

- Only be located at the rear or side of the dwelling
- Be at located ground level. Structures such as decks proposed to be included as private open spaces, which are equal to or less than 500mm above ground level dwelling, and complies with all other criteria, may be considered by Council based upon their merits.
- Minimise overlooking opportunities and shall not decrease the visual privacy of neighbouring development.
- Accommodate both passive and active recreation uses.
- Must be directly accessible from a main living area of the dwelling (i.e. lounge/dining/rumpus room).
- Provided for the exclusive use of the occupant(s) of the dwelling house;
- Include an area for external clothes drying with good solar access where possible, which is not visible from a public area.
- Shall not be steeper than a 1:8 gradient. For steeply sloping sites, Council may consider terrace type stepping, which must have a length to width ratio no greater than 3:1.

C12. Rear private open space areas are to have external access either through an associated garage or directly from a common area in order to facilitate maintenance of the private open space and storage of garbage bins.

C13. Private open space shall be provided at ground level in a single tract with a minimum dimension of not less than 3.0 metres.

C14. Principal private open space shall have a minimum dimension of 4 metres, have direct access from a major living area of the dwelling and be clear of all structures, including posts.

C15. 15% of the total site area is to be provided as private open space for dwelling house, dual occupancy and attached housing developments and this shall include a principal area of 25m^2.

C16. Private open space at a rate of 20% of the total floor area shall be provided for each dwelling within a multi dwelling housing development and this shall include the principal area of 16m^2.

Note:

- Sunlight access controls for private open space is located in section 1.8 of this Part.
- Private open space controls for residential flat buildings is located in section 6 of this Part.
- Ramps and arrangements to make open space more accessible can be incorporated into the design of private open space, but will be excluded from the open space calculations, unless provided in relation to an adaptable dwelling.

1.6. Safety and Security

Objectives

O1. To implement key principles of Crime Prevention through Environmental Design for residential development through natural surveillance, access control and ownership.

O2. To ensure the active surveillance of the public domain from residential dwellings.

O3. To clearly define private and public area locations for safety and security.

O4. To design dwellings and their landscaping in order to maintain the safety and security of a property.

O5. To define public and private spacings through dwelling and landscape design.

Development Controls

Surveillance

C1. The front door of a development should either be visible from the street or internal roadway, or overlooked by a window, and should be clearly visible from the driveway.

C2. Blank walls along street frontages are prohibited.

C3. Landscaping that may allow would-be intruders to hide shall be avoided.

C4. The use sensor lights to detect movement at night whilst saving on lighting costs is encouraged.

Access Control

C5. Council encourages the use of the following measures to control access to and from residential properties:

- Viewers/peepholes and chains on the entry door in order to monitor visitors and increase the feeling of security.
- Fences (side access).
- Solid-core exterior doors.
- Solid door frames with proper strike plates.
- Install quality locks on doors and external windows.
- Consider a monitored alarm system, and
- Ensure side and/or rear accessway gates are lockable.

Ownership

C6. Each property shall be clearly identified by street number, which is visible from a car on the street.

C7. Property lines and private areas should be defined through building materials, fencing and landscaping.Note: Additional ownership controls for Residential Flat Buildings can be found in section 6 of this Part

1.7. Building and Site Sustainability

Objectives

O1. To improve the energy efficiency of dwellings.

O2. To reduce the impact of residential development on the environment whilst creating a more pleasant place in which to live.

O3. To encourage and promote Water Sensitive Urban Design.

O4. To limit the amount of urban run off from residential developments.

Development Controls

C1. Residential building designs should incorporate the following design principles for achieving a more sustainable home:

- Effective building Orientation- attempt to take advantage of northerly aspects, where possible.
- Energy efficient building materials should be used
- Design to allow for cross ventilation- through window size, placement and ventilation.
- Create sustainable landscaping - deciduous trees on north side of dwelling and the planting of vegetable gardens.
- Window Protection- through external shading devices.
- Draughtproofing and weathersealing- to prevent potential air leaks.
- Effective use of natural light- dwellings should be designed so that artificial lighting is not needed during the day.

C2. Soft landscaping should be used to promote soil infiltration and reduce stormwater run-off.

C3. Rain gardens and Water Sensitive Urban Design principles for driveways are encouraged.

C4. The design and location of stormwater drainage structures, such as detention and rainwater tanks, is to be integrated with the landscape design and fencing for the site. Above ground structures should not be visually intrusive.

C5. On Site Detention (OSD) basins should be adequately landscaped in order to minimise its visual impact and maintain the streetscape character of the area.

Roof and Surface Water

C6. All roofing shall be provided with adequate gutter and downpipes connected to roof water drainage systems.

Rainwater Tanks

C7. Full details of proposed rainwater tanks shall be submitted with a Development Application for approval. Details are to include (as a minimum):

- Rainwater tanks shown on all plans, including floor plans and elevations,
- the configuration of inlet/outlet pipe and overflow pipe,
- the storage capacity, dimensions, structural details and proposed materials, and
- the purposes for which the tank is intended to be used, that is for washing machine use, toilet use and outdoor watering use.

Note: Where the applicant can demonstrate a need for a tank smaller than 3000 litres (evidence shall be provided from a suitably qualified engineer with the Development Application), Council may give approval for a smaller rainwater tank.

C8. Rainwater tanks that are to be connected to toilets and washing machines and for outdoor water use are required (minimum 1 per dwelling) and must be located to the side or rear of the dwelling for single dwelling houses.

C9. Rainwater tanks shall not be located within the landscaped area, or reduce the minimum site setback requirements contained within this DCP.

Note: Credit may be granted by Council's Engineering Services in relation to the provision of OSD if a suitable water tank is proposed. Please contact Council for more details.

1.8. Sunlight Access

Objectives

O1. To recognise the reasonable expectation for a dwelling to have the ability to access sunlight.

O2. To ensure adequate residential amenity through the provision of sunlight access and good solar amenity to the living spaces and private open space areas of dwellings.

O3. To not permit overshadowing that arises through poor design.

O4. To ensure a reasonable amount of sunlight access for dwellings is achieved all year round.

O5. To acknowledge, assess and consider both the existing development and what is likely to be built on adjoining sites in areas undergoing change.

O6. To accept that there may be sites and buildings that are vulnerable to being overshadowed, but proposed development shall not preclude reasonable solar amenity access to these sites and buildings.

Development Controls

C1. Residential development shall be designed to have as minimal impact as possible on the sunlight access and amenity obtained by existing adjacent properties and their dwellings.

C2. Applications for proposed dwellings shall demonstrate design mechanisms provided to ensure sunlight access to the proposed dwellings.

C3. On north/south facing allotments, dwellings shall be designed and orientated so that living areas and their major windows and outdoor recreation areas maximise their northern exposure.

C4. On sites with otherwise poor solar access, dwellings shall demonstrate that they are specifically designed to catch the winter sun.

C5. New dwellings shall be designed to ensure direct sunlight access for a minimum of 3 hours between 9.00am and 4.00pm at the winter solstice (22 June) is provided to at least one main living area of the proposed dwelling/s.

C6. The shadow effect from a proposed development on existing adjacent dwellings must be such that a minimum of 3 hours of direct sunlight between 9.00am and 4.00pm at the winter solstice

(22 June) is to be provided to at least one main living area of existing dwellings.

C7. The living rooms and private open spaces for at least 70% of dwellings within a residential flat development shall receive a minimum of 3 hours of direct sunlight between 9.00am and 4.00pm at the winter solstice (22 June).

Note:

- For single dwellings, attached housing, dual occupancies and multi-unit housing, the main living area to be assessed under this section shall be located on the ground floor.
- In order to comply with this control, shadow plans, in elevation, shall be submitted.

C8. A minimum of 50% of the required private open space areas of the proposed dwellings and any adjacent dwellings shall have access to 3 hours of direct sunlight between 9.00am and 4.00pm at the winter solstice (22 June).

Note: Sunlight on private open space adjoining living areas capable of containing a table and chairs is preferred by Council, as it provides good usable solar amenity.

C9. Lightwells should not be used as a principle source of sunlight.

C10. Where sunlight is achieved through east and west facing windows, shading devices should be provided on those elevations for protection from the summer sun.

C11. Proposed development should endeavour not to overshadow any existing solar panels on adjacent properties.

C12. Where existing sunlight access obtained by adjacent development does not meet the provisions of this plan, the proposed development shall not further reduce its achievable sunlight access.

C13. Overshadowing by fences, roof overhangs and changes in level shall be taken into consideration by Council.

Note: Council will not assess the impact of overshadowing by vegetation, unless where the nature of the vegetation has the potential to have a similar impact to that of a solid structure (i.e. very dense hedges etc).

C14. Where development does not comply with the controls in this section, Council will consider the proposal on its merits, having regard to:

- Unusual circumstances on the neighbouring site that prevent compliance (e.g. proximity to boundary, location of windows and living areas).
- Exceptional circumstances of the site that prevent compliance (heritage, topography, orientation, etc).
- Specific design mechanisms implemented in the proposed design of the site and dwelling in order to achieve the maximum potential sunlight access to the proposal and or adjacent dwellings (e.g. height, location of building bulk, modulated building forms, location and types of windows, setbacks, location of private open space etc).

1.9. Cut and Fill

Objectives

O1. To minimise disruption any new buildings or structures may have on natural drainage patterns.

O2. To encourage buildings to follow the natural topography of the land, as much as possible to minimise the need for cut and fill.

O3. To maintain privacy for adjoining residents.

O4. To reduce the bulk and scale of dwellings.

O5. To minimise soil loss through effective site management practices in order to reduce the impact of sedimentation on downstream waterways and drainage systems.

Development Controls

Note: State Environmental Planning Policy (Exempt and Complying Development Codes) 2008, may apply in some instances.

C1. Development is should be designed and constructed to integrate with the natural topography of the site.

C2. Cut and fill shall not create a detrimental impact on the overland flow of the site.

C3. Fill, up to 300mm, is permitted within 900mm of side or rear boundaries.

C4. Fill, 600mm or greater is to be contained within the building envelope.

C5. Where fill is more than 150mm deep, it shall not occupy more than 50% of the landscaped area.

C6. Cut is permitted to a maximum of 1 metre.

C7. Cut is to be limited to 450mm where it is within 900mm of the rear or side boundaries.

C8. Where there is a slope over 4%, cut and fill should be balanced.

C9. Contaminated fill, either imported or found on site, is not permitted.

C10. Where cut and fill is permitted by Council, applicants are to ensure that the privacy and amenity of the development and surrounding dwellings is not affected.

Note:

- Privacy and amenity controls for residential development are contained within 6 section of this Part.
- Erosion and sediment control controls are contained within Part A of this DCP.
- Cut controls are not applicable where basement parking is proposed.

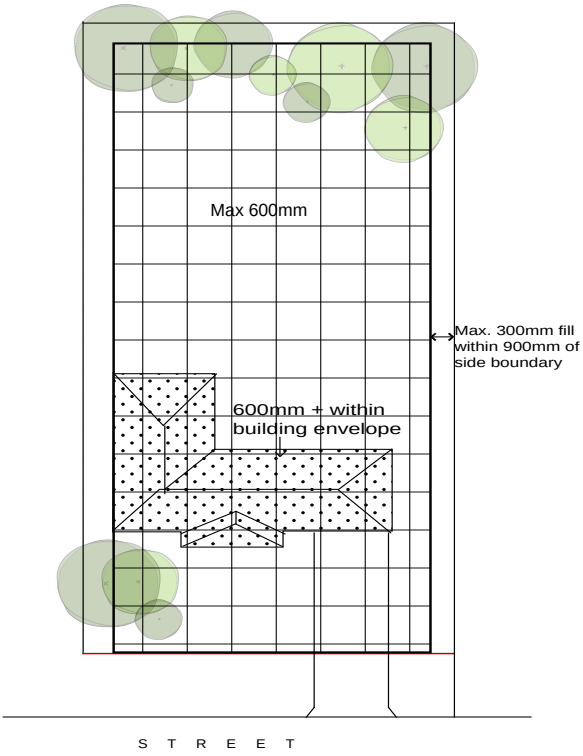


Figure 9. Fill requirements

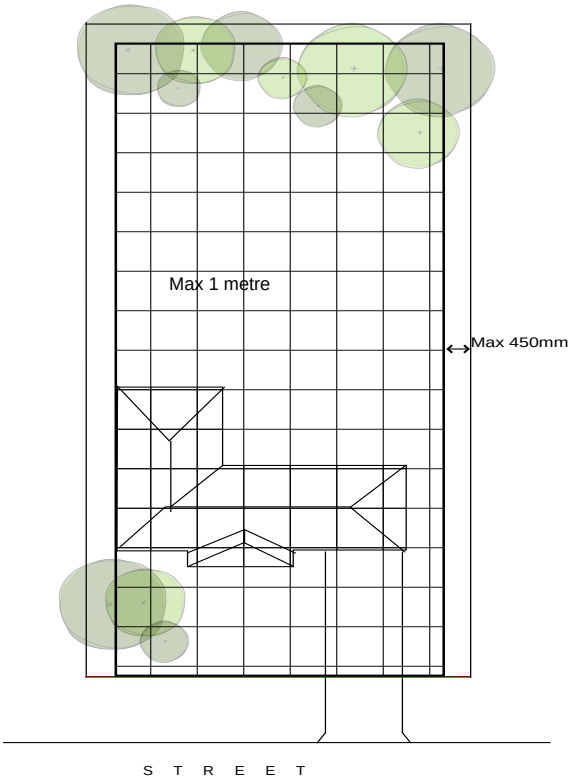


Figure 10. Cut requirements

1.10. Demolition

Objectives

O1. To permit the safe demolition of buildings and structures.

O2. To require the provision of a photographic record of buildings and structures to be demolished.

O3. To ensure the safe removal of asbestos.

O4. To ensure the safety of those involved in the demolition of buildings and structures and residents in neighbouring properties.

O5. To ensure that waste from demolition is effectively managed, and where possible materials are recycled.

Development Controls

C1. Approval for the demolition of a dwelling, addition or outbuilding to a dwelling is required from Council.

Note:

- State Environmental Planning Policy (Exempt and Complying Development Codes) 2008, may apply in some instances.
- Holroyd Local Environmental Plan 2013 prohibits demolition in some instances.

C2. Relocation of existing dwellings may be approved by Council, subject to the relocated dwelling complying with all controls within this DCP.

C3. A photographic record, capturing the external configuration of the building proposed to be demolished and where appropriate, the internal partitions, is required prior to any site works. Please refer to Councils Photographic Record Form for further details.

C4. If the demolition involves removing asbestos, compliance with Council's Asbestos Cement Policy for the safe removal and disposal is required.

Note: Penalties may be imposed on any person not complying with the policy, which will form part of any development approval.

1.11. Car Parking and Roads

Objectives

O1. To meet the vehicular access and parking needs of residents.

O2. To provide convenient off-street parking for residents and, where necessary, visitors within each development.

O3. To ensure vehicular and pedestrian safety and a pedestrian friendly environment through an integrated development design.

O4. To foster access design to form part of the overall landscape design.

O5. To allow for service vehicle access where necessary.

O6. To ensure garages, carports and parking do not visually dominate the streetscape and to reinforce building articulation along the street frontage.

O7. To ensure that where basement parking is proposed, that the bulk and scale of the building is not increased and that landscaping and deep soil zone requirements can be met.

Development Controls

Note:

- Minimum parking standards for residential development shall be provided in all developments. These standards can be found in Part A of this DCP.
- General requirements for parking, access and driveways can be found in Part A of this DCP.

C1. Rooms capable of being used as, or converted into a bedroom shall be included in calculations for car parking.

C2. Council may reduce or increase the parking requirements for any development application, having regard to, but not limited to, the following:

- car ownership levels in the area,
- proximity and frequency of public transport,
- availability or lack of on-street parking,
- street width, traffic volume and parking capacity, and
- proximity to other uses generating parking demand.

C3. Where a reduction or increase of parking spaces is pursued, applicants shall submit a traffic and transport study with the application.

C4. One additional car parking space is permitted within the front setback area for single dwelling development on the following roads:

- Centenary Road, Wentworthville;
- Cumberland Highway;
- Merrylands Road (between Cumberland Highway and Clarence Street), and
- Great Western Highway,

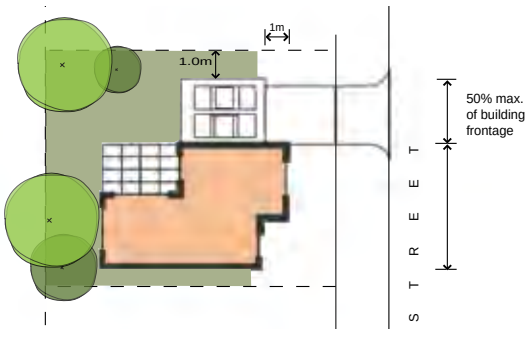


Figure 11. Garage setbacks and widths

where all other provisions of the DCP are achieved, including landscaping area.

Garages and Carports

C5. Garages are to be a maximum of 6 metres clear width or 50% of the width of the buildings street elevation whichever is the lesser.

C6. Where garaging is provided as part of the dwelling frontage, it must be integrated into the design of the dwelling to minimise visual impact (i.e. balcony over garage).

C7. Garages and carports at grade are to be located a minimum of 1000mm behind the front wall of the building or 5.5 metres from the street boundary, whichever is greater.

C8. Where the width of the proposed dwelling house or detached dual occupancy is greater than 12 metres, garages and carports may extend 1.5m from the building façade.

C9. 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.

C10. Where possible, double garages provided as part of the dwelling frontage should be setback from one another, or incorporate detailing to provide visual interest.

C11. Three car garages fronting the street and attached to a dwelling are not permitted.

C12. Car parking should be located at the rear of the site where rear access is available or where this is the prevailing pattern of development in the street. This is not to compromise other development controls (i.e landscape area requirements).

C13. Garages are not permitted to be used for any purpose in contravention of Holroyd LEP 2013.

C14. The size of any garage shall be no more than a maximum of 40m^2. If the proposed garage is to be greater than 40m^2, any area in excess of this will be considered to be floor space.

Note: 40m^2 is equivalent to a double garage, 20m^2 is equivalent to a single garage.

C15. A lockable storage closet for each dwelling should be provided within the garage.

C16. For dwelling houses, dual occupancy and multi dwelling housing, parking in the case of each dwelling shall be separately accessible.

C17. Garages for attached dwellings shall be walk through to the rear yard.

Tandem Parking

C18. Tandem Parking is acceptable (except for sites on arterial roads), provided that it can be demonstrated that the car can be contained in a 5.5 metre space within the property boundaries and does not interfere with the accessibility of other parking spaces, driveway or road.

C19. For single dwellings, tandem garaged parking, for a maximum of 2 car parking spaces, may be provided only for use by the same dwelling, if the street frontage is less than 14 metres.

C20. Tandem spaces are not to be used for the regular storage of non operational motor vehicles, boats, caravans, trailers or the like.

Vehicular Access and Driveways

C21. Vehicular access points are to be minimised and should not break the continuity of the

streetscape.

C22. Vehicle crossing/s shall be a minimum width of 3 metres (5 metres for single dwellings and dual occupancies that propose double or adjacent garages) and a maximum width of 5 metres at the boundary line. A width up to 6 metres can be considered for multi unit complexes. Generally only one vehicular crossing will be permitted per site.

C23. For Multi dwelling housing, there shall be a minimum 6 metre width between driveways.

C24. Landscaping should be used to minimise the visual intrusion of vehicular access points.

C25. Vehicular access points and parking areas are to be:

- Easily accessible and recognisable to motorists;
- Located to minimise traffic hazards and the potential for vehicles to queue on public roads;
- Located to minimise the loss of on street car parking.

C26. All new driveways should be located at least 1 metre away from the side property boundaries, or 1.5 metres in the case of Residential Flat Buildings.

C27. The area between the driveway and the property boundary shall be suitably landscaped to Council's satisfaction.

C28. 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.

Note: The vehicle crossing, from the street to the front property boundary must be concrete to ensure compatibly with the footpath.

C29. Where a driveway is proposed to exceed 30 metres in length, it should not be constructed in a straight line, but should be curvilinear and/or offset by landscaped sections.

C30. For Multi unit dwellings and Residential Flat Buildings, Council generally favours the use of a central under-building access drive. Car parking spaces and drives are to be arranged so that the cars can be driven onto and off the property in a forward direction.

C31. The maximum gradient for a driveway should be 20%, or 1:5.

Basement Parking

C32. Basement Parking is permitted for all residential development.

C33. Basement parking is mandatory for all residential flat buildings and multi dwelling developments within the R4 zone.

C34. Basement parking for single dwellings and dual occupancies shall not be located outside the building footprint.

C35. Basement parking shall:

- Provide, where required, a pumpout drainage system according to Councils engineering requirements.
- Ensure compliance with Section 3.3 of Part A.
- Ensure compliance with the BCA for Ventilation and accessibility.

C36. Basement Parking shall not increase the bulk and scale of development.

C37. Basement Parking shall not affect the privacy of adjacent residential development.

C38. Basement parking manoeuvring shall ensure that vehicles can enter and exit in a forward direction.

C39. For residential flat buildings, access from residential dwellings to all parking, including basement parking, shall be accessible for wheelchair users and for less mobile persons.

1.12. Universal Housing and Accessibility

Objectives

O1. To ensure the provision of flexible housing and accommodation to meet the needs and changing lifestyles of residents within Holroyd Local Government Area.

O2. To ensure that provided universal housing complies with relevant Australian Standards for Adaptable Housing.

O3. To encourage accessibility housing design for people with limited mobility.

Development Controls

C1. Developments should be designed to minimise any barriers to less mobile persons.

Note:

- Council encourages designing dwellings or additions to dwellings to Australian Standard 4299- 1995Adaptable Housing, as it will minimise retro-fitting costs which may be required at a later date if the house is to be retained through lifestyle changes.
- Please refer to the Commonwealth Disability Discrimination Act 1992 for the developers' legal responsibilities in this matter.
- Dwelling entries, where possible, should be level and enable wheelchair access.

C2. All two storey residential dwellings (including single dwellings, dual occupancies, attached housing and multi dwelling housing) should provide one room capable of being used as a bedroom, kitchen, bathroom/toilet and living areas on the ground level.

Multi Dwelling housing and Residential Flat Buildings

C3. For multi dwelling development and residential flat buildings, 15% of dwelling units shall comply with AS4299- 1995- Adaptable Housing Class B.

Note: The number of adaptable units will be calculated by rounding up to the nearest whole unit.

1.13. Subdivision

Objectives

O1. To facilitate greater diversity in housing choice, through encouraging variety and choice in housing forms and dwelling sizes.

O2. To enable flexibility in the choice of housing design and siting of a dwelling house as well as suitable space available for other activities normally associated with the use of a dwelling house.

O3. To require energy efficient subdivision design that maximises solar access and meets requirements for sunlight and solar radiation.

O4. To ensure subdivisions make efficient use of roads and services.

O5. To strike a balance between cost effectiveness and recurrent costs to Council and the community.

O6. Provide an appropriate level of amenity for new and existing residential areas.

O7. To ensure appropriate levels of service for utilities and the road network are achieved and to optimise existing infrastructure.

O8. To adequately consider environmental constraints and impacts including flooding, drainage, vegetation, erosion on a proposed subdivision.

O9. Encourage innovative subdivision and housing design.

O10. Consider the design of roads and allotments to create variety and interest in the streetscape.

O11. To preserve significant natural features of the subdivision site.

O12. Encourage the retention of significant existing vegetation within open space areas, and integration with private site landscaping and natural bushland area.

O13. To provide for each allotment sufficient area and dimensions to enable construction of a dwelling and convenient on and off road vehicle access and parking.

O14. Provide sufficient road reserve, carriageway and verge width to allow roads to perform any required drainage systems and minimise life cycle costs without compromising other objectives.

O15. To allow variety in house design, enable off street parking and to reduce road construction and servicing costs.

Development Controls

Note: General subdivision controls are located in Part A of this DCP.

C1. The subdivision of secondary dwellings (i.e. granny flats) will not be permitted by Council.

C2. The type of title (torrens, strata, community) will depend on the nature and final form of development.

Lot and road orientation

C3. Allotment orientation should ensure that living and private open space areas of any dwelling can be orientated to the north and that dwellings can be positioned so that the possible overshadowing impact on existing or future adjoining buildings can be minimised.

C4. Road orientation shall be designed to increase the energy efficiency of dwellings.

Note:

- Roads running close to east-west provide for good orientation of allotments for solar access to dwellings and provide open space, while maintaining a narrow allotment frontage. This will contribute to minimising the street length and reduce lengths of utility and service related infrastructure.
- On roads running, north-south, allotments may need to be widened to provide for solar access and prevent overshadowing of dwellings and private open space.

C5. Where land slopes are greater than 4%, road and allotment design should provide for dwellings to be parallel with the contours to minimise earthworks.

C6. Allotments shall be design and configured to:

- Minimise boundary retaining walls,
- Minimise potential overlooking,
- Maintain solar access, where slopes face south.

Allotment size and dimensions

Note: The minimum allotment size for residential development is contained within Holroyd Local Environmental Plan 2013.

C7. Council will consider the shape of the proposed allotment/s as it would allow a rectangular building envelope of approximately 12 metres x 10 metres behind the building line, leaving 6 metres to the rear boundary.

C8. A minimum frontage of 12 metres is required where it is proposed to erect a dwelling house on the allotment. An allotment shall be no less than 22 metres in depth.

C9. Each residential allotment shall have a satisfactory lot depth to frontage.

C10. The access corridor of a battleaxe shaped allotment is not included in the calculation of the minimum

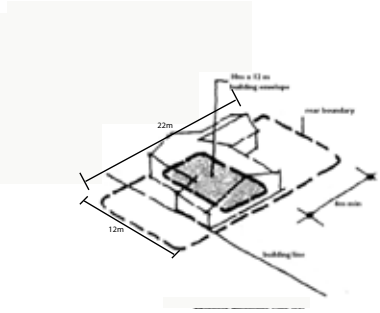


Figure 12. Subdivision dimensions

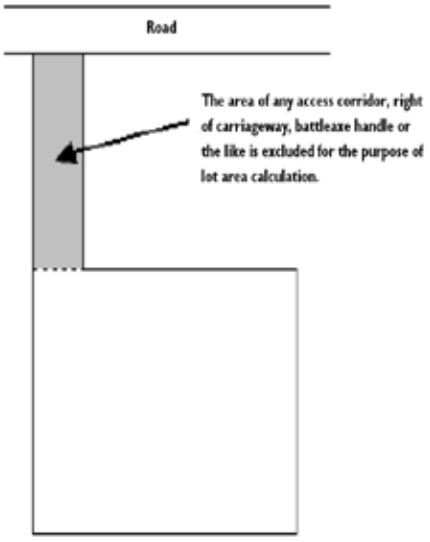


Figure 13. Calculating Battleaxe handle

area required for that allotment.

Note: The access corridor is that part of a battleaxe shaped allotment which provides private access between the main part of the allotment and public road.

C11. Proposed corner allotments should have a minimum width of 14 metres to take account of a second building line to the secondary street frontage.

C12. Where subdivision involves the existing allotments with new property boundary within 6 metres of an existing residential building envelope, the applicant shall establish a building envelope to show how future development can be accommodated on the proposed allotment.

Note: This should be based on an assessment of opportunities for achieving objectives related to orientation, solar access, visual and acoustic privacy appropriate for the type of development proposed.

C13. Multiple subdivisions of battleaxe lots is prohibited.

Access corridors

C14. Any proposed vehicular access corridors shall have a maximum length of 60 metres, a minimum width of 4 metres and a minimum width of shared corridor of 6 metres.

C15. The number of battleaxe shaped blocks in a subdivision should be kept to a minimum. No more than four battleaxe shaped should adjoin each other and access to more than 4 lots should be by a dedicated road.

C16. No more than two allotments should be served by a shared access corridor.

C17. Where two corridors are shared, reciprocal rights of way and easements for drainage and services shall be granted over the access corridors for the benefit of both allotments.

C18. An access corridor to a single allotment shall be constructed with full width concrete paving, minimum 2.5 metres wide. Shared access corridors (serving two allotments) shall be constructed with a full width centrally located driveway, 3.5 metres wide to Councils Engineering Services Department requirements.

C19. For battleaxe allotments intended to be used for

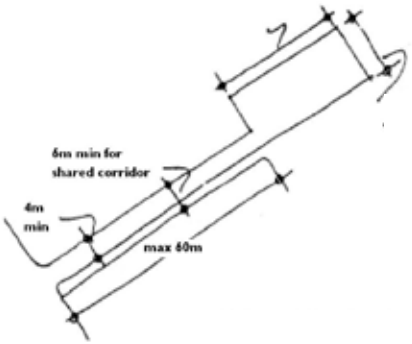


Figure 14. dimensions of access corridor

a Multi unit development, the applicant shall be required to demonstrate the suitability of a shared access corridor for the number of dwellings proposed.

Dual Occupancy and Multi Dwelling Development

C20. Council will allow the torrens subdivision of dual occupancies and the strata subdivision of multi dwelling development subject to compliance with all other related controls contained in this DCP.

Residential Flat Development and Mixed Use development

C21. Council will allow the strata subdivision of residential flat buildings subject to compliance with all other related controls contained in this DCP.

Staged and Concept Development

C22. Council will consider a variation to the minimum allotment sizes provided theconcept plan demonstrates that the allotment sizes meet the objectives and design principles.

Road Design and Construction- road network and capacity

C23. Road layouts shall provide for access to bus routes within acceptable walking distance from all dwellings.

C24. Unless prescribed otherwise, no more than 10% of allotments shall be more than 400 metres walking distance from a proposed bus route.

C25. Large developments or those which require direct access to an external (arterial) road network are subject to negotiation with Council.

C26. An access street shall serve a maximum of 200 allotments, or generate no more than 1500 vehicle movements per day (based on an average of 7 vehicle movements per dwelling,) unless a lower rate can be demonstrated.

Road Design Speeds

C27. A combination of measures may be required to limit design speeds by:

- Limiting street length,
- Introducing bends.

C28. Introducing slow points, bends and other traffic management measures such as constriction of carriageway width, speed humps etc. These may not be appropriate in all situations.

C29. Road design and speed profiles shall conform to RMS guidelines.

Road Reserve

C30. Carriageway, verge and road reserve widths shall be provided as shown in Table 1 and Figure 15 below. Where not already provided, Council will require 4 metre x 4 metre splay corners to be dedicated in road reserves at intersections.

C31. While discouraged, where rear fences face major roads, greater verge widths may be required for landscape measures to screen fences, without compromising visibility at intersections.

On street parking

C32. On street parking shall be provided as part of the carriageway.

Pedestrian/cyclist facilities

C33. An access place or street shall be provided with a 1.2 metre wide concrete footpath on all frontages. Council will consider the alternative of interlocking road pavements for short length access places serving up to 10 dwelling allotments.

C34. Where an cycleway and access approved plan exists, pedestrian and cyclist paths shall be provided in accordance with that plan.

Road Formation

C35. New roads must be constructed with kerb and gutter, 1.2 metre wide concrete footpath and be sealed from gutter to gutter.

C36. Cul-de-sacs will be accepted only where surrounding land has been fully developed or where the DCP provides for cul-de-sacs roads. Cul-de-sac roads are to have a 12 metre radius with 12 metre reverse curves on boundary alignment.

Note: Construction is to be a standard not less than the Council's standard specification for new residential roads. This can be purchased or inspected at the Council Chambers.

Table 1- Carriageway and road reserve widths

Road type	Carriageway (m)	Verge (m)	Road reserve (m)	Max. no of lots served	Design speed
Access place minor cul-de-sac	6	3.5	13	15 including corner lots	15km/hour
Minor access street minor loop roads, and cul-de-sacs	8	3.5	15	more than 15	40km/hour
Access street loop road serving activity centres such as open space areas.	11	3.5	18		
Collector likely bus and inter precinct traffic routes	13	3.5	20		

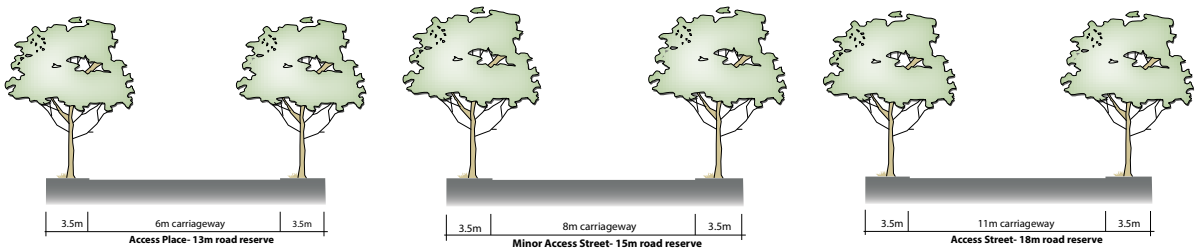


Figure 15. Carriageway widths

2. Dwelling Houses and Secondary Dwellings

2.1. Lot Size and Frontage

Objectives

O1. To ensure each lot has dimensions to enable the suitable siting and construction of a dwelling house and associated activities, whilst retaining the character and amenity of the residential area in which it is located.

O2. To ensure that housing design complements and integrates with existing streetscapes.

O3. To allow choice and variety in housing design.

O4. To ensure that allotments provide opportunities for good housing design, including active surveillance of the street, non dominating car parking structures and sufficient open space.

O5. To enable adequate street frontage for off street parking, whilst ensuring that parking does not dominate the streetscape.

O6. To ensure adequate amenity for new and existing residents.

O7. To encourage development that maximises opportunities for solar access and minimises overshadowing on neighbouring properties.

O8. To allow Council to consider dwelling houses on existing registered lots that do not meet development control requirements for lot size and frontage widths.

Development Controls

C1. The minimum allotment size for a dwelling house is 300m^2.

C2. The minimum frontage for a dwelling house is 10 metres at the building line.

Note: The area of any access corridor, right of carriageway or the like will be excluded for the purpose of lot area, site coverage, landscape area and private open space calculations.

C3. The minimum width of an access corridor is 5 metres inclusive of 1 metre of landscape strip on both side of the access corridor.

C4. Where a registered lot exists in a residential zone and is less than 300m^2 in area, or less than 10m in width, Council may consent to the development of a dwelling house on the lot. See Section 4 of this Part.

2.2. Site Coverage

Objectives

O1. To ensure that new dwelling housing and alterations and additions to existing dwelling housing are consistent with the streetscape character and the future amenity of its locality.

O2. To allow for adequate landscaping including deep soil zones and private open space.

O3. To minimise overshadowing of the proposed development on surrounding residences and their private open space.

O4. To minimise potential privacy issues on surrounding residences and their private open space.

Development Controls

C1. The maximum site coverage for a dwelling house is 60% of the site area (Figure 16).

Note:

- Achieving the maximum site coverage shall not be interpreted as an automatic right of approval. Applicants must demonstrate consideration of site constraints and other design and amenity considerations detailed within this DCP relating to bulk and scale.
- The maximum floor space ratio is detailed within Holroyd Local Environmental Plan 2013, as a written statement and associated maps.

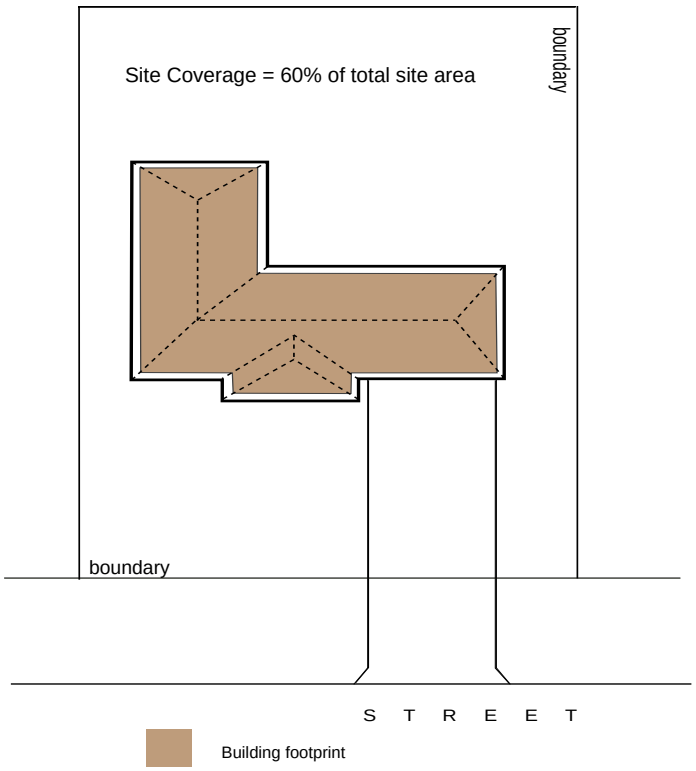


Figure 16. Site Coverage- Single Dwellings, alterations/additions and outbuildindings

2.3. Setbacks

Objectives

O1. To establish setbacks for single dwellings and their associated parking facilities and outbuildings from the street and property boundaries.

O2. To integrate new dwelling house development and alterations and additions to existing dwelling housing into a existing streetscape character.

O3. To ensure that the bulk and scale of new dwelling housing and alterations and additions to existing dwelling houses maintains the established bulk and scale of its locality.

O4. To ensure sufficient separation between buildings to allow for privacy and sunlight access.

O5. To provide locations in which landscaping may be located, in order to maintain the established landscaped character of Holroyd with of prominence of deep soil zones to the rear of lots.

O6. To allow for specific architectural features to be permitted in primary street setbacks that, are complimentary to the design of the dwelling and provide architectural interest in the building.

Development Controls

Note: Setback standards contained within the DCP are set as a minimum only. Council may require increased setbacks in order to reduce overshadowing, to ensure privacy is maintained and to reduce bulk and scale of buildings.

C1. Only eaves and gutters are permitted to encroach into setbacks, unless otherwise stated in this Development Control Plan.

Front Setbacks

C2. The minimum setback from the principal street frontage is 6 metres.

C3. Dwellings are to align with the street, where possible.

C4. Where front setbacks of adjacent dwellings differ from 6 metres, Council may approve a front setback which is similar to that of adjacent dwellings. Where setbacks of adjacent buildings differ significantly, the setbacks of the two will be averaged to provide the setback allowed for the new dwelling.

C5. The front setback area shall be landscaped area except allowing for driveway and pathway leading to the dwelling.

Side Setback

C6. Setbacks from the side boundaries are to be a minimum of 900mm.

C7. Minimum side setbacks for granny flats shall be 900mm.

Rear Setback

C8. The minimum setback from the rear boundary shall be at least 3 metres for single storey dwellings or a single storey component of two storey dwellings.

C9. The upper storey shall be setback at least 7 metres from the rear boundary.

Rear Lane

C10. Setbacks to a rear lane (new front setback) shall be a minimum of 3 metres and a maximum of 5 metres.

Corner Lots

C11. Corner dwellings are to address both streets through appropriate design.

C12. A minimum side setback to secondary streets shall be 4 metres.

Articulation Zone

C13. An articulation zone shall be permitted in the front setback to the primary street frontage. The articulation zone is limited in width to 25% of the building width and 1.5 metres in length.

C14. Building elements permitted in the articulation zone include: verandahs, porticos/ entry features, bay windows, awnings, shade structure, window box treatment, balcony, patio, pergola, terrace, verandah or steps.

C15. Building elements shall not extend above the eave gutter line, other than a pitched roof to an entry feature or portico. This shall have the same pitch as the roof of the dwelling house.

C16. The area of building elements is not included in calculations for landscaped area or private open space.

C17. Building elements permitted in the articulation zone shall integrate with the overall design of the dwelling house and shall not appear as a 'tack on' structure.

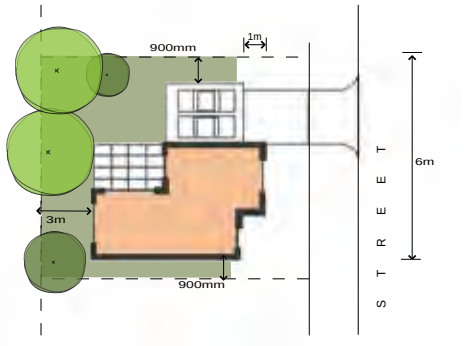


Figure 17. Setbacks- single dwellings

2.4. Building Height

Objectives

O1. To establish the maximum storey limit for detached dwellings, their alterations and additions and associated outbuildings.

O2. To establish minimum floor to ceiling heights for detached dwellings, their alternations and additions and associated outbuildings.

O3. To permit attics where they do not impact on the bulk and scale of a dwelling.

O4. To ensure that new dwelling house development and alterations and additions to dwelling houses integrate within the existing streetscape character.

O5. To maintain sunlight access, privacy and amenity for new and existing residents.

Development Controls

C1. A dwelling house and alterations and additions to a dwelling house shall be no more than 2 storeys in height.

Note: The height (in metres) of single storey dwelling shall be 7 metres (Figure 18).

C2. The minimum floor to ceiling height of dwelling house is 2.4 metres (Figure 19).

C3. Attics are permissible, only where they comply with all other height and floor to ceiling height requirements.

C4. Attics are to be designed to fit within the building envelope (with the exception of dormer windows) and are not to increase the bulk and height of the roof.

C5. Council may only consider dormer style rooms, only where it is located within the roof line of the dwelling house and facing the principal street or a public park and do not impact on neighbouring properties privacy.

C6. Dormer windows may be included which are no higher than the height of the main roof of the building, no greater than 1.5 metres in width and are not to incorporate an access or balcony. (Figure 20).

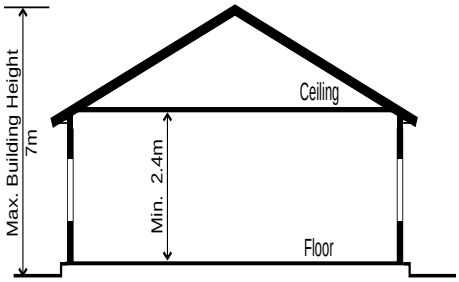


Figure 18. Single storey dwelling height

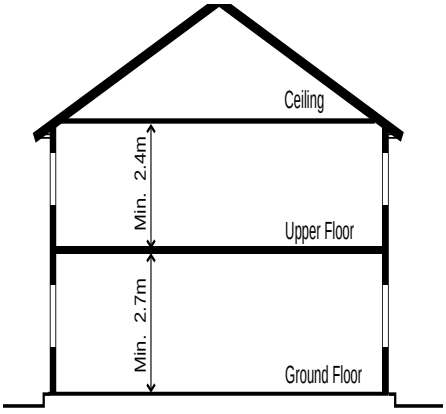


Figure 19. Two storey dwelling height

Note: The maximum height for a dwelling house (in metres) is detailed within Holroyd Local Environmental Plan 2013, as a written statement and associated maps.

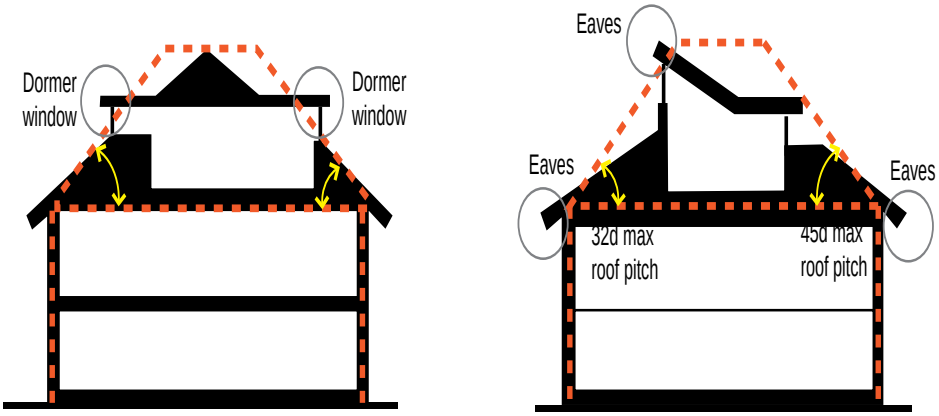


Figure 20. Attics and dormer windows

2.5. Building Appearance

Objectives

O1. To ensure residential amenity is maintained through controlling the bulk and scale of single dwellings and their additions and alteration and providing separation between dwellings.

O2. To require good dwelling design outcomes through ensuring dwellings are designed to have regard to the size, shape and orientation of the allotment it is to be located on.

O3. To maintain, and enhance, the appearance of residential areas through the detailing, materials and design of dwellings and to compliment and integrate new development into the surrounding locality.

O4. To minimise visual impact of new development and potential loss of views for existing development.

O5. To ensure that dwellings located on corner lots are designed to address both street frontages.

O6. To ensure that security and surveillance of the street is maintained through dwelling design.

O7. To ensure new development have facades which define and enhance the public domain and desired street character.

O8. To ensure that building elements are integrated into the overall building form and façade design.

Development Controls

Dwelling Design

C1. The design of a dwelling house shall have regard to the size, shape and orientation of the allotment the dwelling is to be located on in relation to:

- the type of dwelling house proposed,
- the position of the dwelling on the allotment,
- Opportunities for solar access,
- The maximisation of private open space, and
- Minimising the potential for overlooking.

C2. Dwelling design and its architectural style is to interpret and respond and not be in strong visual contrast to the positive character of the locality, including setbacks, height, and dominant patterns, textures and compositions of buildings and their elements such as roof shape, pitch and overhangs, entry porches, verandas, balconies and terraces, materials, finishes, fixtures, patterns, fenestrations, colours and detailing and the location and proportion of windows and doors.

Bulk and scale

C3. Maximum length of walls along the first floor side boundaries shall be 10 metres without any indentations or offsets or other articulation features. Indentations or offsets shall be a minimum width of 1 metre.

Front Façade

C4. At a minimum, the front façade of a dwelling house (with the exception of battleaxe lots) shall orientate the front door and a window of a habitable room on the ground floor to address the principal street frontage.

C5. Where lots have dual frontages, some form of address, such as windows, architectural features, and surveillance, must also be provided to the secondary street.

C6. Building facades should be modulated in plan and elevation and articulated to reduce the appearance of building bulk and to express the elements of the buildings architecture.

2.6. Outbuildings

Objectives

O1. To ensure outbuildings compliment and do not dominate or detract from the built form and character of the area.

O2. To protect the visual and acoustic privacy and amenity of adjoining properties.

O3. To ensure landscape area and private open space are maintained.

O4. To ensure outbuildings are integrated into dwelling design.

O5. To ensure garages do not visually dominate the streetscape.

O6. To allow flexibility in the location and design of outbuilding development.

O7. To allow outbuildings where fronting a rear laneway, accommodate attic-style development.

Development Controls

General

C1. Outbuildings shall be for domestic purposes only.

C2. Outbuildings shall be setback behind the building line.

C3. The floor area of any outbuilding shall not be greater than 10% of the site area of the lot.

C4. The maximum site coverage for dwellings and ancillary development (including outbuildings) is 60%.

C5. The maximum building height of a new outbuilding or the alterations and additions to an existing outbuilding must not be more than 4.8m above ground level (existing).

C6. An outbuilding with a building height at any part of up to 3.8m must have a setback from a side or rear boundary of at least the following:

- 900mm, if the lot has an area of at least 450m^2 but less than 900m^2,
- 1.5m, if the lot has an area of at least 900m^2 but less than 1500m^2,
- 2.5m, if the lot has an area of at least 1500m^2.

C7. An outbuilding with a building height at any part of more than 3.8m must have a setback from a side or rear boundary of at least the sum of:

- the amount of the setback specified for the relevant sized lot in C6, plus
- an amount that is equal to one-quarter of the additional building height above 3.8m.

C8. Outbuildings fronting a rear laneway are to have a maximum height of 6 metres.

C9. All amenities associated with outbuildings must only be accessible externally.

C10. Outbuildings shall be constructed or installed so that any roofwater is disposed of into an existing stormwater drainage system.

Balcony, deck, patio, pergola, terrace or verandah

C11. Any enclosing wall shall have a maximum height of 1.4m.

C12. If it is comprised of metal components, it shall be constructed of low reflective, factory pre-

coloured materials.

C13. The floor height shall not be more than 1m above existing ground level.

C14. If it is a roofed structure:

- That is attached to a dwelling, it shall not extend above the roof gutter line of the dwelling, and
- The roof shall not be higher than 4.8m, at its highest point, above ground level (existing).

C15. There shall be no interference with the functioning of existing drainage fixtures or flow paths.

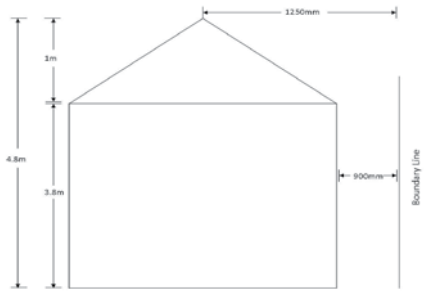


Figure 21. Outbuilding setbacks

Cabana, cubby house, fernery, garden shed, gazebo or greenhouse

C16. Shipping containers any other portable or pre-fabricated units are permitted where they compky with the BCA and all other controls within this DCP.

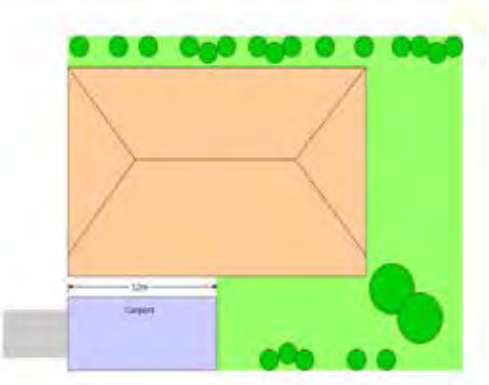


Figure 22. Detached Carports

Carport (detached)

C17. The development must not result in a building classified under the Building Code of Australia as Class 7a.

C18. A carport shall be 2 or more sides open and not less than one-third of its perimeter open.

C19. Carports may be permitted forward of the building line within the permitted articulation zone.

C20. If it is comprised of metal components, it should be constructed of low reflective, factory pre-coloured materials, and

C21. Carports shall be located so that it will not reduce vehicular access to, or parking or loading or unloading on, or from, the lot.

C22. A zero setback to a side boundary is permissible with a maximum length of 12 metres to allow for tandem car parking for two vehicles (Figure 22).

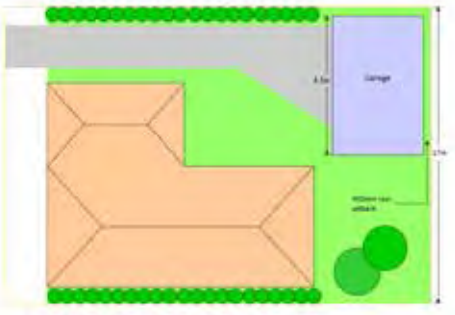


Figure 23. Detached Garages

C23. If located within 900mm from the boundary, it shall be constructed of materials that require minimal maintenance.

Garage (detached)

C24. Garages shall not be used to store commercial vehicles.

C25. Where a garage is proposed to be located on the

rear boundary, and has a maximum width of less than 50% of the rear boundary width, the garage may have a reduced minimum rear setback of 500mm (Figure 23).

C26. Where located between 500- 900mm from the boundary, garages shall be constructed of materials that require minimal maintenance and comply with the BCA.

C27. A garage must:

- be at least 1m behind the building line, where the dwelling house has a setback from a road boundary of 4.5m or more, or
- be at least 5.5m from a road boundary, where the dwelling house has a setback of less than 4.5m.

Rainwater tank (above ground) that is detached from a dwelling house

C28. A minimum setback of 450mm from each lot boundary, if the tank has a height of more than 1.8m above ground level (existing).

C29. Rainwater tank shall be located behind the building line of any road frontage.

C30. A maximum cut and fill of 1m below or above existing ground level is permitted.

C31. If it is constructed or installed on or in, or in relation to, a heritage item or a draft heritage item, it should be located in the rear yard.

Shade structures (detached)

C32. It shall not cause the total area of all such structures on the lot to be more than 15% of the ground floor area of the dwelling on the lot.

C33. It shall be located behind the building line of any road frontage.

C34. If it is comprised of metal components, it should be constructed of low reflective, factory pre-coloured materials.

C35. There shall be no interference with the functioning of existing drainage fixtures or flow paths.

2.7. Secondary Dwellings (Granny Flats)

Objectives

O1. To provide housing choice within a standard residential lot for the use of a secondary dwelling within the existing title.

O2. To permit flexible housing arrangements to suit the needs of sections of the Holroyd community that conventional housing does not meet.

O3. To enable families to provide care and support within close proximity, whilst enabling the occupants to maintain their independence.

O4. To ensure that this accommodation enables those in detached dwellings to provide care and support where required without impacting on the amenity of the area.

O5. To require lower scale secondary housing, to ensure compatible with the existing built environment and character of the single dwelling zone across Holroyd City.

O6. Ensure that the conversion of existing structures to secondary housing incorporates a satisfactory level of design and appearance, which results in a high quality of residential amenity for occupants of secondary housing.

O7. To only permit secondary housing development where it does not detract from the amenity of adjoining neighbours.

O8. To ensure that secondary dwelling development does not compromise the provision of on site car parking provided for an existing or new dwelling house on the lot.

O9. Ensure privacy is maximized for neighbours of the development and those who will occupy the secondary dwelling.

O10. To ensure that room sizes within secondary dwellings are functional, of sufficient size and cater for the intended use of the secondary dwelling.

O11. Furnish secondary dwellings with basic amenities to ensure the occupants are provided with an acceptable standard of independent living.

Development Controls

General

C1. A maximum of one secondary dwelling per allotment is permissible.

C2. Secondary dwellings are permissible on lots with an area of 450m^2 or greater.

C3. The subdivision of secondary dwellings (including torrens, strata or community title) is not permitted.

C4. Conversions of existing outbuildings will only be considered where:

- The building meets the standards required by the Building Code of Australia and;
- The principal dwelling complies with the provisions of this DCP- i.e. parking requirements are to be complied with.

Site Coverage

C5. The maximum site coverage for a secondary dwelling, combined with an existing or proposed dwelling shall be 60%.

Note:

- The floor space ratio of a secondary dwelling, combined with an existing or proposed dwelling, shall be consistent with the maximum floor space ratio for dwelling houses, in each residential zone is detailed within Holroyd Local Environmental Plan 2013, as a written statement and associated maps.
- The maximum floor space for a secondary dwelling is detailed within Holroyd Local Environmental Plan 2013, as a written statement.

Height

C6. Secondary dwellings are to be a maximum of 1 storey in height.

C7. A secondary dwelling, where located above a garage facing a laneway, is permitted to be 1 storey above the garage.

Note: The maximum height for a secondary dwelling in each residential zone is detailed within Holroyd Local Environmental Plan 2013, as a written statement and associated maps.

Setbacks

C8. Secondary Dwellings are not permitted within the front setback area of the principal dwelling, except where the secondary dwelling is part of and integrated with the design of the principal dwelling or existing garage and the street setback requirements for the principal dwelling are satisfied.

C9. On corner sites, a minimum setback of 3 metres on the secondary street is required.

C10. Granny Flats on rear lanes require a minimum setback of 1.5 metres

C11. Granny flats shall have a minimum of 3 metre rear setback, whether attached or detached from the principal dwelling.

Design and Materials

C12. Secondary dwellings shall compliment the principal dwelling in style of construction, design and materials.

C13. Metal or corrugated iron materials should be avoided, with the exception of roofs.

C14. The living area of the secondary dwelling should connect to private open space.

Facilities

C15. A secondary dwelling shall contain at the minimum:

- kitchen/kitchenette,
- bathroom,
- living room and
- bedroom.

C16. A common laundry may be provided to share for the principal and secondary dwellings.

2.8. Swimming Pools and spa pools (ancillary to a dwelling house) and associated decking and privacy screening

Objectives

O1. To provide the installation requirements of swimming pools and spa pools within Holroyd.

O2. To minimise the risks of unsupervised access to pool areas.

O3. To ensure the maintenance of pool water quality.

O4. To provide ready access to the pool for cleaning a recovery of items from the water.

Development Control

Note: State Environmental Planning Policy (Exempt and Complying Development Codes) 2008, may apply in some instances.

C1. Swimming Pool and spa pool development, including associated decking and privacy screening is not to be carried out without the approval of Council.

C2. Where an existing registered lot is less than 450m^2, Council may consent to the development of a swimming pool or spa pool that is ancillary to a dwelling house.

C3. Swimming pools and spa pools that are ancillary to a dwelling house shall be located behind the front setback from a primary road and/or in the rear yard of a dwelling house.

C4. Where it is proposed that a swimming pool or spa pool have a setback of less than 1 metre from a side or rear boundary Council may consider the variation to the above setback to this where it has considered the following:

- Sufficient area for resuscitation
- Room for maintenance of the pool and spa area, and
- Any potential impacts on adjacent dwellings and their ancillary structures due to the excavation of the pool.

C5. A minimum clearance of 1.5m must be provided from the water line to the pool fencing to at least one internal side.

C6. The development of a swimming pool and/ or spa pool shall not impact the privacy of surrounding properties.

Design, construction and materials

C7. A pool, whether constructed on site or prefabricated must comply with the relevant Australian Standards including:

- AS 2783-1992
- AS/NZS 1838-1994
- AS/NSZ 1839-1994

C8. A pool shall be constructed of inert and durable materials. Where the pool is constructed of reinforced concrete it shall be finished with a suitable surface.

C9. A barrier shall be placed around ladders at the access point to an aboveground pool.

C10. Ladders and filters shall be located away from the non-climbable zone (NCZ) so as not to

compromise the barrier.

C11. A gate incorporated in a child-resistant barrier (pool safety fence) must be a minimum 1.2m high, be fitted with a device which will return the gate to a closed position, and operate the latching device from any position with a stationary start, without the application of manual force.

C12. Each gate shall be fitted so it will only swing outwards away from the pool area with the opening mechanism located a minimum of 1.5m above finished ground level.

C13. Double gates are not acceptable construction for a self-closing and self-latching gate.

C14. A padlocked gate is not an acceptable alternative for a self-latching gate.

C15. The maximum allowable gap between the base of the child-resistant barrier (safety fence) and the finished ground/pavement surface level is 100mm.

C16. Where the rails for the dividing/boundary fences are located on the adjoining neighbouring property they are to comply with the requirements of AS 1926.1.

C17. Any door providing access to the pool area from a building must have no openings below a height of 1.5m above the floor through which a round bar 105mm in diameter can be passed.

C18. The door must be kept closed at all times when not in use and kept child-safe by means of a lock, latch, bolt or other child-resistant device located at least 1.5m above finished floor level.

C19. The door or door frame must not be provided with any footholds wider than 10mm between the release mechanism of the door and any point 100mm above finished floor level.

C20. Although the Regulation does not specify the use of self-closing devices on doors, Councils policy requires one be fitted as an additional safety measure to ensure the door will remain closed when not in use.

Water Disposal

C21. A hydrostatic pressure relief valve shall be incorporated in rigid pool shell designs.

Decking and Privacy Screening

C22. Privacy screening shall:

- Take the form of a trellis, fence or panel (but not a dividing fence),
- Be located behind the existing building line,
- Have a maximum height of 2.4m above adjacent ground level,
- Have a maximum length of 10m,
- Not be of masonry construction,
- Be structurally adequate.

C23. No part of a privacy screen located outside the pool area shall be constructed within 900mm of any child resistant barrier (safety fence).

Noise

C24. Any potential noise- generating motor, equipment or machinery system must be located so as to not cause a noise nuisance for neighbours. These items must be capable of being operated in accordance with the noise requirements of the Protection of the Environment Operations Act. 1997.

C25. Should the noise generating item be deemed to be causing a nuisance to neighbours then the items may have to be acoustically treated to reduce noise levels to an acceptable level.

3. Dual Occupancy and Semi Detached Dwellings

3.1. Specific requirements for Attached Dual Occupancy Development

Objectives

O1. To ensure dual occupancy development is compatible with both the established character and the desired future amenity of particular residential areas.

O2. To ensure that dual occupancy development is to have a similar appearance, bulk and scale to a detached house, to allow so that it integrates effectively with the locality.

O3. To require sufficient allotment area and dimensions to enable the siting and construction of a dual occupancy and its ancillary buildings with the provision of private outdoor space with good solar access, and convenient vehicle access and parking.

O4. To ensure that both dwellings are located on ground level to allow direct access to private open space and reduce potential privacy and overlooking issues.

O5. To require dual occupancy development to provide a sense of identity, whilst maintaining compatibility between the dwellings.

Development Controls

C1. No more than one attached dual occupancy may be erected on a single allotment of land.

C2. The minimum allotment size for an attached dual occupancy development is 500m^2 in Zone R2 Low Density Residential and 450m^2 in Zone R3 Medium Density Residential.

C3. The minimum site frontage for an attached dual occupancy, as measured from the building line is 15 metres.

C4. A minimum lot width of 26 metres (including 4 metre access handle) is required for attached dual occupancies on battleaxe lots.

C5. An attached dual occupancy is to be located at the front of the allotment.

C6. The two dwellings must not be located one on top of the other.

C7. Mirror reverse designs for attached dual occupancies are not permitted.

C8. Architectural differentiation between the dwellings, such as variable setbacks is required. Compatibility with the adjoining dwelling should be retained through roof pitch, colour schemes, materials etc.

C9. Two storey attached dual occupancy development will only be permitted directly adjoining the street frontage where there are no adverse privacy and overshadowing impacts, and where it is compatible with the existing streetscape.

C10. If an attached dual occupancy consists of one dwelling at the front of the site and one attached to the rear, the rear dwelling must be single storey.

Note: In the case of attached dual occupancies on corner allotments, refer to clause 3.4 for specific provisions.

3.2. Specific requirements for Detached Dual Occupancy Development (including the retention of an existing dwelling)

Objectives

O1. To ensure the development is compatible with both the established character and the desired future amenity of particular residential areas.

O2. To require sufficient allotment area and dimensions to enable the siting and construction of a dual occupancy and its ancillary buildings with the provision of private outdoor space with good solar access, and convenient vehicle access and parking.

O3. To ensure that where the original house on an allotment is retained, the house is in good condition.

Development Controls

C1. No more than one detached dual occupancy is to be erected on a single allotment of land.

C2. The minimum allotment size for detached dual occupancy development is 500m^2 in Zone R2 Low Density Residential and 450m^2 in Zone R3 Medium Density Residential.

C3. The area of any access corridor, right of carriageway, battleaxe handle or the like will be excluded for the purpose of lot area calculation.

Note: In the case of attached dual occupancies on corner allotments, refer to section 3.4 for specific provisions.

C4. The minimum site frontage for a detached dual occupancy is 15 metres.

C5. Two storey development will only be permitted directly adjoining the principal street frontage where there are no adverse privacy and overshadowing impacts, and where it is compatible with the existing streetscape.

C6. If a detached dual occupancy consists of one dwelling at the front of the site and one attached to the rear, the rear dwelling must be single storey.

C7. Two dwelling in a detached dual occupancy must be a minimum 2 metres separation distance between the external walls of both dwellings. This is required even if subdivision is not proposed.

C8. A minimum lot width of 26 metres (including 4 metre access handle) is required for dual occupancies on battleaxe lots.

Where the original house is to be retained

C9. Where the retention of an existing house for a detached dual occupancy is proposed, the existing house must comply with the provisions of this Development Control Plan.

C10. Consideration may be given to reducing the required side 1 metre landscaped strip, where necessary, to provide driveway access to a rear dwelling.

C11. For detached dual occupancy proposals where the dwelling to be retained is not listed in a conservation area, or as a heritage item, the existing dwelling must be in a good condition.

C12. Where the dwelling to be considered for retention is not considered by Council to be in good condition, upgrading of the original house to Councils satisfaction will be required so

that materials and colours are compatible. Council will also consider whether retention of an existing dwelling can satisfy the requirements of the Building Code of Australia (BCA).

3.3. Specific requirements for Dual Occupancies facing laneways and in Cul-de sacs

Objectives

O1. To ensure that new dual occupancy development does not adversely alter the traffic regime and services that have been provided in the area.

O2. To provide suitable development in laneways that respects the character of the neighbourhood and amenity of the surrounding residents.

O3. To restrict the development of dual occupancies in cul-de-sac locations where constrained access and parking would exist.

Development Controls

C1. Dual Occupancies shall not be permitted within the 'bulb' area of a cul-de-sac.

C2. Detached dual occupancies are permitted to be built to an existing rear access lane.

C3. Detached dual occupancies are to be built facing the laneway, but only where it strictly complies with the following:

- Minimum 3 metres total side boundary setbacks, either divided along both sides of the new building or along one side boundary only. Side setbacks shall be a minimum of 1 metre.
- The side setback area, if 3 metres or more and fully landscaped, can be included in the garden space calculations.
- New dwelling shall be setback 3 metres from the existing lane alignment.
- Except for driveway area, the setback area is to be fully landscaped as a front garden area containing Garaging for one car only and 3 metre maximum width for driveway access to rear lane.

3.4. Specific requirements for Dual Occupancies on Corner Allotments

Objectives

O1. To ensure dual occupancies on corner lots address both the principal and secondary street frontages.

O2. To improve the quality of dual occupancies on corner sites through adequate setbacks.

O3. To ensure that sufficient street frontages are provided for dual occupancies.

O4. To ensure that the design of dual occupancies on corner lots contribute to the urban design and amenity of the locality.

O5. To provide for the safety of vehicular movements past dual occupancies on corner lots.

Development Controls

C1. The minimum lot size for a dual occupancy on a corner allotment is 500m^2 in Zone R2 Low Density Residential and 450m^2 in Zone R3 Medium Density Residential.

C2. The minimum lot frontage width is 15 metres (for both street frontages).

C3. For a corner allotment, the minimum setback from the principal street frontage is 6 metres.

C4. The setback from the secondary street frontage is 4 metres, and a 5.5 metre setback is required to a garage.

C5. Dual Occupancies on corner sites are to be articulated to address each street frontage, define the corners and contribute to both streetscapes. Design the building façade to address the corner and integrate the façade to achieve a unified architectural concept by incorporating a minimum of two of the following design elements into the building façade facing the secondary street.

- Verandah
- Gable
- Vertical Elements to reduce the horizontal emphasis of the façade
- Entry feature or portico, and
- Balcony/windows boxes or similar elements

C6. Corner elements with windows at an angle to the main walls must only be located on the front façade or on the ground floor at the rear of the dwellings, they:

- Must not provide direct views onto adjoining private open space.
- Must have habitable rooms addressing both the streets.
- Must have separate entry pathways to each dwelling.
- Must have an active corner with architectural interest e.g wrap around verandah or continuous windows etc (Figure 24).

C7. Driveways must be located a minimum of 6 metres from the tangent point of the kerb return on the street corner.

Figure 24. Corner lot housing

3.5. Site Coverage

Objectives

O1. To ensure that dual occupancy are consistent with the streetscape character and the future amenity its locality.

O2. To allow for adequate landscaping including deep soil zones and private open space.

O3. To minimise overshadowing of the proposed development on surrounding residences and their private open space.

O4. To minimise potential privacy issues on surrounding residences and their private open space.

Development Controls

C1. The maximum site coverage for a dual occupancy is 50% of the site area.

C2. Where dual occupancies are located with the R4 zone, the maximum site coverage may be increased, where compliance with setbacks and landscaped area requirements is achieved.

Note:

- Achieving the maximum site coverage shall not be interpreted as an automatic right of approval. Applicants must demonstrate consideration of site constraints and other design and amenity considerations detailed within this DCP relating to bulk and scale.
- The maximum floor space ratio is detailed within Holroyd Local Environmental Plan 2013, as a written statement and associated maps.

3.6. Setbacks

Objectives

O1. To reduce the areas of hard paving in the front setback to improve the streetscape amenity and allow for greater rainwater infiltration.

O2. To establish setbacks for dual occupancy developments and their associated parking and outbuildings from the street and property boundaries.

O3. To integrate new dual occupancy development into an existing streetscape character.

O4. To ensure that the bulk and scale of dual occupancy development maintains the established bulk and scale of its locality.

O5. To ensure sufficient separation between buildings to allow for privacy and solar access.

O6. To provide locations in which landscaping may be located, in order to maintain the established landscaped character of Holroyd with of prominence of deep soil zones to the rear of lots.

O7. To allow for specific architectural features to be permitted in primary street setbacks that, are complimentary to the design of the dual occupancy and provide architectural interest in the building.

Development Controls

Note: Prescribed setbacks in this development control plan may be increased by Council after considering privacy, overshadowing, solar access and other relevant issues.

Front Setback

C1. The minimum setback from the principal streetscape frontage is 6 metres (with the exception of dwellings to rear laneways or secondary streets).

C2. Council may consider a variation to the setbacks prescribed above if an applicant can demonstrate that a proposal will be consistent and compatible with existing setbacks of the adjoining properties.

Side Setback

C3. Side setbacks are to be a minimum of 900mm.

Rear Setback

C4. Rear setbacks shall be a minimum 30% of the length of the site. This is irrespective of the location of private open space. This does not apply to corner lots.

C5. For corner lots, rear setbacks shall be a minimum of 4 metres. Rear setback relate to the proposed rear setback of the dwellings, not the existing rear setback.

C6. In the case of a detached dual occupancy, where one dwelling is situated behind another dwelling that has principal street frontage, the rear dwelling must be setback at least 1 metres from the common boundary between the two dwellings.

Articulation Zone

C7. An articulation zone shall be permitted in the front setback to the primary street frontage. The articulation zone is limited in width to 25% of the building width and 1.5 metres in length.

C8. Building elements permitted in the articulation zone include: verandahs, porticos/ entry features, bay windows, awnings, shade structure, window box treatment, balcony, patio, pergola, terrace or verandah. These elements shall not extend above the eave gutter line, other than a pitched roof to an entry feature or portico. This shall have the same pitch as the roof of the dwelling house. Building elements permitted in the articulation zone shall integrate with the overall design of the dwelling house and shall not appear as a 'tack on' structure.

C9. The area of building elements is not included in calculations for landscaped area or private open space.

3.7. Building Height

Objectives

O1. To establish maximum storey limits for dual occupancy development

O2. To establish minimum floor to ceiling heights for dual occupancy development

O3. To ensure that dual occupancy development integrates within the existing landscape

O4. To maintain solar access and privacy for new, existing and future residents.

O5. To permit attics where they do not impact on the bulk and scale of a dwelling.

O6. To maintain sunlight access, privacy and amenity for new and existing residents.

Development Controls

C1. The maximum height of a dual occupancy dwelling is two (2) storeys.

Note: Single storey dual occupancies shall have a maximum building height of 7 metres (Figure 25).

C2. Two storey development will only be considered directly adjoining the principal street frontage where there are no adverse privacy and overshadowing impacts:

- Where the second storey is articulated and integrated into the design of the development;
- Where it is consistent with other development in the vicinity.

C3. Two storey development, where dwellings face a secondary street (including corner allotments and laneways) may be considered where development:

- Provides front setbacks as required for primary street frontages, where development is oriented and has a driveway to that street,
- provides all landscaped area and private open space as required by the DCP,
- sunlight access is achieved as required by the DCP,
- is not in conjunction with a heritage item.

C4. The minimum floor the ceiling height for a dual

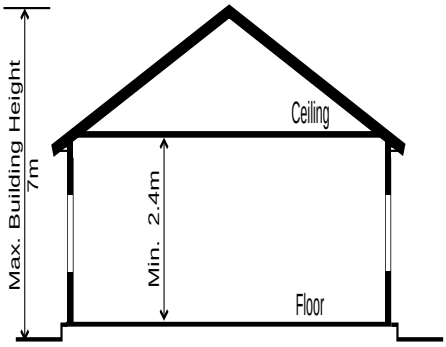


Figure 25. Single storey dwelling height

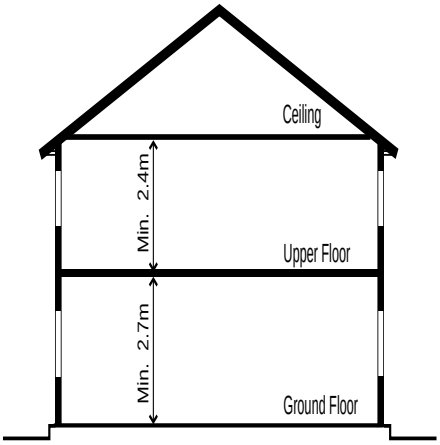


Figure 26. two storey dwelling height

occupancy is 2.4 metres (Figure 26).

C5. Attics are permissible, only where they comply with all other height and floor to ceiling height requirements.

C6. Attics are to be designed to fit within the building envelope (with the exception of dormer windows) and are not to increase the bulk and height of the roof.

C7. Council may only consider dormer style rooms, only where it is located within the roof line of the dwelling house and facing the principal street or a public park and do not impact on neighbouring properties privacy.

C8. Dormer windows may be included which are no higher than the height of the main roof of the building, no greater than 1.5 metres in width and are not to incorporate an access or balcony.

Note: The maximum height for a dual occupancy (in metres) is detailed within Holroyd Local Environmental Plan 2013, as a written statement and associated maps

3.8. Building appearance

Objectives

O1. To ensure residential amenity is maintained through controlling the bulk and scale of dual occupancy development and providing separation between dwellings.

O2. To require good dwelling design outcomes through ensuring dwellings are designed to have regard to the size, shape and orientation of the allotment it is to be located on.

O3. To ensure architectural differentiation of design to create interesting buildings that are not dominated by large scale 'box' type dwellings.

O4. To minimise the impact of dual occupancy dwellings in areas where there are predominately detached single storey houses.

O5. To preserve the amenity of adjoining development and minimise the impact on the streetscape.

O6. To ensure garages do not dominate the dwellings and the streetscape.

O7. To permit innovative design solutions to ensure that materials and landscaping are appropriate for the area.

O8. To maintain, and enhance, the appearance of residential areas through the detailing, materials and design of dwellings and to compliment and integrate new development into the surrounding locality.

O9. To ensure that dwellings located on corner lots are designed to address both street frontages.

O10. To ensure that security and surveillance of the street is maintained through dwelling design.

O11. To ensure new development have facades which define and enhance the public domain and desired street character.

O12. To ensure that building elements are integrated into the overall building form and façade design.

Development Controls

Design

C1. The design of a dual occupancy shall have regard to the size, shape and orientation of the allotment the dwelling is to be located on in relation to:

- the type of dual occupancy proposed,
- the position of the dwelling on the allotment,
- Opportunities for solar access,
- The maximisation of private open space, and
- Minimising the potential for overlooking.

C2. Dual Occupancy design and its architectural style is to interpret and respond and not be in strong visual contrast to the positive character of the locality, including setbacks, height, and dominant patterns, textures and compositions of buildings and their elements such as roof shape, pitch and overhangs, entry porches, verandas, balconies and terraces, materials, finishes, fixtures, patterns, fenestrations, colours and detailing and the location and proportion of windows and doors.

Bulk and scale

C3. Maximum length of walls along the first floor side boundaries shall be 10 metres without any indentations, offsets or other articulation features.

C4. Indentations or offsets shall be a minimum width of 1 metre from the ground floor external wall.

Front Façade

C5. Whilst Council encourages innovative design, it is important that key character defining design elements such as setbacks, height, roof form, detailing and materials visible from public areas and adjoining properties, are not in strong visual contrast with buildings in the vicinity.

C6. Building design is to enhance the existing built character by translating into contemporary design solutions the themes found in the neighbourhood.

C7. At a minimum, the front façade of each dwelling in a dual occupancy shall orientate the front door and a window of a habitable room on the ground floor to address the principal street frontage.

C8. Where lots have dual frontages, some form of address, such as windows, architectural features, and surveillance, must also be provided to the secondary street.

C9. New dual occupancies are to have a maximum straight wall length of 10 metres to a public street after which the wall must be recessed/offset to provide some visual relief. Punctation by bay windows, verandahs and the like shall be provided within that 10 metres straight wall. Building facades should be modulated in plan and elevation and articulated to reduce the appearance of building bulk and to express the elements of the buildings architecture.

3.9. Specific controls for Dual Occupancy Development on Arterial Roads and/ or the Transitway

Objectives

O1. To ensure vehicular access and egress to dual occupancies located on arterial roads is safe for all vehicles and pedestrians.

Development Controls

O2. Dual Occupancy development on arterial roads and/ or the Transitway must comply with the following provisions:

- All vehicles must be able to enter and leave the property in a forward direction
- Manoeuvring space must be provided within the property to facilitate subclause (a) above.
- Tandem parking must not be provided in front of garages.
- For corner lot dual occupancy, access must be provided via the road with the lesser traffic, as expressed as Average Annual Daily Traffic (AADT).
- Access to the development must be provided via one driveway only.

Note: Council may permit additional driveway paving in the front setback area where no other alternative exists. Landscaped area controls are still to be complied with.

4. Attached and Small Lot Housing

4.1. Lot size and frontage

Objectives

O1. To ensure that attached housing occurs on land that will allow the achievement of a high level of amenity for its occupants and adjoining residences.

O2. The enable the development of dwelling houses on small and/or narrow existing allotments.

O3. To ensure lot and frontage sizes permit a high quality of urban design.

O4. To allow sufficient area for landscaping, resulting in sufficient water infiltration into the soil.

O5. To allow the creation of reasonable areas of private open space can be provided for each dwelling.

O6. To ensure that small lot housing are designed to maximise lot dimensions.

Development Controls

C1. The minimum lot size for each dwelling is 200m^2.

C2. Attached and Small lot housing are not permitted on battleaxe allotments.

C3. Attached housing is not permitted on the 'bulb' section of a cul-de-sac.

C4. Existing allotments shall have a minimum frontage of 6 metres at the building line.

C5. A minimum lot frontage of 6.5 metres at the building line is required after subdivision.

Note: The maximum floor space ratio for a multi dwelling housing in each zone is detailed within Holroyd Local Environmental Plan 2013, as a written statement and associated maps.

4.2. Setbacks

Objectives

O1. To minimise adverse bulk and scale and amenity impacts from multi dwelling housing on adjacent and adjoining properties.

O2. To provide for visual and acoustic privacy for dwelling occupants and adjoining residents.

O3. To provide area on site for landscaped area to ensure the growth of plants, grasses and trees in order to enable a landscaped setting for dwellings.

O4. To ensure multi dwelling developments are compatible with its setting and maintain the established character of the streetscape.

O5. To ensure reasonable solar access can be achieved for adjoining residences.

O6. To establish the desired spatial proportions of the street and define the street edge.

O7. To create a clear threshold by providing a transition between public and private space.

O8. To allow for surveillance of the street.

O9. To maximise building separation to provide visual and acoustic privacy.

Development Controls

Front Setback

C1. The minimum setback from the principal street frontage shall be 4 metres. The maximum front setback is 5.5m.

C2. Garages shall be setback 1m behind the main façade, or 5.5m from the front boundary, whichever is greater, of each dwelling.

C3. For a corner allotment, the minimum setback from the secondary street frontage shall be 4 metres, except where adjacent residential development is close to the boundary, in which case the setback may be similar to that which exists.

C4. Basement car parks are not to extend beyond the building envelope into the front setback, and are not permitted for lots less than 8 metres in length.

Side and Rear Setbacks

C5. The minimum side setback for remaining external side elevations shall be 900mm.

C6. Dwellings shall be built to at least one boundary (within 150mm of the boundary).

C7. The minimum rear setback is 3 metres for each dwelling.

C8. Any elevation that is within 900mm of a boundary shall not contain any openings associated with the main living area.

Note: Additional side setbacks or offsets may be required for maintanence

4.3. Height

Objectives

O1. To establish maximum storey limits for attached housing.

O2. To establish minimum floor to ceiling heights for attached housing.

O3. To ensure that multi dwelling and attached housing integrates within the existing landscape.

O4. To ensure reasonable solar access and privacy for new, existing and future residents and the public domain.

O5. To ensure future development responds to the desired scale and character of the street and local area.

O6. To increase the sense of space in dwellings and provide well proportioned rooms.

Development Controls

C1. The minimum floor to ceiling height for all development shall be 2.4 metres.

Note: Single storey dwellings shall have a maximum building height of 7 metres.

C2. The external side wall height shall be a maximum of 7 metres.

Attics

C3. Attics are permitted in attached housing only where they comply with all other height and floor to ceiling height requirements.

C4. Attics are to be designed to fit within the building envelope (with the exception of dormer windows) and are not to increase the bulk and height of the roof.

C5. Dormer windows are only permitted where high sill windows are implemented.

C6. Council may only consider dormer style rooms, only where it is located within the roof line of the dwelling house and facing the principal street, a public park or an internal road and does not impact on neighbouring properties privacy.

C7. Dormer windows may be included which are no higher than the height of the main roof of the building, no greater than 1.5 metres in width and are not to incorporate an access or balcony.

Note: The maximum height for multi dwelling and attached housing (in metres) is detailed within Holroyd Local Environmental Plan 2013, as a written statement and associated maps.

4.4. Building Appearance and Facilities

Objectives

O1. To ensure attached housing is compatible with its setting and maintain the established character of the streetscape.

O2. To optimise streetscape quality.

O3. To ensure building design of a high standard.

O4. To ensure development integrates with the existing streetscape.

O5. To increase active street surveillance and security.

O6. To promote high architectural quality in attached housing developments.

O7. To ensure building elements are integrated into the overall building form and façade design.

O8. To ensure the location of bin storage areas does not impact on the look and setting of attached housing, whilst placed in a convenient location.

O9. To require adequate storage facilities to be provided.

Development Controls

C1. The design of a attached housing shall have regard to the size, shape and orientation of the allotment the dwelling is to be located on in relation to:

- the position of the dwelling on the allotment,
- opportunities for solar access,
- the maximisation of private open space, and
- minimising the potential for overlooking.

C2. Dwelling design and its architectural style is to interpret and respond and not be in strong visual contrast to the positive character of the locality, including setbacks, height, and dominant patterns, textures and compositions of buildings and their elements such as roof shape, pitch and overhangs, entry porches, verandas, balconies and terraces, materials, finishes, fixtures, patterns, fenestrations, colours and detailing and the location and proportion of windows and doors.

C3. Building articulation on side facades built to the boundary is not required.

Front Façade

C4. Whilst Council encourages innovative design, it is important that key character defining design elements such as setbacks, height, roof form, detailing and materials visible from public areas and adjoining properties, are not in strong visual contrast with buildings in the vicinity.

C5. Building design is to enhance the existing built character by translating into contemporary design solutions the themes found in the neighbourhood.

C6. Dwellings shall orientate the dwelling entry and at least one window to a habitable room overlooking all public domain areas on the ground floor.

C7. Complex roof forms shall be avoided.

Dwelling design

C8. Housing on steep or sloping blocks shall be built as a split level construction.

C9. The internal layout of the dwelling shall incorporate cross ventilation.

C10. Bathrooms, ensuites, laundries and walk in wardrobes shall be located to the side and rear of the dwelling.

Maintainence and storage

C11. Bin Storage areas shall be provided in a convenient location at the front of the dwelling, behind the building line, suitably screened from the street or any public place.

C12. The location of bin storage shall not impact upon the amenity of adjoining dwellings.

C13. A storage facility shall be provided in a location accessible from the front setback area, with minimum dimensions of 2 x 3 metres.

Parking

C14. The maximum width of a garage door for small lot dwellings is 2.5 metres.

Note: Refer to Part A for parking space requirements.

5. Multi Dwelling Housing

5.1. Lot size and frontage

Objectives

O1. To ensure that multi unit development occurs on land that will allow the achievement of a high level of amenity for its occupants and adjoining residences.

O2. To ensure lot and frontage sizes permit a high quality of urban design.

O3. To allow sufficient area for landscaping, resulting in sufficient water infiltration into the soil.

O4. To allow the creation of reasonable areas of private open space can be provided for each dwelling.

O5. To ensure development provides street address and does not unduly affect the physical achievement of on-street parking.

Development Controls

Note: The amalgamation of land parcels into larger development sites is encouraged as this will result in improved forms of housing development and design.

C1. The minimum lot size for multi dwelling housing is 900m^2.

C2. Battleaxe allotments are not permitted to contain multiple dwellings.

C3. Multi dwelling housing is not permitted with a frontage to roads with a carriageway less than 6.5 metres.

C4. Where multi dwelling housing is proposed on the 'bulb' section of a cul-de-sac, additional on-site parking will be required.

C5. A minimum lot frontage of 24 metres at the building line is required (Figure 27).

C6. A minimum lot frontage of 20 metres at the building line for multi- dwelling housing is permitted where basement parking is proposed.

Note:

- The maximum floor space ratio for a multi dwelling

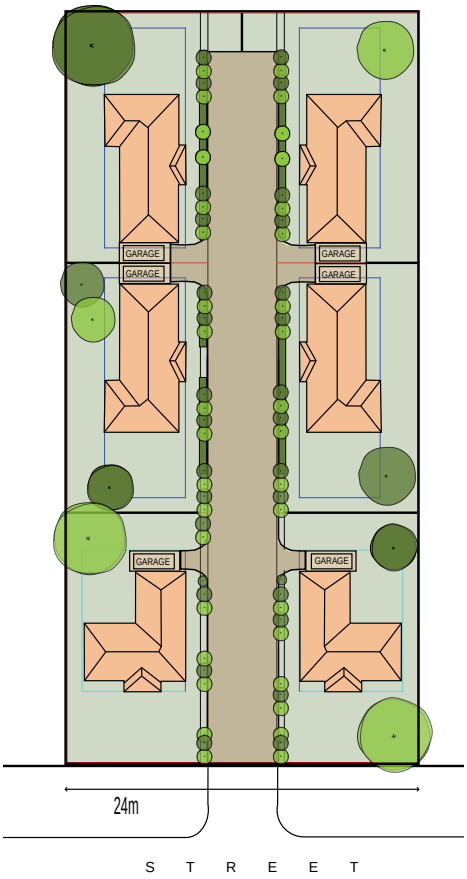


Figure 27. Multi Dwelling Housing frontage

housing in each zone is detailed within Holroyd Local Environmental Plan 2013, as a written statement and associated maps.

- Where adjacent sites are developing concurrently, site planning options for development as an amalgamated site are to be explored.
- Narrow sites with frontages less than 20 or 24 metres at the building line, are to be amalgamated with another site, to provide sufficient width.

5.2. Setbacks

Objectives

O1. To minimise adverse bulk and scale and amenity impacts from multi dwelling housing on adjacent and adjoining properties.

O2. To provide for visual and acoustic privacy for dwelling occupants and adjoining residents.

O3. To provide area on site for landscaped area to ensure the growth of plants, grasses and trees in order to enable a landscaped setting for dwellings.

O4. To ensure multi dwelling developments are compatible with its setting and maintain the established character of the streetscape.

O5. To ensure reasonable solar access can be achieved for adjoining residences.

O6. To establish the desired spatial proportions of the street and define the street edge

O7. To create a clear threshold by providing a transition between public and private space.

O8. To allow for surveillance of the street.

O9. To maximise building separation to provide visual and acoustic privacy.

Development Controls

Front Setback

C1. The minimum setback from the principal street frontage shall be 6 metres.

C2. Where front setbacks of adjacent dwellings differ from 6 metres, Council may approve a front setback which is similar to that of adjacent dwellings. Where setbacks of adjacent buildings differ significantly, the setbacks of the two will be averaged to provide the setback allowed for the new dwelling.

C3. Garages shall be setback 1m behind the main façade of each dwelling.

C4. For a corner allotment, the minimum setback from the secondary street frontage shall be 4 metres, except where adjacent residential development is close to the boundary, in which case the setback may be similar to that which exists.

C5. Basement car parks are not to extend beyond the building envelope into the front setback.

Side and Rear Setbacks

C6. The minimum side setback shall be 900mm.

C7. The minimum rear setback is 3 metres for each dwelling within a multi dwelling development.

C8. Second storeys and above shall be setback at least 4 metres from the rear and side property boundaries of the dwelling.

Note: The side setback relates to the side of the dwelling irrespective of its orientation on the site. The rear setback relates to the rear of the dwelling irrespective of how it is orientated and does not relate to the rear of the site.

C9. Notwithstanding the above, the rear boundary of the property site shall have a minimum setback of 4 metres.

C10. Any elevation that is within 3 metres of a boundary shall not contain any openings associated with the main living area.

Use of Setbacks

C11. For multi dwelling development, private open space courtyards may intrude into the front setback where it is demonstrated that issues of privacy and residential amenity are maintained and the streetscape is reasonably consistent with established dwellings. Any such intrusion shall be limited to half the front setback.

5.3. Height

Objectives

O1. To establish maximum storey limits for multi dwelling housing.

O2. To establish minimum floor to ceiling heights for multi dwelling housing.

O3. To ensure that multi dwelling and attached housing integrates within the existing landscape.

O4. To ensure reasonable solar access and privacy for new, existing and future residents and the public domain.

O5. To ensure future development responds to the desired scale and character of the street and local area.

O6. To increase the sense of space in dwellings and provide well proportioned rooms.

Development Controls

C1. The maximum height for multi dwelling housing is two (2) storeys.

C2. The minimum floor to ceiling height for all development shall be 2.4 metres.

C3. Two storey dwellings shall have a maximum building height of 9 metres.

C4. Single storey dwellings shall have a maximum building height of 7 metres.

C5. The maximum building height of one storey applies developments (Figure 28) such as:

- Row(s) or other arrangements of townhouses/terraces that are situated to the rear of townhouses/terraces at the street frontage (e.g. a second row of townhouses).
- A row of townhouses that predominately faces the side boundary rather than the street, for that part of the building that is not within the first 20m of building length (i.e. the first 20m is permitted to be 2 storeys and the building is then required to step down to 1 storey).

C6. Two storey development, where dwellings face a secondary street (including corner allotments

and laneways) may be considered where development:

- Provides front setbacks as required for primary street frontages, where development is oriented and has a driveway to that street,
- provides all landscaped area and private open space as required by the DCP,
- sunlight access is achieved as required by the DCP,
- is not in conjunction with a heritage item and
- is within the two storey height zone.

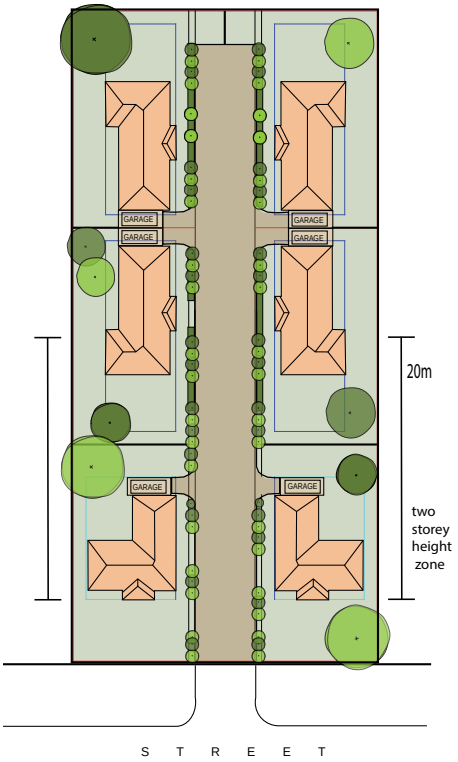


Figure 28. Multi Dwelling Housing height

Attics

C7. Attics are permitted in multi dwelling housing only where they comply with all other height and floor to ceiling height requirements.

C8. Attics are to be designed to fit within the building envelope (with the exception of dormer windows) and are not to increase the bulk and height of the roof.

C9. Dormer windows are only permitted where high sill windows are implemented.

C10. Council may only consider dormer style rooms, only where it is located within the roof line of the dwelling house and facing the principal street, a public park or an internal road and does not impact on neighbouring properties privacy.

C11. Dormer windows may be included which are no higher than the height of the main roof of the building, no greater than 1.5 metres in width and are not to incorporate an access or balcony.

Note: The maximum height for multi dwelling and attached housing (in metres) is detailed within Holroyd Local Environmental Plan 2013, as a written statement and associated maps.

5.4. Building Appearance

Objectives

O1. To ensure multi dwelling developments are compatible with its setting and maintain the established character of the streetscape.

O2. To optimise streetscape quality.

O3. To ensure building design of a high standard.

O4. To ensure development integrates with the existing streetscape.

O5. To increase active street surveillance and security.

O6. To promote high architectural quality in multi housing developments.

O7. To ensure building elements are integrated into the overall building form and façade design.

Development Controls

C1. The design of a multi dwelling and attached housing shall have regard to the size, shape and orientation of the allotment the dwelling is to be located on in relation to:

- the position of the dwelling on the allotment,
- Opportunities for solar access
- The maximisation of private open space, and
- Minimising the potential for overlooking.

C2. Dwelling design and its architectural style is to interpret and respond and not be in strong visual contrast to the positive character of the locality, including setbacks, height, and dominant patterns, textures and compositions of buildings and their elements such as roof shape, pitch and overhangs, entry porches, verandas, balconies and terraces, materials, finishes, fixtures, patterns, fenestrations, colours and detailing and the location and proportion of windows and doors.

Bulk and scale

C3. Maximum length of walls along the first floor side boundaries shall be 10 metres without any indentations or offsets or other articulation features.

C4. Indentations or offsets shall be a minimum width of 1 metre from the ground floor external wall.

Front Façade

C5. Whilst Council encourages innovative design, it is important that key character defining design elements such as setbacks, height, roof form, detailing and materials visible from public areas and adjoining properties, are not in strong visual contrast with buildings in the vicinity.

C6. Building design is to enhance the existing built character by translating into contemporary design solutions the themes found in the neighbourhood.

C7. Dwellings with street frontage shall orientate the dwelling entry and at least one window to a habitable room overlooking all public domain areas on the ground floor.

C8. 'Gun barrel' driveways shall be avoided through, dwelling location, curving of the driveway and landscaping.

C9. Complex roof forms shall be avoided.

Dwelling design

C10. Multi dwelling housing on steep or sloping blocks shall be built as a split level construction.

C11. The internal layout of the dwelling shall incorporate cross ventilation.

C12. Bathrooms, ensuites, laundries and walk in wardrobes shall be located to the side and rear of the dwelling.

6. Residential Flat Buildings

6.1. Lot size and frontage

Objectives

O1. To encourage variety and choice in housing forms by providing for a broad range of dwelling sizes the meet the requirements of people with differing housing needs.

O2. Ensure that developments are compatible with both the established character and the desired future amenity of particular residential areas.

O3. Ensure residential flat development is carried out on sites adequate in size and dimensions to provide appropriately proportioned development which is sited to allow for the provision of private outdoor space with regard to solar and daylight access, and convenient vehicle access and parking where required.

O4. To create residential flat building development that is built across a site, to enable adequate deep soil zones at the rear of sites.

O5. To avoid landlocking of adjoining sites.

O6. To maximise the potential of land to best achieve urban consolidation objectives and to improve the quality and variety of housing design.

Development Controls

C1. The minimum lot frontage for residential flat buildings at the property line is as follows:

- 24 metres if the property is located in the highlighted area in maps 1-8 (see Appendix 1), or
- 28 metres for all other properties, or
- 45 metres for all development 6 storeys or more.

Note: Council requires that the consolidation of more than one existing residential holding for residential flat development be undertaken, in order to meet all the requirements of this development control plan.

C2. Residential Flat Buildings are not permitted on battleaxe lots.

C3. Council does not permit individual properties being left between two developments in a manner that would limit its future development potential for flat development and/or otherwise impact on its value.

C4. Where consolidation has not been achieved through negotiation efforts, lots with a frontage of less than what is required under C1 shall be restricted to the development potential otherwise achieved Sections 3-4 of this Part.

6.2. Site Coverage

Objectives

O1. To provide for a variety of building forms to achieve a balance of building size and open space appropriate to the locality.

O2. To ensure that any area affected by road widening is included in the calculation of site coverage.

O3. To ensure that new development results in site coverage which allows adequate provision to be made on site for deep soil planting, landscaping, driveways, communal open space and On-Site Detention.

Development Controls

C1. The maximum site coverage of any residential flat development shall not exceed 30% of the site area.

Note: The maximum floor space ratio for development is detailed within Holroyd Local Environmental Plan 2013, as a written statement and associated maps.

6.3. Setbacks and Separation

Objectives

O1. To protect the amenity of adjoining sites, maintaining appropriate residential character and providing adequate sunlight to dwellings and private open space.

O2. To permit flexibility in the siting of buildings

O3. To require setbacks to respond to the site and proposed development dimensions.

O4. To provide for a landscaped setting including deep soil planting for residential flat buildings.

O5. To provide visual and acoustic privacy for existing and new residents.

O6. To minimise any overshadowing of adjacent properties and their private or communal open spaces.

Development Controls

Front Setback

C1. The minimum setback for residential flat buildings from the principal street frontage shall correspond to the existing prevalent building setback, but be no less than 6 metres .This setback may be reduced, where:

- adjacent residential development is closer to the front boundary, or
- site specific controls contained in this DCP detail otherwise.

C2. The front setback requirements shall be exclusive of any area required for road widening.

C3. For corner parcels, the minimum setback from the secondary street frontage shall be 4.0 metres except:

- where adjacent residential development is closer to the boundary, in which case the setback may be similar to that which exists, or
- site specific controls contained in this DCP detail otherwise.

C4. The area between the street alignment and building setback is to be landscaped except for areas used for driveways and paths for vehicles and pedestrians, gaining access to the site.

Rear Setback

C5. The minimum rear setback for a residential flat buildings shall be:

- **up to four storeys**- 20% the length of the site, or 6 metres, whichever is greater.
- **five storeys or more** - 30% the length of the site.

Side Setbacks

C6. Side setbacks shall be a minimum of 3 metres.

Note: Side setbacks shall comply with building separation requirements.

Separation

C7. Separation between any adjoining buildings, between portions of the same building or where there is more than one building on an allotment shall be:

For residential up to 4 storeys

- 12 metres between habitable rooms and balconies.
- 9 metres between habitable rooms and balconies and non-habitable rooms.
- 6 metres between non-habitable rooms.

For residential between 5- 8 storeys

- 18 metres between habitable rooms and balconies.
- 13 metres between habitable rooms and balconies and non-habitable rooms.
- 9 Metres between non-habitable rooms.

C8. Where a building steps back to create a terrace, the building separation distance for the floor below applies.

Use of Setbacks

C9. Side and rear boundary setbacks shall be landscaped and may include private courtyards, communal open space and clothes drying facilities.

C10. One side setback may be used for access and parking if required, provided that a landscape buffer with a minimum width of 1m is provided to the side boundary.

C11. The minimum setback for basement and semi-basement levels to the side and rear boundaries of an allotment is 3 metres.

Upper Storey Setback

C12. An minimum upper storey setback of 3m is required for all floors above 4 storeys.

6.4. Height

Objectives

O1. To permit a scale of development compatible with the localities topography, and the context, scale and character of the street and streetscape.

O2. To preserve the amenity of adjoining residents.

O3. To ensure apartments to receive satisfactory solar access.

Development Controls

C1. The minimum floor to ceiling heights shall be:

- 2.7 metres for habitable rooms.
- 2.4 metres for non habitable rooms.
- 2.4 metres for the second storey section of two storey units if 50% or more of the apartment has a 2.7 metre minimum ceiling height.
- Attic spaces shall have 1.5 metre minimum wall height at the edge of room with a 30 degree minimum ceiling slope.

C2. Ceiling heights shall be measure from finished floor level (FFL) to finished ceiling level (FCL).

C3. Maximum building height in storeys shall be provided in accordance with the table below:

Permitted Height (storeys)	
Height (m)	storeys
9	1
11	2
12.5	3
15	4
18	5
21	6
24	7

C4. Attics are permissible in residential flat buildings, where they comply with height and floor space ratio requirements.

C5. Dormer windows are only permitted where high sill windows are implemented.

C6. Attic spaces are to have a minimum wall height at the edge of the room of 1.5 metres with a 30 degree minimum ceiling slope.

Note: The maximum permissible height for residential flat buildings is detailed within Holroyd Local Environmental Plan 2013, as a written statement and associated maps.

6.5. Building Depth

Objectives

O1. To provide adequate solar access and natural ventilation for the amenity for building occupants.

O2. To provide for dual aspect dwellings.

O3. To permit building depths that relate to the conditions of the site and locality.

O4. To allow for an optimum apartment layout.

Development Controls

C1. The maximum internal plan depth of a residential flat building shall be 18 metres.

C2. Council may consider internal plan depths deeper than 18 metres for some forms of residential flat development, where it can be demonstrated that satisfactory solar access and ventilation is achieved through higher floor to ceiling heights or wider frontages.

6.6. Open Space

Objectives

O1. To enhance the quality and liveability of the built environment.

O2. To ensure the retention, establishment and healthy growth of trees in urban areas.

O3. To provide residents with areas for passive and active recreation.

O4. To ensure that open space is consolidated and defined to establish a useable space.

O5. To provide high amenity communal open space on roof tops, podiums and internal courtyards.

O6. To create a pleasant, safe and attractive living environment.

O7. To assist managing the water table and water quality.

O8. To ensure that balconies are integrated into the overall architectural form and facade of buildings.

O9. To ensure primary private open space is provided for each dwelling and is in sufficient dimensions to contain a table and chair or a table and two chairs for units with two or more bedrooms

O10. To provide private open space that has high usability and displays high visual privacy.

O11. To ensure adequate soil depth and volume appropriate for the establishment of plantings shall be used for planting on structures.

Development Controls

Communal Open Space and Landscaping

Note: Communal open space may be included in the calculation of the landscaped area for residential flat buildings, where compliant with the definition of landscaped area.

C1. Communal open space shall be provided behind the building line, in one unbroken parcel. It shall have a minimum dimension of 4 metres in any direction.

C2. For mixed residential flat and commercial buildings, where it is not possible to provide communal open space on ground floor, it can be provided on podium level.

C3. For residential flat buildings, communal open space shall have a minimum area of 10m^2 per dwelling or 30% of the site area, whichever is the greater.

C4. Communal open space shall be located where it is highly visible and directly accessible to the maximum number of dwellings. Excessively long paths of travel to and from communal open space must be avoided.

C5. Communal open space should be located adjacent to surrounding public open spaces such as reserves and public through site links where appropriate

C6. Communal open space shall be integrated with the site and designed with uses such as circulation, BBQ or play areas or passive amenity.

C7. Communal open space shall be appropriately landscaped and ensure active and passive recreation through the provision of facilities such as seating, pergolas, barbeque facilities and

the like.

C8. Communal open space shall be clearly defined.

C9. Communal open space shall be fenced and contain one item of heavy-duty playground equipment per five dwellings, and may contain facilities for adult recreation and permanent seating.

Note: Where possible, communal open spaces should have a northern aspect and contain a reasonable proportion of unbuilt upon (landscaped) area and paved area.

Private Open Space and balconies

C10. Each dwelling within a residential flat building shall have access to primary private open space, in the form of a deck, balcony, courtyard or terrace, accessible from main living areas of the dwelling.

C11. Balconies shall be a minimum area of 10m², with a minimum dimension in any one direction of 2m for studio and 1 bedroom units and 2.4m for 2+ bedroom units shall be provided as private open space for each dwelling.

C12. Private open space is not encouraged within the street setback unless as a terrace or verandah which provides the potential for passive surveillance to the street. This area is not included in the minimum private open space area calculation.

C13. Dwellings on the ground floor should be provided with a courtyard that has a minimum area of 10m² and a minimum dimension of 2.5 metres.

C14. Where courtyards are provided to the street side of an apartment, the maximum fence wall height is 1.5 metres.

C15. 1.8 metre high courtyard walls are not permitted to the public domain.

C16. Where possible, private open space shall have a northerly or easterly aspect. Gas and water outlets shall be provided in these areas.

C17. Secondary balconies should be considered for additional amenity.

C18. Balustrades shall not be fully transparent, but shall be designed to allow views and casual surveillance of the street while providing for safety and visual privacy.

C19. The depth of balconies shall not cause sunlight penetration to dwellings to be compromised.

C20. Balconies shall not be continuous across the entire facade of the residential flat building.

C21. Gas and water outlets shall be provided on primary balconies and terraces.

C22. Appropriate measures shall be taken to ensure visual privacy is maintained between balconies within a development.

C23. Furniture layouts must accompany all development applications to ensure the useability of all balconies.

Planting on structures

C24. Proposed plantings on structures shall be provided with appropriate soil conditions, drainage and irrigation.

Note: The minimum soil provision requirements, per plant type is provided in Part A of this DCP

6.7. Building Appearance

Objectives

O1. To protect the amenity of adjoining sites, maintaining appropriate residential character and providing adequate sunlight to dwellings and private open space.

O2. To provide high architectural quality in residential flat buildings.

O3. To ensure that building elements are integrated into the overall building form and facade design.

O4. To ensure that new developments have facades which define and enhance the public domain and desired streetscape character and provide visual interest.

O5. To integrate the design of the roof into the overall facade, building composition and desired contextual response to ensure the appropriate proportion, scale and detail for buildings.

O6. To provide quality roof designs, which contribute to the overall design and performance of residential flat buildings and mixed residential and commercial buildings.

O7. To consider the relationship between the whole building form, the façade and building elements by ensuring that the pattern and rhythm established by the proportions of the façade, the modulation of the external walls and the design of façade elements including their materials and detailing are considered in the design process.

Development Controls

Facades

C1. Facades are to be composed with an appropriate scale, rhythm and proportion, which responds to the building's use and desired contextual character. Design solutions may include:

- Defining a base, middle and top related to the overall proportion of the building;
- Expressing key datum lines in the context using cornices, a change in material or building setback;
- Expressing the internal layout of the building, for example, vertical bays or its structure, such as party wall-divisions;
- Expressing the variation in floor to floor height, particularly at the lower levels;
- Articulating building entries with awnings, recesses, blade walls and projecting bays;
- Selecting balcony types which respond to the street context.

C2. Façade designs shall reflect the orientation of the site using elements such as shading devices, light shelves and bay windows as environmental controls, depending on the facade orientation.

C3. All walls to the street shall be articulated by either/or windows, verandahs, balconies or blade walls. Such 'articulation' elements may be forward of the required building line up to a maximum of 600mm.

C4. Buildings located on corner sites are to be articulated to address each street frontage and shall define prominent corners.

C5. Express important corners by giving visual prominence to parts of the facade, for example, a change in building articulation, material, colour or roof expression.

C6. Building services, such as drainage pipes shall be coordinated and integrated with overall facade and balcony design.

C7. Security grills, ventilation louvres and carpark entry doors shall be integrated with the design of the overall facade.

C8. Security devices fitted to building entrances and windows shall be transparent to allow for natural surveillance.

Roof Design

C9. Roofs shall be designed to relate to the desired built form and context and character of the street.

C10. Roofs may be articulated, or broken down its massing on large buildings, in order to minimise the apparent bulk or to relate to a context of smaller building forms.

C11. Avoid directly copying elements and detail of single family houses in larger flat buildings.

C12. Pitched roofs will not be permitted in the following circumstances:

- Where a pitched roof design does not relate to the existing urban context,
- Where a pitched roof increases the visual bulkiness of a proposed building,
- Where land has been rezoned to high density residential after 5 August 2013.

C13. Roof design is to respond to the orientation of the site through using eaves and skillion roofs to respond to sun access.

C14. The visual intrusiveness of service elements shall be minimised by integrating them into the design of the roof. Elements include: lift over-runs, service plants, air conditioning units, chimneys, vent stacks, telecommunication infrastructures, gutters, downpipes and signage.

C15. The maximum height for roofs, from the top ceiling height to the ridgeline is 3m.

C16. Consideration should be given to facilitating the use of roofs for sustainable functions such as:

- Installing rain water tanks for water conservation,
- Orient and angle roof surfaces suitable for photovoltaic applications,
- Allow for future innovative design solutions such as water features or green roofs.

6.8. Building Entry and Pedestrian Access

Objectives

O1. To ensure the optimal accessibility and usability of the site, its buildings and associate spaces, for all residents and visitors.

O2. To provide entrances that orient residents and visitors.

O3. To contribute positively to the streetscape and building facade.

O4. To require development which is well connected to the street and contributes to the accessibility of the public domain.

O5. To ensure that all entrances are safe and secure.

O6. To ensure active surveillance and activation of the street or public places.

Development Controls

C1. Building entries shall be a clearly identifiable element of the building.

C2. Entrances shall be visible from the street, sheltered and well lit.

C3. Entrances shall be designed to avoid ambiguous and publicly accessible small spaces in entry areas.

C4. Clear lines of sight shall be provided between one circulation space and the next.

C5. The main building entry is to be separate from car parks or car entries.

C6. Ground floor dwellings that are oriented towards the street may have their own entrances from the street.

C7. High quality accessible routes are to be provided to the following areas of the site:,

- major entries:
- lobbies,
- communal open spaces,
- site facilities,
- parking areas, and
- public streets.

C8. The main building entrance shall be designed to be accessible from the street and car parking areas for less mobile persons.

C9. Pedestrian and vehicle access ways are to be separate and clearly distinguishable.

C10. The accessibility standard set out in Australian Standard AS 1428 (parts 1 and 2) is to be followed as a minimum.

C11. Entries and circulation space shall be designed to allow movement of furniture between public and private spaces.

6.9. Parking and Vehicular Access

Objectives

O1. To integrate vehicular access and parking facilities with the design of the overall building, landscape and site design.

O2. To minimise the visual impact of vehicular access.

O3. To avoid conflicts between pedestrians and vehicles.

O4. To provide adequate car parking for the buildings users and visitors.

Development Controls

Note:

- General parking requirements are located in Part A of the DCP.
- General car parking provisions for residential development can be found in section 1.12 of this Part

C1. Only basement carparking will be permitted for residential flat buildings.

C2. Vehicle access points shall be limited to a minimum.

C3. Ensure that clear site lines at pedestrian and vehicle crossings.

C4. Separate and clearly distinguish between pedestrian and vehicular access ways through landscaping and detailing.

C5. The appearance of vehicle entries shall be improved by:

- Setting back car park entries from the main façade.
- Providing security doors to car park entries to avoid 'black holes' in the façade.
- Continuing the facade material into the carpark entry recess for the extent visible from the street.

C6. Where possible, vehicular parking entries shall be located off secondary streets.

C7. Where possible, natural ventilation should be facilitated to basement and sub-basement areas.

C8. Any ventilation grills or screening devices of car parking openings shall be integrated into the façade and landscape design.

C9. Direct access shall be provided to from car parking facilities to lobbies.

C10. Where on grade parking cannot be avoided, ensure the design of the site development mitigates any negative impact on the streetscape and street amenity by:

- Locating the parking on the side of the site, or away from the primary street frontage.
- Providing wrapped car parking.
- Screening cars from view of streets and buildings.
- Allowing for safe and direct access to building entry points.
- Incorporating parking into the landscape design of the site.

C11. Driveways associated with residential flat buildings shall be arranged to facilitate safe and efficient vehicular access. Vehicles shall be able to enter and leave the site in a forward direction with minimal on-site manoeuvring. (i.e. Maximum of a three point turn)

C12. A full width plain concrete vehicle crossing shall be constructed at the vehicle entrance to the property in accordance with Council's requirements with a minimum width of 5m and a maximum width of 6m at the property boundary line.

C13. Car parking spaces allocated to dwellings that are built to the Adaptable Housing Standard – AS 4299 must comply with the dimensions specified in that standard.

C14. Access to resident parking areas shall be restricted via a security gate or door with an intercom, code or lock system. Visitor parking will be permitted in this area subject to intercom access being provided to each dwelling.

C15. One car wash bay shall be provided for all developments having 10 or more dwellings. The car wash bay shall be a common, independent area and not serve as a visitor parking space.

6.10. Dwelling Layout and Mix

Objectives

C1. To ensure that the design and layout of every dwelling provides a high standard of residential amenity.

C2. To maximise the environmental performance of dwellings.

C3. To accommodate a variety of household activities and varied occupants needs.

C4. To ensure a mix of residential dwelling types to accommodate a range of family types.

C5. To ensure the provision of adaptable housing to meet a broad range of occupants needs over time.

Development Controls

Note: Universal housing provisions are within Section 1.13 of this Part.

Dwelling layout

C6. The minimum internal floor areas for residential flat building dwellings shall be as follows:

Dwelling Type	Minimum Area
Studio dwelling	40m²
1 bedroom dwelling	50m²
2 bedroom dwelling	70m²
3 bedroom dwelling	95m²

Note: storage area provided for within the dwelling shall not be included in the above calculation.

C7. Single aspect dwellings shall be limited in depth to 8 metres from a window.

C8. The width of cross-over or cross-through dwellings over 15 metres deep shall be 4.5 metres or greater to avoid deep narrow dwelling layouts.

C9. The back of a kitchen should be no more than 8 metres from a window.

C10. Dwelling layouts shall be designed to be flexible for a range of different needs of future occupants by:

- Being able to accommodate a variety of furniture arrangements;
- Utilising flexible room sizes and proportions or open plans;
- Ensuring circulation by stairs, corridors and through rooms is planned as efficiently as possible thereby increasing the amount of floor space in rooms.

C11. Dwelling layouts are to be designed to respond to the natural environment and optimise site opportunities by:

- orienting main living spaces towards the primary outlook and aspect, and away from neighbouring noise sources or windows;
- locating main living spaces adjacent to main private open space;
- Locating habitable rooms, and where possible kitchens and bathrooms, on the external face of the building thereby maximising the number of rooms with windows.
- Maximising natural ventilation and solar access through providing, corner apartments, cross over or cross through apartments, split level or maisonette apartments or shallow single aspect

apartments

C12. Apartment layouts and dimensions shall facilitate furniture removal and placement.

Dwelling Mix

C13. A mix of residential dwelling types between studio, one, two, and three plus-bedroom dwellings shall be provided within each residential flat building particularly in larger developments.

C14. The combined total number of studio and one-bedroom dwellings shall not exceed 20% of the total number of dwellings, within any single site.

C15. Where possible, a mix of one and three bedroom dwellings should be located on the ground floor where accessibility is easily achieved for families and the elderly.

6.11. Internal Circulation

Objectives

O1. To create safe and pleasant spaces for the circulation of residents and their possessions.

O2. To contribute positively to the form and articulation of the building facade and its relationship to the urban environment.

Development Controls

C1. Where dwellings are arranged off a double-loaded corridor, the number of dwellings accessible from a single core/corridor will be limited to eight (8). This criteria may be waived where:

- The development involves the adaptive reuse of a building,
- where developments can demonstrate the achievement of the desired streetscape character and entry response, and
- Where developments can demonstrate a high level of amenity for common lobbies, corridors and units.

C2. Amenity and safety in circulation spaces are to be increased by:

- Providing generous corridors widths and ceiling heights, particularly in lobbies and dwelling entry doors,
- Providing appropriate levels of lighting, including the use of natural daylight, where possible,
- Minimising corridor lengths to give short, clear sight lines,
- Avoiding tight corners,
- Providing legible signage noting dwelling numbers, common areas and the like,
- Providing adequate ventilation.

C3. All common facilities within a development must be accessible.

C4. All staircases within a development shall be located internally.

C5. The location of sensitive noise rooms adjoining less sensitive noise rooms, corridors and stairwells shall be minimised.

C6. Locate habitable rooms with windows overlooking communal/public areas.

6.12. Facilities and Amenities

Objectives

O1. To ensure essential amenities and facilities are incorporated within residential flat developments.

O2. To ensure that adequate provision is made for site facilities.

O3. To ensure that site facilities are integrated into the development and do not diminish or adversely affect residential amenity or building appearance.

O4. To provide for adequate storage for everyday household items.

Development Controls

Laundries and other clothes drying facilities

C1. Each dwelling shall be provided with individual laundry facilities located within the dwelling unit.

C2. Open air clothes drying facilities should be provided in a sunny ventilated and convenient location, which is adequately screened from streets and other public places. 7.5 metres of line per dwelling shall be provided.

C3. Mechanical drying appliances shall be provided for each dwelling and the provision of external drying areas at a rate of 3.0 metres of line per dwelling in a suitably screened position.

Garbage

C4. Council garbage collection services will be provided from the public road frontage only. Where 15 or more dwellings are proposed for a site, Council may require special arrangements to be made for bulk garbage collection.

TV Antennae

C5. A master antenna should be provided for any development of more than two dwellings.

C6. Only one telecommunications / TV antenna / satellite dish will be permitted for each residential flat building.

C7. Satellite dishes, telecommunication antenna and other ancillary facilities shall be located away from the primary street frontage and incorporated into the overall building design, where possible.

Fencing and Screen walls

C8. The service courts or clothes drying areas shall be screened by walls at least 1.5 metres high.

C9. Screens not being building walls may be of masonry or lapped, capped and stained timber or other material approved by Council, except that screen walls facing roads, pedestrian walkways, reserves or public places shall be of material used in the building external wall construction and in harmony with the building wall design.

C10. Landscaped private courts shall be clearly defined either by building services or by screen walls or by fencing.

Public Utilities

C11. Metre box rooms for utilities shall be provided in the basement of residential flat buildings.

Mail Boxes

C12. Mailboxes shall be integrated with the design of landscaped areas, fences and buildings, and shall not dominate the street front. They are to be clearly defined and easily accessible from the main access point of the building.

C13. Mailboxes shall be designed and provided so that they are convenient for residents, shall not be at 90° to the street, does not require a postal employee to enter the site and shall not clutter the appearance of the development from the street.

Note: Applicants should discuss with Australia Post the required dimensions and locations for mailboxes.

Storage

C14. Storage shall be provided in locations convenient for the dwelling. Options include:

- locating at least 50% of the required storage space within the dwelling;
- dedicating storage rooms on each floor within the development;
- dedicating storage in internal or basement car parks.

Note: Storage space shall be excluded from the calculation of FSR.

C15. Storage for individual dwellings not located within the dwelling shall be separate and secure for individual use.

C16. Storage facilities shall be provided at the following rates:

Dwelling Type	Minimum storage required
Studio Dwelling	$6m^3$
One Bedroom Dwelling	$6m^3$
Two Bedroom Dwelling	$8m^3$
3+ Bedroom Dwelling	$10m^3$

C17. Access to storage areas shall be accessible to wheelchair users and for less mobile persons.

Other

C18. All dwellings shall be clearly and appropriately numbered.

C19. A garden maintenance and storage area shall be provided in all developments. It shall be conveniently located and connected to water and drainage.

6.13. Natural Ventilation

Objectives

O1. To ensure that all dwellings are designed to provide all habitable rooms with direct access to fresh air and to assist in creating thermal comfort for occupants.

O2. To reduce energy consumption by minimising the use of mechanical ventilation, particularly air conditioning.

Development Controls

C1. The site is to be planned to promote and guide natural breezes by:

- determining prevailing winds and orienting buildings to maximise use;
- locating vegetation to direct breezes and cool air as it flows across the site;
- selecting or planting trees that do not inhibit air flow.

C2. The building layout and section are to be utilised to increase the potential for natural ventilation. Design solutions include:

- facilitating cross ventilation by designing narrow building depths and providing dual aspect dwellings (eg. cross through dwelling or corner dwellings);
- facilitating convective currents by designing dwellings which draw cool air in at lower levels and allow warm air to escape at higher levels (eg maisonette dwellings and two-storey dwellings).

C3. The internal layout of dwellings shall be designed to promote natural ventilation by:

- minimising interruptions in air flow through a dwelling. The more corners or rooms airflow must negotiate, the less effective the natural ventilation;
- grouping rooms with similar usage together, for example, keeping living spaces together and sleeping spaces together. This allows the dwelling to be compartmentalised for efficient summer cooling or winter heating.

C4. Doors and operable windows are to be selected to maximise natural ventilation opportunities established by the dwelling layout. Design solutions may include:

- locating small windows on the windward side (facing the prevailing winds) and larger windows on the leeward side (away from the prevailing winds) of the building thereby utilising air pressure to draw air through the dwelling;
- using higher level casement or sash windows, clerestory windows or operable fanlight windows, including above internal doors to facilitate convective currents. This is particularly important in dwellings with only one aspect;
- selecting windows which occupants can reconfigure to funnel breezes into the dwelling, such as vertical louvred, casement windows and externally opening doors.

6.14. Maintenance

Objectives

O1. To ensure long life and ease of maintenance for residential flat buildings.

Development Controls

C1. Initial high quality design and construction is the most effective way of ensuring the building has a long life and requires low maintenance.

C2. Windows shall be designed to enable cleaning from inside the building, where possible.

C3. Manually operated systems such as blinds, sun shades, pergolas and curtains are preferable to mechanical systems.

C4. Durable materials, which are easily cleaned and graffiti resistant, are to be selected.

C5. A fully automated commercial grade drip irrigation system shall be provided to all landscaped areas of the development.

C6. A garden maintenance and storage area shall be provided in all developments. It shall be conveniently located and connected to water and drainage.

6.15. Waste Management

Objectives

O1. To avoid the generation of waste through design, material selection and building practises.

O2. To plan for the types, amount and disposal of waste to be generated during demolition, excavation and construction of the development.

O3. To encourage waste minimisation, including source separation, re-use and recycling.

O4. To ensure efficient storage, management and collection of waste through quality design facilities.

Development Controls

Note: General controls on waste management are located in Part A of this DCP.

C1. Bin storage areas shall:

- be located behind the building line and screened from the street and any public place;
- be accessible and in relatively close proximity to each dwelling;
- allow for unobstructed access that does not exceed a grade of 1:8 for bins to be wheeled to the collection point;
- not impact upon the amenity of adjoining premises or dwellings within the development, i.e. odour.

C2. Storage areas are to be of adequate size to store the required number of bins, durable and waterproof, well ventilated and should integrate with the design of the development.

C3. The floor of bin storage areas shall be made of concrete construction and shall be properly graded to the drain.

C4. A water hose shall be provided in close proximity to facilitate regular cleaning of bins and the storage area itself.

C5. An area is to be nominated on-site for communal composting.

C6. Every dwelling is to be provided with a waste cupboard or temporary storage area of sufficient size to hold a single days waste and to enable source separation.

7. Controls for Landlocked Sites

Objectives

O1. To consider the likely environmental impacts of a proposed development, upon the amenity and enjoyment of land locked sites including shadow, privacy, noise, odour and visual impacts.

O2. To encourage the consolidation of properties for the development of high density residential development in a manner that maximises the potential of land to best achieve the zone objectives.

O3. To consider the consequential impacts of land locking upon the character of the streetscape and objectives of high density residential zones.

O4. To ensure the consolidation of properties for the development of high density development in a manner that does not limit the future development potential and/or value of adjoining lands due to land locking.

O5. To encourage the consolidation of properties for residential flat development in a way that improves the quality and variety of its design.

O6. To discourage speculative withholding of land in a manner that artificially inflates land values and reduces housing affordability.

O7. To provide guidelines for the development of sites which, if approved will result in the land locking of an adjoining site(s).

O8. To ensure the preservation of the environmental and developmental integrity of development sites in Residential R4 zones and to maintain a satisfactory level of environmental amenity where consolidation cannot be achieved.

O9. To provide development standards that encourage existing landlocked sites to be developed in a manner that is consistent in character with surrounding development.

Development Controls

Submission requirements

C1. Development within Residential R4 zones should not result in the creation of land locked or isolated sites that are unable to be developed in such a way that complies with development standards and controls contained within Holroyd LEP and this DCP.

C2. Where adjacent sites are developing concurrently, site planning options should be explored that consider either amalgamation or how the two developments will be integrated in terms of the public domain, open space etc.

C3. Development proposals that create land locking or site isolation shall provide documentation at DA submission that demonstrates that a reasonable attempt has been made by the applicants to purchase the land locked site(s). Documentation shall, at least, include:

i) Two written valuations that represent the affected sites potential value. These are to be undertaken by two independent valuers registered with the Australian Institute of Valuers, and;

ii) Evidence that a genuine, reasonable offer has been made to the owner(s) of any

adjoining lands are likely to be landlocked as a result of the development proposal proceeding.

Note:

- Potential value can include, (but is not limited to) the land locked site developed jointly with adjoining properties, or on its own, under Holroyd LEP and this plan.
- A reasonable offer shall be a fair market value, and include for all expenses that would be incurred by the owner in the sale of the land locked site.

C4. Consideration during the development assessment process will be given to any submission, valuation or counter offer of sale made by, or on behalf of the owner(s) of the land locked site(s). Any counter offer that is largely different to those values submitted by the applicant, must be supported by a suitably prepared valuation report.

C5. Where a proposed development/amalgamation is likely to result in an isolated site then the applicants for the development site are to demonstrate how a future development on the isolated site can be achieved to ensure a high quality streetscape. The following should be addressed:

- Height
- Carparking access
- Site coverage
- Constructability
- Envelope separation
- Open Space

Design requirements

C6. Proposed developments shall demonstrate the maintenance of a satisfactory level of amenity along the existing streetscape.

C7. The siting and design of the proposed development shall be sympathetic to dwellings on any potentially landlocked site(s).

C8. Side setback(s) to adjoining land locked site(s) shall be maximised and suitably landscaped.

Note: This may be achieved by designing open space or the driveway access along this boundary

C9. Differences in building height between the proposed development and the landlocked site(s) should not exceed one storey when viewed from the public street. This requirement applies to the building for a width of one room, nominally 3 metres, and to the full depth of the development

C10. The proposed development should be designed in a manner that is sympathetic to the surrounding development. The development should not dominate or largely alter the streetscape and should have colour schemes which are sympathetic to the streetscape.

C11. The minimum setback from the principal street frontage shall be 6 metres. This setback is exclusive of any area required for road widening.

C12. For a corner allotment, the minimum setback from the secondary street frontage shall be 4 metres except:

a) where adjacent residential development is closer to the boundary, in which case the setback may be similar to, but no less than, that which exists; or

b) where the adjacent residential development is a potential landlocked site and is setback greater than 4.0 metres, in which case the setback or a significant proportion of the setback should be increased or staggered in a sympathetic manner.

C13. Use of setback - The area between the street alignment and building setback is to be landscaped except for areas used for driveways and paths for vehicles and pedestrians, gaining access to the site. The controls relating to side and rear setbacks can be found in this Part B.

Developing existing land locked sites

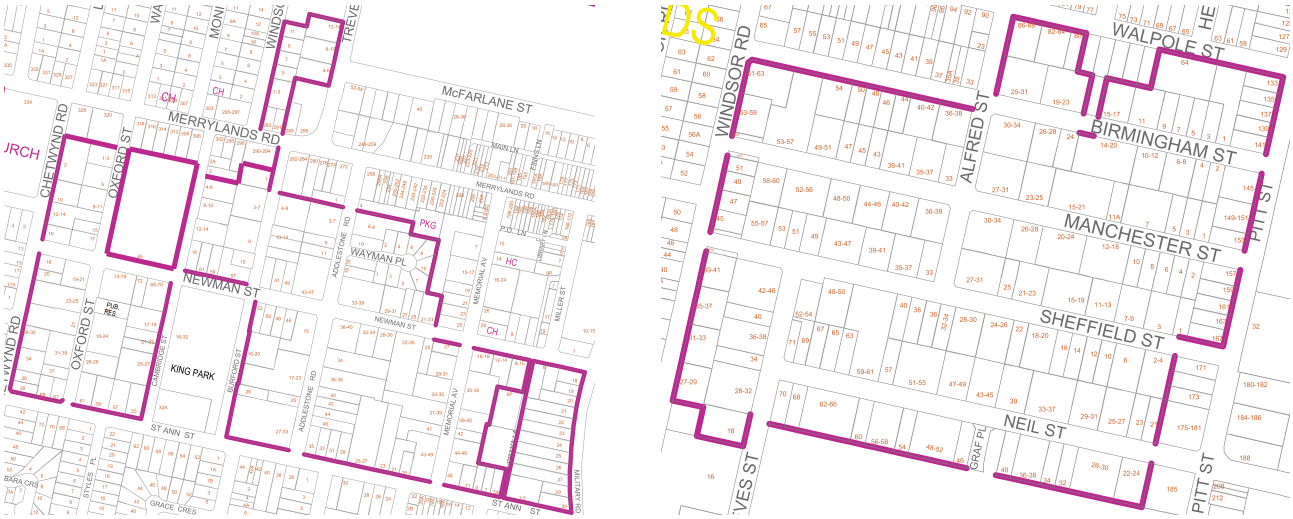
C14. Development proposals involving existing land locked and isolated sites shall be assessed on their merit. Proposals shall achieve a satisfactory level of amenity, privacy, solar access, landscaping and setbacks and shall not detract from the character of the streetscape.

Note:

- It is likely that development of existing isolated sites may not achieve the maximum FSR & height potential.
- An existing landlocked site is a site that is limited in its development potential by either an existing higher density development or an existing current development consent for higher density development and is unable to be consolidated with adjoining properties for residential flat development due to such development or consents.

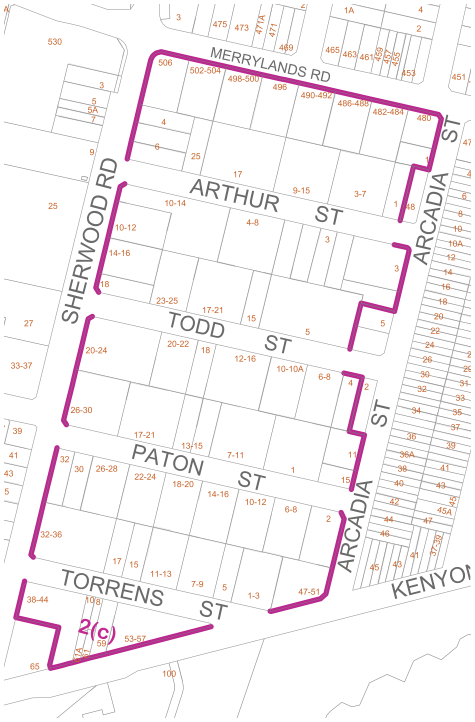
Appendix 1- Maps 1-8

Maps 1 and 1a- Guildford



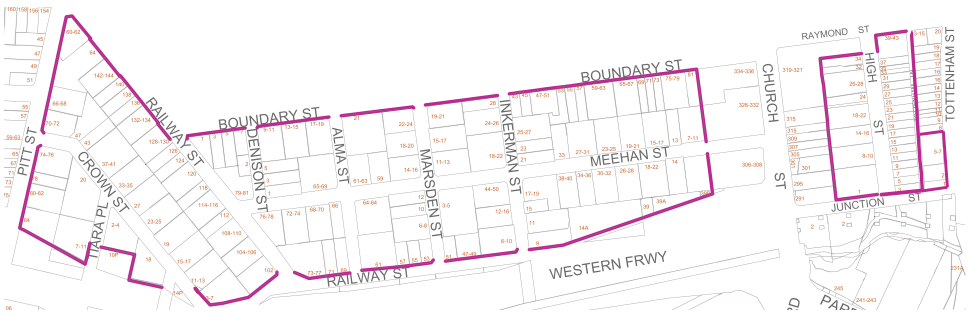
Maps 2 and 2a- Merrylands

Residential

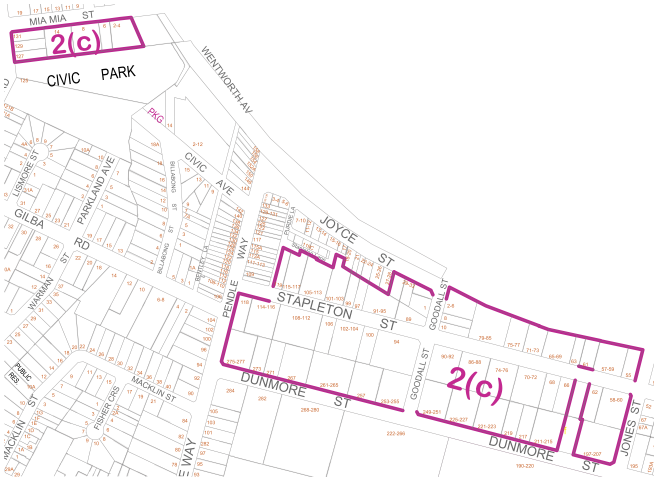


Maps 3- Merrylands West

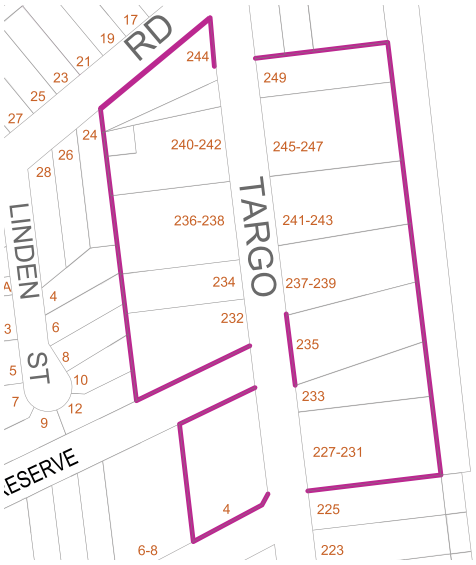
Maps 4- Wentworthville



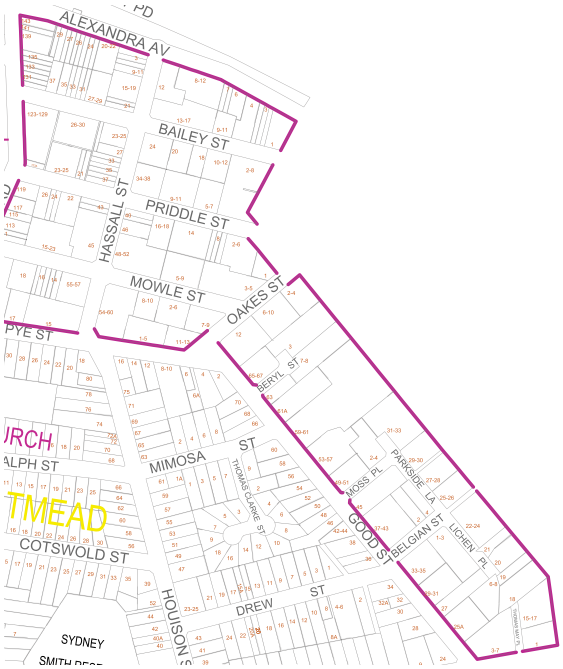
Maps 5- Parramatta/Granville



Maps 6- Pendle Hill



Maps 7- Toongabbie



Maps 8- Westmead

Part C

Commercial, Shop top housing and Mixed use development Controls

Holroyd Development Control Plan 2013

Commerical Development

Contents

Commerical Development

Land covered by this Part

This Part applies to development on land zoned Business under Holroyd Local Environmental Plan 2013 and for development types including Commercial Premises, Shop top Housing and Mixed use development (with residential uses) as detailed within this Part.

Relationship of Part C to Holroyd Development Control Plan 2013

Part C of Holroyd DCP 2013 shall be read in conjunction with the following Parts of Holroyd DCP 2013, which contain objectives and development controls that relate to development in this Part:

Part A - General Controls

Part B - Residential Controls

Part D - Industrial Controls

Part E - Public Participation

Part F - Advertising and Signage Controls

Part G - Places of Public Worship Controls

Part H - Heritage and Conservation Controls

Part I - Child Care Centre Controls

Part J - Site Specific Controls

Part K - Holroyd Gardens Controls

Part L - Town Centre Controls

Part M - Merrylands Centre Controls

Part N - Transitway Station Precinct Controls

Part O - Guildford Pipehead Site Controls

Part P - Pemulwuy Residential Controls

Part Q - Pemulwuy Northern Employment Lands Controls

Part R - Definitions

1. Building Envelope

1.1. Lot size and frontage

Objectives

O1. To ensure that commercial development is carried out on sites that are sufficient in frontage in order to provide adequate vehicular access and basement carparking.

O2. To ensure developments are compatible with both the established character and desired future amenity of commercial areas.

O3. To ensure sufficient lot dimensions for vehicular access and parking.

O4. To avoid land locking of adjoining sites.

Development Controls

C1. The minimum lot frontage for development within Zone B2 Local Centre, Zone B4 Mixed Use and Zone B5 Business Development and Zone B6 Enterprise Corridor shall be, unless otherwise stated as site specific controls in this DCP:

- **up to three storeys**- 20 metres.
- **4 - 8 storeys**- 26 metres.
- **9 storeys and greater**- 32 metres.

Note: There is no minimum lot frontage for commercial development in Zone B1 Neighbourhood centre, unless otherwise stated as site specific controls in this DCP.

C2. Council may require the consolidation of more than one existing land holding to be undertaken in order to meet all the requirements of this development control plan.

C3. Commercial development is not permitted on battleaxe lots.

C4. In instances where lot amalgamation in order to meet the requirements of this DCP cannot be achieved, the following information must be submitted with any development application:

- Two written valuations indicating the value of the remaining sites that were to be developed in conjunction with the applicants properties. These are to be undertaken by two independent valuers registered with the Australian Institute of Values, and;
- Evidence that a reasonable offer* has been made to the owner(s) of the affected sites to purchase and valuation reports.

C5. Where amalgamation (as required) is not achieved, the applicants must show that the remaining sites, which are not included in the consolidation, and the proposed development site, will still be able to achieve the development outcome prescribed in this DCP, including achieving the required vehicular access, basement parking and built form.

C6. Sites must not be left such that they are physically unable to reasonably develop a three storey building in accordance with the controls in this part.

1.2. Site coverage, floor area and building use

Objectives

O1. To provide controls that support the objectives established in Holroyd Local Environmental Plan 2013.

O2. To provide for a variety of building forms.

O3. To ensure new development responds appropriately to the size and dimensions of the subject site to avoid over development and inappropriate bulk and scale.

Development Control

Site Coverage

C1. There is no minimum site coverage controls for commercial or shop top housing development, unless otherwise stated as site specific controls within this DCP.

Floor Area

C2. The maximum retail floor area for neighbourhood shops is detailed within Holroyd Local Environmental Plan 2013.

C3. For a bulky goods development, the bulky goods shall occupy a minimum 60% of the total floor area.

C4. Consent must not be granted to development for the purposes of a food and drink premises on land in Zone B6 Enterprise Corridor if the gross floor area of the food and drink premises is more than 1000 square metres.

C5. Consent must not be granted to development for the purposes of a shop on land in Zone B1 Neighbourhood Centre if the gross floor area of the shop is more than 1000 square metres.

Building Use

C6. Commercial development shall be located at least at street level, fronting the primary street and where possible the secondary street. Residential dwellings may be permitted at ground floor within Zone B1 Neighbourhood Centre and B6 Enterprise Corridor.

C7. Residential dwellings are not permitted at ground floor within Zone B2 Local Centre and Zone B4 Mixed Use.

C8. Where residential dwellings are located at ground level and face the street, they shall be constructed as flexible floor plates to enable future commercial development.

Note:

- Additional controls for site coverage for retail and/or business uses in specific business centres may be detailed as site specific controls within this DCP.
- The maximum floor space ratio is detailed within Holroyd Local Environmental Plan 2013, as a written statement and associated maps.

1.3. Building Height

Objectives

O1. To provide controls that support the objectives established in Holroyd Local Environmental Plan 2013.

O2. To permit a scale of development that is compatible with the localities topography and the context, scale and character of the street and streetscape.

O3. To require an appropriate scale relationship between building heights and street width.

O4. To preserve the amenity of adjoining buildings.

O5. To ensure appropriate management of overshadowing, access to sunlight and privacy.

O6. To allow reasonable daylight access to all developments and the public domain.

O7. To enable flexibility of uses by implementing higher floor to ceiling heights within buildings for the ground and first floors.

O8. To ensure a variation of the height of each storey to enable flexible uses over time.

O9. To reduce the visual impact of building on the public domain.

O10. To encourage, in town centres, articulation of the façade of the building by variation in the ceiling heights of the various floors, which gives the building a top, middle and base.

Development Controls

C1. The minimum floor to ceiling height for a floor in a commercial building, or the commercial component of a building shall be as follows:

Floor	Min Floor to Ceiling height
Ground Floor	3.5m
First Floor- regardless of use	3.3m
All other floors	2.7m

C2. Basement level parking above the natural ground level should be limited to not impact on the bulk, scale and design of the building.

C3. Maximum building height in storeys shall be provided in accordance with the table below:

Permitted Height (storeys)	
Height (m)	Storey
10	1
11	2
12.5	2
14	3
17	4
20	5
23	6
26	7
29	8
32	9
38	11
41	12
50	15
53	16
65	20

Note:

- Permitted height in storeys have been determined based on a number of assumptions including minimum floor to ceiling heights, slab thicknesses, roof heights, slope of the land, basement provision, floor level requirements for flooding. There may be instances where development is able to achieve a greater number of storeys and still comply with maximum height under Holroyd LEP 2013. A full and proper assessment including relevant controls such as floor to ceiling height, floor space ratio, flooding, amenity and character will determine the appropriate height for the specific site.
- Ceiling heights shall be measured from finished floor level (FFL) to finished ceiling level (FCL).
- The maximum permissible height (in metres) is detailed within Holroyd Local Environmental Plan 2013, as a written statement and associated maps.
- Site specific height controls within of this DCP may also apply to commercial and shop top housing development.

1.4. Setbacks, Separation and Depth

Objectives

O1. To permit flexibility in the siting of buildings.

O2. To protect the amenity of adjoining sites and reduce the impact of buildings on the public domain.

O3. To minimise overshadowing of adjacent buildings and properties.

O4. To ensure a consistent built streetscape.

O5. To require suitable definition of the public domain and public spaces, including the provision of sufficient curtilage to heritage items.

O6. To require a continuous built edge adjacent to footpaths that will reinforce the retail activity and commercial uses within the majority of the town centre.

O7. To require setbacks which appropriately respond to the building separation requirements.

O8. To provide visual and acoustic privacy for existing and new residents.

O9. To ensure appropriate separation and articulation to minimise overshadowing of other residential areas and the public domain.

O10. To provide adequate separation between proposed and existing buildings, whilst not unnecessarily burdening any proposed development with the majority of the separation requirements.

O11. To establish the desired spatial proportions of the street and define the street edge.

O12. To allow an outlook to and surveillance of the street.

O13. Building separation is to increase in proportion to the building height to ensure appropriate urban form, adequate amenity and privacy for building occupants.

Development Controls

Note: Site specific controls for setbacks in certain business zones and precincts are located within this DCP.

Front Setback

C1. Development in B1 Neighbourhood centre zones shall observe the established front setbacks of the existing neighbourhood centre.

C2. Front setbacks in B2 Local Centre zones and B4 Mixed Use zone are indicated in site specific controls within this DCP.

C3. Minimum front setbacks for B5 Business Development zones shall be as follows:

- Greystanes and Smithfield-10 metres
- Holroyd/Granville- 6 metres
- Church Street Granville- 0 metres
- All other areas, unless otherwise stated in Part J, K, L, M, N, O, P or Q- 4 metres

C4. Minimum front setbacks for B6 Enterprise Corridor zones shall be as follows:

- South Wentworthville- 6m
- All other areas, unless otherwise stated in Part J, K, L, M, N, O, P, or Q- 4 metres.

Upper Storey Setback

C5. Unless otherwise stated in site specific controls within this DCP, a street wall height of three storeys (11-14 metres) is required for all commercial development, and for mixed use development in a commercial zone.

C6. Notwithstanding, a street wall height of four storeys (14-17m) is required in the following locations:

- B6 Enterprise Corridor zone on Great Western Highway at Mays Hill and Finlayson Transitway Precincts.
- B5 Business Development zone- Church Street.

C7. A 3 metre setback is required above the street wall height.

Side Setbacks

C8. Unless otherwise stated in site specific controls within this DCP, where a site adjoins a business zone, there is no side setback requirement.

C9. Where a site adjoins any residential zone (and not separated by a road), the side setback shall be a minimum of 3 metres.

C10. Where adjoining a residential zone, the development must demonstrate that the proposed setbacks will enable the achievement of access to sunlight and privacy as required under this DCP to the adjoining residential property. Setbacks, transition of height, location of balconies and windows and screening may assist.

Rear Setback

C11. Unless otherwise stated in site specific controls within this DCP, development adjoining residential zones shall have a rear setback of 6 metres.

C12. Where development in the B6 Enterprise Corridor zones has access to a rear laneway, development may have a rear setback of 0m at ground level.

C13. Where adjoining a residential zone, the development must demonstrate that the proposed setbacks will enable the achievement of access to sunlight and privacy as required under this DCP to the adjoining residential property. Setbacks, transition of height, location of balconies and windows and screening may assist.

Separation- Mixed use development

C14. Building separation between adjoining buildings, where containing residential dwellings shall be provided, dependant on the height (in storeys) of the development. Separation controls are within Part B of this DCP.

C15. Openings, which allow for solar access may be provided on sites abutting street frontages, which would normally not be permissible due to inadequate separation to neighbouring buildings so long as, the proposed openings result in no adverse impacts on visual privacy and a minimal impact on acoustic privacy.

Note: Habitable room/s includes rooms that are capable of being converted to a habitable room.

Depths

Note:

- Building depths for the retail or commercial component of a development shall be guided by setback, floor space ratio, site coverage, landscaping and parking requirements within this DCP.
- Building depths for residential component of development can be found Part B or Part M of this DCP.

1.5. Landscaping and Open Space

Landscaping should build on a site's existing natural and cultural features to contribute to a developments positive relationship to its context and site. Landscape design should optimize usability, privacy, social opportunity, equitable access and respect for neighbours' amenity. It plays a significant role in improving the amenity of open space and the visual quality for residents and visitors to the centre.

Together, landscape and buildings operate as an integrated and sustainable system, resulting in greater aesthetic quality and amenity for occupants and the adjoining public domain. As such, it should not be generated by left over spaces resulting from building siting and location.

Objectives

O1. Enhance the amenity and liveability for residents, workers and visitors to the centre through integrated landscape design, improvements to the public domain and the provision of passive and recreational opportunities.

O2. Provide a pleasant and enhanced streetscape character and amenity through the retention and/or planting of trees.

O3. Provide for pleasant and safe public open spaces through designing for accessibility and surveillance.

O4. Assist the management of the water table, stormwater and water quality through maximising site infiltration through deep soil and permeable surfaces.

O5. Require communal open space that is assessable, functional and attractive and provides for passive recreation and landscaping.

O6. Enhance liveability for residents by requiring every dwelling to have access to a private, useable and functional private open space directly adjacent to living areas and providing an extension of the living spaces.

O7. Provide balconies and terraces of sufficient size and proportion, which are functional and allow for outdoor living and planter opportunities.

O8. Require balconies and terraces to be integrated into the overall architectural form of the building and to contribute to the articulation and modulation of the building façade.

O9. Contribute to the safety and liveliness of the street by allowing for casual overlooking and address.

O10. Ensure private and communal open space areas are adequately landscaped and able to accommodate a range of plant species.

O11. Provide appropriate soil conditions, drainage and irrigation measures that encourage plant

growth.

Development Controls

C1. Landscaped area is not required in business zones, unless where site specific controls within this DCP requires otherwise.

C2. Where street setbacks are required, the resulting open space, other than that approved for vehicular and pedestrian access, shall be landscaped and maintained to Council's satisfaction.

Streetscape planting and public domain works

C3. Planting and public domain works shall be in accordance with Council's Landscape Masterplan, where available.

C4. Planting and pavement treatments along the street frontage are to maintain the landscape character of the locality. Integrating the development with adjoining properties by using plant species appropriate to the scale of the streetscape is required.

C5. Developments are to contribute to streetscape character and public domain amenity by:

- **i)** relating landscape design to the desired proportions and character of the streetscape
- **ii)** using planting and landscape elements appropriate to the scale of the development
- **iii)** selecting appropriate indigenous species in accordance with Council's preference.
- **iv)** mediating between and visually softening the bulk of large development for the person on the street.

Deep Soil zones

C6. Where there is limited capacity for water infiltration, stormwater treatment measures are to be integrated with the design of the buildings.

Communal Open Space- Residential Uses

C7. Communal open space is to comprise a minimum of 25% of the site area for each development.

C8. Locate open space on a podium level or on roofs, making it accessible for all residents.

C9. Communal open space may be located in deep soil zones.

C10. Communal open space should be in part open to the sky, unless where it contains a gym, swimming pool or similar.

C11. Communal open space shall be consolidated and configured in order to achieve a functional, useable space. The minimum dimension of communal open space in any one direction is 6m.

C12. Where possible, dwellings must be orientated towards communal open space areas to provide passive surveillance.

C13. Dwellings adjoining communal open space may provide private entries with adequate fencing to ensure a suitable level of privacy.

C14. Opportunities for planting shall be provided.

Private open space- Residential Uses

C15. A minimum of one (primary) balcony and/or terrace must be provided for each residential unit.

C16. Primary balconies must:

- **i)** Be located adjacent to the main living areas, such as the living room, dining room or kitchen to extend the dwelling living space;
- **ii)** Have a minimum dimension of 2.4m and with a minimum area of 10m^2 for 2+ bedroom apartments.
- **iii)** Council may consider dimension of 2m and a minimum area of 8m^2 for balconies of studio and 1 bedroom apartments.
- **iv)** Should be large enough to accommodate an outdoor dining table and seating.
- **v)** Provide for planter boxes to allow for plantings within private balconies.

C17. Consider secondary balconies, including juliet balconies or operable walls with balustrades, for additional amenity and choice in larger apartments, adjacent to bedrooms and for clothes drying, site balconies off laundries or bathrooms.

C18. Design and detail balconies in response to the local climate and context. This may be achieved by:

- **i)** Locating balconies facing predominantly north, east or west to provide solar access;
- **ii)** Utilising sun screens, pergolas, shutters or louvres and operable walls to control sunlight and wind;
- **iii)** Providing balconies with operable screens, Juliet balconies or operable walls/sliding doors with a balustrade in special locations where noise or high winds prohibit other solutions – along rail corridors, on busy roads or in tower buildings;
- **iv)** Ensure the long face of the balcony is oriented to the outside of the building;
- **v)** Choose cantilevered balconies, partially cantilevered balconies an/or recessed balconies in response to daylight, wind, acoustic privacy and visual privacy; and
- **vi)** Ensuring balconies are not so deep that they prevent sunlight entering the apartment below.
- **vii)** Design balustrades to allow views and casual surveillance of the street while providing for safety and visual privacy. Design considerations may include:
- **viii)** Detailing balustrades using a proportion of solid to transparent materials to address site lines from the street, public domain or adjacent development. Full glass balustrades are not permitted as they do not provide privacy for the balcony or the apartment's interior, especially at night; and
- **ix)** Detailing balustrades and providing screening from the public, for example, for a person seated looking a view, clothes drying areas, bicycle storage or air conditioning units.

C19. Use mechanisms to reduce noise impacts such as glass shutters to balconies.

C20. Additional balconies should have a minimum depth of 1.5m.

C21. Provide drying cupboards within balconies.

C22. Provide water and gas outlets on the main balconies, terraces and courtyards.

C23. Furniture layouts must accompany all development applications to ensure the useability of the

balconies and terrace.

C24. Coordinate and integrate building services, such as drainage pipes and utilities/fixtures, with overall facade and balcony design, for example, drainage pipes under balconies are often visible from below in taller buildings and negatively impact the overall facade appearance.

Roof gardens and On Structure Planting

C25. Planter boxes must be adequate in size, shape and design to ensure the optimum growth of plants. The minimum requirement for soil provision is as follows:

Plant type	Volume	Depth	Area
Large Trees (up to 16m canopy diameter at maturity)	150m^2	1.3m	10m x 10m
Medium Trees (8m canopy diameter at maturity)	35m^2	1m	6m x 6m
Small Trees (4m canopy diameter at maturity)	9m^2	800mm	5m x 3.5m
Shrubs Depth		500-600mm	
Ground Cover Depth		300-450mm	
Turf Depth		100-300mm	

C26. Sufficient depth of soil above paving slabs is to be provided in order to enable growth of mature trees.

Landscape design.

C27. Paving is required to utilise porous materials wherever possible to contribute to on-site stormwater management.

C28. Use evergreen material to enhance visual privacy between adjoining buildings.

C29. All landscape treatments are to be provided by and at the cost of the developer.

C30. Minimum maintenance of landscaped areas through the use of robust materials and treatments is required.

C31. Landscape design should contribute to water and stormwater efficiency by integrating with water and stormwater management by:

- **i)** using plants with low water demand to reduce mains consumption
- **ii)** using plants with low fertiliser requirements
- **iii)** utilising permeable surface
- **iv)** using water features
- **v)** incorporating wetland filter systems.

C32. The amenity of open space is to be improved with landscape design by:

- **i)** providing appropriate shade from trees or structures
- **ii)** providing accessible routes through the space and between buildings
- **iii)** screening cars, communal drying areas, swimming pools and the courtyards of ground floor units
- **iv)** allowing for locating art works where they can be viewed by users of open space

and/or from within apartments.

C33. The energy and solar efficiency of dwellings and the microclimate of private open spaces are to be improved by planting design solutions including:

- **i)** trees for shading low-angle sun on the eastern and western sides of a dwelling
- **ii)** trees that do not cast a shadow over solar collectors at any time of the year
- **iii)** deciduous trees for shading of windows and open space areas in summer
- **iv)** locating evergreen trees well away from the building to permit the winter sun access
- **v)** varying heights of different species of trees and shrubs to shade walls and windows
- **vi)** locating pergolas on balconies and courtyards to create shaded areas in summer and private areas for outdoor living.
- **vii)** locating plants appropriately in relation to their size at maturity.
- **viii)** is to provide a pleasant outlook and increased visual privacy between apartments

Pedestrian areas

C34. The provision of pedestrian plaza area and open space facilitating pedestrian movements.

C35. Changes in levels in pedestrian areas shall be gradual and minimised.

Note: Pedestrian areas include (but are not limited to) footpaths, carparking areas and plazas.

C36. Pedestrian areas are to be paved in a manner to match existing paving or to suit the architectural treatment of the proposed development.

C37. Landscaping, including tree planting shall be provided within pedestrian areas.

C38. Pedestrian areas shall be provided as frontage to shops and shall link all activity within a centre.

Note: Outdoor dining areas may be permitted in some pedestrian areas. Refer to Councils Outdoor dining policy.

2. Movement

2.1. Rear Laneways and Private Accessways

Good vehicular circulation in the centre is important for pedestrians and residents. Vehicular crossings over footpaths not only can restrict vehicle and pedestrian movement, it can be dangerous within a town centre environment. Enabling access to developments through a secondary street or accessway will improve movement in the centre whilst making it a safer place.

The addition of laneways can also add to the vibrancy of the centre, providing opportunities for retail uses at grade.

Objectives

O1. Make vehicular access to buildings more compatible with pedestrian movements and the public domain.

O2. Require buildings fronting primary roads to gain vehicular access from the rear of the property.

O3. Ensure the design of laneways promotes the principles of safer by design by ensuring clear sight lines through the laneway.

O4. For building treatment and design for laneways to ensure functional and safe places.

O5. Enable the maintenance of continuous retail frontages.

Development Controls

C1. Where buildings have access to existing laneways, vehicular access must be provided from the laneway.

C2. Laneways and private accessways shall be clear, direct and shall allow access for pedestrians at all times.

C3. Signage shall be provided that indicates the public accessibility of lanes and rear accessways and the street to which the lane connects.

C4. Laneways shall be visually appealing, which may be achieved through building design or the provision of public art.

C5. All laneway shall be 8m in width, unless specified otherwise.

2.2. Pedestrian access

Pedestrian accessibility is critical to establishing vibrant and safe business centres. Designing for pedestrians within the centre focuses on delivering high quality, safe and pleasant walking environments, which is person centred, rather than vehicular centred. Pedestrian access should be equitable, barrier free where all people who live, work and visit can enjoy the public domain and access communal use areas and apartments.

Objectives

O1. Ensure access to workspaces, retail areas, apartments and to the public domain is direct and efficient for the entire community, regardless of age, physical condition or mobility restriction.

O2. Require development to be well connected to the street and contributes to the accessibility of the public domain.

O3. Provide an environment which is permeable for pedestrians.

O4. Create a safe environment for all pedestrians.

Development Controls

C1. The site and its planning is to be utilised to optimise accessibility to the development.

C2. The design of developments shall comply with Disability (Access to buildings- Premise-Buildings) Standards 2010.

C3. Design buildings to comply with Australian Standards (SS1428 Parts 1 & 2) Design for Access and mobility).

C4. Direct and unimpeded access from the car parking area to all residential units and commercial uses within a development shall be provided.

C5. Main building entry points should be clearly visible from primary street frontages, well lit, legible and enhanced through building design and treatment.

C6. Access to public areas of buildings shall not have unnecessary barriers or obstructions including uneven and slippery surfaces, steep stairs and ramps, narrow doorways, paths and corridors etc.

C7. Developments must provide continuous paths of travel from all public roads and spaces as well as unimpeded internal access.

C8. Public accessible spaces including access ways, entry paths and lobbies must use durable, no slip materials, tactile surfaces and contrasting colours.

2.3. Building entries

Clear and legible entrances provide orientation for both pedestrians and drivers. Well designed building entrances can assist in activating street frontages which is critical to the viability and vitality of the town centre. Direct, easy access from the footpath draws the street into ground floor uses encouraging pedestrian accessibility.

Objectives

O1. Reinforce activities along main streets.

O2. Provide legible and clearly defined building entries and access points

O3. Ensure the design of entrances contributes to pedestrian safety and security.

Development Controls

C1. Equal accessibility is to be ensured for all, in both residential and commercial uses.

C2. The main entrance of buildings must be accessible for all members of the community.

C3. Separate entries from the street are to be provided for cars, pedestrians, multiple uses (commercial and residential) and ground floor apartments.

C4. Residential entries must be secure where access (e.g. lifts) is shared between commercial and residential uses.

C5. Multiple cores which access above ground uses are to be provided where the site frontage is over 30m.

C6. Dwellings off communal open space should have direct private entries.

C7. Entries and associate circulation space are to be designed of an adequate size to allow movement of furniture.

C8. Commercial development should include adequate areas for pedestrian movement, free from advertising or "overflow" retail structures.

C9. Appropriate materials and treatments such as slip resistant materials, tactile surfaces and contrasting colours are to be used at building entries to ensure legibility and safety for all users.

2.4. Vehicle access

The location, type and design of vehicular access points for a development can have impacts on the streetscape, building design and function of the centre. It is important that vehicular access is located to ensure the maintenance of a safe pedestrian environment, viability and vitality of the centre.

Objectives

O1. Minimise the impact of vehicle access on streetscape amenity, pedestrian safety and circulation within the centre.

O2. Enable active frontages.

O3. Differentiate between primary and secondary roads and their uses.

O4. Integrate vehicular access and service areas into building design and streetscape character.

Development 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, side street or rights of way, the loading and unloading facilities and service access shall be provided from that lane.

C3. The location of vehicular access shall consider existing services (power, drainage etc) and street trees.

C4. One two way driveway is permitted per development site up to 10,000m^2.

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 6 metres or 8 metres for commercial loading docks and servicing.

C9. Pedestrian safety is to be maintained through design including ensuring clear site lines at pedestrian and vehicular crossings and clearly differentiating vehicular and pedestrian access.

C10. Flexible vehicluar crossing widths to a maximum of 8 metres will be considered depending on traffic flows, sight distances and the type of vehicles using the crossing. This is consistent with Part D.

2.5. Parking

On- site parking includes both underground (basement), surface (on grade) and above ground, and can include parking stations.

It is important that carparking does not visually dominate the streetscape or impact on stormwater management. Carparking that is well designed and located should make efficient use of the site, reduce its visual impact and enables the maintenance of active frontages.

Objectives

O1. Minimise car dependency for commuting and recreational transport use and to promote alternative means of transport such as public transport, bicycling and walking.

O2. Maintain a positive streetscape character by designing and treating carparking to reduce its visual impact.

O3. Ensure parking does not impact on the character and function of active frontages.

Development Controls

Note: Parking rates for are located in Part A of this DCP.

C1. On-site parking is to be accommodated underground wherever possible, in zones where residential development is permitted.

C2. Consolidate basement parking areas under building footprints to maximise the area available for landscaping.

C3. No on-site parking is to be directly visible from an active or main street frontage.

C4. Parking areas shall be designed to ensure pedestrian amenity and safety.

C5. Natural ventilation is to be facilitated to basement and sub-basement car parking areas wherever possible and with regard to any flooding issues.

C6. 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.

C7. Safe and secure access is to be provided from on site parking for building users, including direct access from parking to lobbies

C8. Marked pedestrian pathways with clear lines of sight and safe lighting shall be provided.

C9. Parking shall be provided as a logical and efficient structural grid.

C10. Required visitor spaces must be capable of being accessed by visitors with a disability.

C11. Driveway walls adjacent to the entrance of a basement car park are to be treated so that their appearance is consistent with the basement or podium walls.

C12. Private car parking for shop top housing must be clearly identified and separated from regular business car parking must be clearly identified and separated from regular business car parking.

C13. Visitor parking shall be clearly identified and may not be stacked parking.

3. Design and Building Amenity

3.1. Safety and Security

A safe and secure environment encourages activity, vitality and viability, which in turn encourages a greater level of security. The design of buildings, private and public spaces should enable casual surveillance, definition of space and access control and minimise threats to safety.

Objectives

O1. Ensure building and place design is guided by the Crime Prevention through Environmental Design (CPTED principles).

O2. Reduce opportunities for crime through the provision of opportunities for casual surveillance.

O3. Provide pedestrians with direct and well used traffic routes with good night lighting.

O4. Control access to private spaces within the centre.

Development Controls

C1. Boundaries between private and public spaces should be defined and strengthened through building form and/or design elements.

C2. Casual surveillance of spaces is to be achieved through active frontages, street address and creating casual views of common internal areas (i.e. lobbies and foyers, hallways, recreation areas and carparks).

C3. Visible, functional and safe building entries are to be provided using the following: street address, clear lines of sight, separate entries for commercial and residential uses, direct entries to ground floor dwellings, direct and well lit routes from carparks and lift lobbies to all floors within the development.

C4. Building entries should be placed in visually prominent locations and be easily identifiable with numbering.

C5. Blind or dark alcoves near lifts and stairwells, at the entrance and within carparks along corridors and walkways are not permitted.

C6. Adequate lighting shall be provided within a development, such as pedestrian routes and accessways, common areas and communal open space, car parking areas, all entries and under awnings. Timers and motion sensors may be implemented where appropriate to reduce energy consumption.

C7. Illumination in carparks and building entrances should draw attention to the spaces to increase perceived safety.

C8. Landscaping should avoid opportunities for concealment. Landscape treatment such as low plantings or trees with a clean trunk to 2m are encouraged.

C9. The design of roads and location of street furniture must ensure adequate sight lines for drivers.

C10. Paving and other walkway treatments shall be designed and maintained to prevent trip hazards.

C11. Where private open space is located within the front setback, the design and height of fencing should allow passive surveillance of the street.

C12. Provide security access controls to buildings where appropriate.

C13. Large scale retail and commercial development and mixed use developments shall provide a safety by design assessment in accordance with CPTED principles from a qualified consultant.

3.2. Façade design and Building materials

The architectural quality of facades contributes to the character and vibrancy of the centre and its public domain. High architectural quality requires the appropriate composition of building elements, textures, materials, colours to reflect the use, internal design and structure of the development.

Objectives

O1. Ensure buildings contribute positively to the streetscape and public domain through high quality architectural design.

O2. Ensure building longevity and a visually positive streetscape through the provision of high quality finishes and materials.

O3. Contribute to a visually interesting skyline.

O4. Provide for pedestrian amenity and safety through architecture definition of streets and public spaces.

O5. Design buildings to maintain a pedestrian scale through articulation and detailing on the lower levels of the building.

Development Controls

C1. Provide a street address to each building.

C2. Facade proportions and vertical and horizontal emphasis shall be appropriate to the scale of development and its interaction with the streetscape. Vertical emphasis shall be incorporated above awnings.

C3. Express vertical elements within the façade rather than floor levels.

C4. Blank walls and large expanses of one material shall be avoided.

C5. External walls should be constructed of high quality and durable materials and finishes that are appropriate for the scale of development. Materials with 'self cleaning' attributes shall be used.

C6. Maximise the use of glazing to active frontages.

C7. Building walls addressing the street should be articulated and fragmented to add interest and to avoid bulky appearance.

C8. Buildings located on corner sites are to be articulated to address each street frontage.

C9. Building finishes should not result in causing glare that creates a nuisance and hazard for pedestrians and motorists in the centre. Generally reflective and glazed finishes are discouraged above the first floor.

C10. Balconies and terraces should be provided to overlook the street and public domain and shall be integrated into the design of the facade.

C11. Façade designs shall reflect the orientation of the site using elements such as shading devices, light shelves and bay windows as environmental controls, depending on the facade orientation.

C12. All walls to the street shall be articulated by either/or windows, verandahs, balconies or blade walls. Such 'articulation' elements may be forward of the required building line up to a maximum of 600mm.

C13. The design of plant rooms and lift overruns is to be integrated into the overall architecture of the building.

C14. Building services, such as drainage pipes shall be coordinated and integrated with overall façade and balcony design.

C15. In mixed use and shop top housing development, distinguish residential entries from commercial/retail entries.

C16. Security grills, ventilation louvres and carpark entry doors shall be integrated with the design of the overall facade.

C17. Security devices fitted to building entrances and windows shall be transparent to allow for natural surveillance.

C18. New buildings should express the existing underlying subdivision pattern (i.e. designing fine grain shop fronts, where the existing subdivision is fine grain).

C19. Any Automatic Teller Machine (ATM) must be located at a highly visible locations at street level, and must be well lit at night and incorporate mirrors or reflective materials so that users can observe people behind them.

C20. The ground floor level must have active uses facing streets and public open spaces.

3.3. Laneway and Arcade Design

Site links in the form of laneways and arcades provide permeability within the centre for pedestrians and vehicular traffic which enhances movement, safety and streetscape vibrancy and functionality. It is important that the design of these links consider the safety and security of pedestrians and how they may contribute to the vibrancy of places.

Objectives

O1. Ensure the design of laneways and arcades provides for pedestrian safety and amenity.

O2. Assist in creating a vibrant centre through active frontages.

O3. Promote permeability in the redevelopment of large sites.

Development Controls

Laneway

C1. The design of laneways and buildings adjacent shall incorporate safer by design principles and

promote a safe environment through:

i) defining private and public space,
ii) ensuring clear lines of sight between from one end of the laneway to the other,
iii) eliminating spaces that enable hiding or that do not have direct visual access,
iv) ensure overlooking and surveillance through balcony and window location,
v) provide suitable lighting to all entrances and locations of parking from the laneway.
vi) North/south Laneways shall be clear and direct throughways for pedestrians
vii) Public access to laneways shall be provided at all times, unless otherwise stipulated by Council.

C2. A high standard of facade design is required to create articulation for buildings addressing laneways.

C3. Opportunities for public art and design in laneways should be explored in order to create visual interest and vibrancy.

C4. Any awnings provided in laneways shall be a reduced size to provide amenity for pedestrians, without affecting vehicular traffic access and safety.

C5. Continuous awnings are not required on laneways.

Arcades

C6. Arcades shall be a minimum width of 6m and a minimum 4m high, which is free of all obstructions (i.e. columns, stairs etc).

C7. Direct and unrestricted public access shall be provided during business trading hours.

C8. Active frontages shall be provided on both sides, for the full length of the arcade.

Large sites

C9. Redevelopment of sites over 8000m^2, where no pedestrian links are required under this DCP shall maximise the permeability of the site and where necessary provide suitable pedestrian links in accordance with this plan.

3.4. Shopfronts

Objectives

O1. To provide for an active and vibrant commercial centre through activating the street, during both trading and non-trading periods.

O2. To implement adequate security measures.

O3. To allow casual surveillance of the streetscape.

O4. To ensure that retail and business premises present a suitable streetscape appearance.

O5. To create an inviting, visually pleasing and safe environment.

Development Controls

Security

C1. Solid roller shutters, either internal or external, that block out or obscure windows or entrances, are not permitted.

C2. Security Bars are not permitted.

C3. The boarding/bricking up of shopfronts is not permitted.

C4. The following security measures are acceptable:

- Open grille (concertina) security devices- where they are unobtrusive, discreet in design and colour and open in nature.
- Transparent grille shutter security devices- where located behind the shopfront.

C5. Council may require the removal and upgrading of existing unacceptable or unauthorised shopfront security devices.

Notes:

- The use of toughened glass is encouraged.
- Security measures such as alarms, appropriate lighting and security patrols should be considered.

Design

C6. All street frontage windows located at ground floor level are to be clear of glazing.

C7. Street numbers shall be located on shopfronts and awnings, and shall be clearly visible from the street.

C8. New shopfronts shall be constructed of materials that are consistent with the existing building and streetscape.

3.5. Daylight Access

Solar access is a major determinant of environmental comfort. Good passive solar design offers a resource and financial benefit by reducing the need for artificial heating and cooling.

Merrylands centre is to become a compact urban area and it is critical for daylight access to be achieved in both public open spaces and private living areas. The orientation of roads within Merrylands core centre is east-west, which requires dwellings to be carefully orientated and designed in order to maximise the northern and eastern aspects as far as possible to achieve daylight access for residents.

Objectives

O1. Maximise the use of direct and indirect natural light to reduce energy consumption and create energy efficient buildings.

O2. Ensure adequate daylight access is provided to all habitable rooms within a development.

O3. Ensure development does not hinder the obtainment of adequate daylight access to habitable rooms of other dwellings.

O4. Provide public open spaces that receive adequate daylight access for the enjoyment of all residents and visitors.

Development Controls

C1. Developments shall be designed to maximise northern aspects for dwellings and offices.

C2. Habitable rooms and primary private open spaces should be located on northern, eastern and western aspects.

C3. South facing dwellings where possible should have an alternative orientation to achieve solar access

C4. Where south facing dwellings are unavoidable, window areas are to be maximised.

C5. Single aspect dwellings that have a southerly aspect (SW-SE) shall be limited to a maximum of 30% of the total number of dwellings proposed within a development.

C6. Single aspect dwellings shall be limited in depth to 8m.

C7. Living rooms and private open spaces in a minimum of 70% of dwellings within a development shall receive at least 2 hours of direct sunlight between 9am and 3pm in Mid-winter.

C8. Maintain 3 hours of direct sunlight to 70% of dwellings in adjoining R4 zones.

C9. Direct daylight shall be achieved in communal open spaces between March and September and appropriate shading is to be provided in summer.

C10. Public open spaces identified within this plan are to receive 3 hours of daylight to 50% of the space in mid winter.

C11. Developments shall ensure that access to daylight is maintained to private open spaces and habitable rooms of existing and proposed surrounding buildings, so as to comply with this DCP.

C12. Developments shall be designed to control shading and glare.

3.6. Visual + Acoustic Privacy

Acoustic privacy from internal spaces within buildings and external noise factors increases the amenity for residents and the liveability of business centres

Developments shall be designed in order to protect the amenity of residents through the separation of buildings, arrangement of internal spaces within apartments and materials and finishes.

Objectives

O1. Provide reasonable levels of visual privacy externally and internally, during the day and night.

O2. Maximise outlook and views to the street and public spaces without compromising visual privacy.

O3. Ensure a high level of amenity for residents through the provision of acoustic privacy within dwellings and private open spaces.

O4. Minimise impacts from noise generating infrastructure.

Development Controls

Visual Privacy

C1. New development shall be located and oriented to maximise visual privacy between buildings on site and adjacent buildings by:

- **i)** providing adequate building separation and setbacks in accordance with Section 4.5,
- **ii)** utilising the site layout to increase building separation by orienting buildings on narrow sites to the front and rear of the lot, thereby utilising the street width and rear garden depth to increase the separation distance.

C2. Detailed site and building design elements are to be used to increase privacy without compromising access to light and air. Design detailing may include:

- **i)** offsetting windows of apartments in new development and adjacent development windows,
- **ii)** recessing balconies and/or vertical fins between adjacent balconies,
- **iii)** using solid or semi-solid balustrades to balconies,
- **iv)** using louvres or screen panels to windows and/or balconies,
- **v)** providing appropriate fencing,
- **vi)** providing vegetation as a screen between spaces,
- **vii)** incorporating planter boxes into walls or balustrades to increase the visual separation between areas,
- **viii)** utilising pergolas or shading devises to limit overlooking of lower apartments or private open space,
- **ix)** providing appropriate fencing.

C3. Building layouts are to be designed such that direct overlooking of rooms and private open spaces is minimised in apartments by:

- **i)** locating balconies to screen other balconies and any ground level private open space

ii) separating communal open space, common areas and access routes through the development from the windows of rooms, particularly habitable rooms

iii) changing the level between ground floor apartments with their associated private open space, and the public domain or communal open space

C4. Landscaping shall be designed to provide screening and filtering for control of privacy and to reduce overlooking of dwellings.

Acoustic Privacy

C5. Building siting and layout shall be designed to maximise the potential for acoustic privacy. This shall be achieved through:

i) providing adequate building separation and setbacks in accordance with Section 4.5 and,

ii) ensuring vertical and horizontal separation between conflicting uses generating different levels of noise.

C6. Apartments shall be arranged within a development to minimise noise transition by:

i) Locating busy, noise areas next to each other and quieter areas next to each other (i.e. bedrooms with bedrooms and service areas like kitchen, bathroom, and laundries together).

ii) Using storage or circulation zones within an apartment to buffer noise from adjacent dwellings, mechanical services or corridors and lobby areas, minimizing the amount of party (shared) walls with other dwellings.

iii) Using service areas/corridors to buffer 'quiet' areas such as bedrooms from noise generators including traffic, railway line, service and loading vehicle entries.

iv) minimising the amount of party (shared) walls with other dwellings/apartments.

C7. Conflicts between noise, outlook and views are to be resolved by using design measures such as double glazing, operable screened balconies and continuous walls to ground level courtyards where they do not conflict with streetscape or other amenity requirements.

C8. Where commercial/offices uses and residential uses are located adjacent to each other, air conditioning units, buildings entries and the design and layout of areas serving after hours uses shall be located and designed to minimise any acoustic conflicts.

C9. Developments shall be designed to minimise the impact of noise associated for uses whose hours may extend outside of normal business hours, including restaurants and cafes.

C10. Developments shall be designed to locate driveways, carports or garages away from bedrooms.

C11. Reduce noise transmission from common corridors or outside the building by providing seals at entry doors.

Note:

- Noisy walking surfaces such as suspended timber, metal decks, tiles and reflective internal surfaces to hallways or other communal areas are to be avoided.
- Plumbing noise between dwellings and between buildings should be eliminated.

3.7. Managing External Noise and Vibration

Buildings in close proximity to the railways need to consider the impact of external noise and vibration on development proposals.

Objectives

O1. Ensure consent is not to be granted for development on land affected by external noise, if, in the opinion of Council, will be affected by noise and vibration, unless the development will incorporate attenuation measure to the satisfaction of Council.

Development Controls

C1. Development proposals within 60m of a railway line and/or adjacent Classified Road must provide a report, to be submitted with the development application, demonstrating that the development will comply with the following criteria.

C2. The following Australian Standards are to be complied with:

- i) AS 1055-1997 Acoustics - Description and Measurement of Environmental Noise.
- ii) AS 1259-1990 Acoustics – Sound Level Meters Part 2 Integrating – Averaging.
- iii) AS 1633-1985 Acoustics - Glossary of Terms and Related Symbols.
- iv) AS 2107-2000 Acoustics - Recommended Design Sound Levels and Reverberation Times for Building Interiors.

C3. The report shall be prepared by an acoustic consultant having the technical eligibility criteria required for membership of the Association of Australian Acoustical Consultants (AAAC) and/ or grade membership of the Australian Acoustical Society (MAAS).

C4. Prior to the issues of an Occupation Certificate, a noise compliance report shall be submitted to the Principal Certifying Authority (PCA) confirming that the building/s comply with the noise criteria following. The report shall be prepared by an acoustic consultant, other than the consultant responsible for the preliminary/design report, having the technical eligibility criteria required for membership of the Association of Australian Acoustical Consultants (AAAC) and/ or grad membership of the Australian Acoustical Society (MAAS).

C5. Acoustic reports prepared under this Plan must be prepared in accordance with the specified methodology provided in the Appendix.

C6. Floor vibration levels in habitable rooms should comply with the criteria in British Standard BS6472: 1992 Evaluation of Human Exposure to Vibration in Buildings (1 Hz to 80 Hz). This is the vibration standard recommended by the Department of Planning and the Department of Environment and Conservation (DEC). It is similar to AS2670.2 – 1990 but includes additional guidance in relation to intermittent vibration such as that emitted by trains.

3.8. Awnings

The provision of awnings within a centre increases the usability of amenity of the footpath, encouraging active environments through greater pedestrian movement and activity. Awnings like building entries, provide a public presence and interface with the public domain contributing to the identity of an environment.

Objectives

O1. Ensure the amenity of pedestrians through weather protection.

O2. Maintain a consistent streetscape and provide visual interest through a continuous awning theme.

O3. Locate awnings to provide for the safety and security of pedestrians.

O4. Enable the provision of street tree planting and furniture location.

Development Controls

C1. Continuous awnings are required to be provided to all active street frontages (except laneways).

C2. Awnings generally:

- i) Should be flat,
- ii) must be 3m deep,
- iii) be setback from the kerb a minimum of 600mm,
- iv) have a minimum soffit height of 3.2m-3.3m,
- v) have slim vertical facias and/or eaves not to exceed 300mm.

C3. Awnings are permitted on laneways where active frontages are required and shall be retractable and only used in hours of operation.

C4. Colonnades are generally not permitted except only for building facades that address open space areas.

C5. Awnings should be provided in modules to match building frontages.

C6. Awnings on street corner buildings shall wrap around corners.

C7. Cantilevered awnings from the buildings shall have a minimum soffit height of 3.2m – 3.3m.

C8. Do not break a continuous run of awnings.

C9. Canvas blinds along the street edge are not permitted.

C10. Awnings are to be located over all building entries to indicate entry points.

C11. Awnings should be complimentary to each other in regards to size, design and location.

C12. Cut outs or offsets in awnings for trees and lightpoles are not acceptable.

C13. Lighting fixtures should be recessed into the design, with all wiring and conduits to be concealed.

C14. Gutters should not be clearly visible from the footpath and could be concealed or recessed into the ground floor frontage of the building.

3.9. Apartment Layout

It is important that the spatial layout of an apartment has been designed with consideration of a range of environmental and liveability factors that would impact on the level of residential amenity achievable.

Objectives

O1. Ensure a quality spatial arrangement reflective of a town centre lifestyle.

O2. Ensure high a standard of amenity and flexibility for residents.

O3. Maximise the environmental performance of apartments.

O4. Provide efficient apartment layouts.

O5. Avoid deep and narrow apartments.

O6. Maximise the environmental performance of apartments.

Development Controls

C1. No part of any residential unit shall be more than 8m from the glassline.

C2. Single aspect apartments are to have a maximum depth of 8m from the glassline.

C3. The back of the kitchen shall be no more than 8m from a window.

C4. The width of any apartment is to be no less than 4.5m (4.3m internally).

C5. Residential apartments are to have the following minimum internal floor areas:

i) Studio - 40m^2
ii) 1 bedroom - 50m^2
iii) 2 bedroom - 70m^2
iv) 3 bedroom - 95m^2
v) 4 bedroom - 120m^2

C6. The minimum width of cross-over or cross-through apartments which are over 15 metres deep shall be 4.5m or greater.

C7. Apartment layouts shall be designed to be resilient over time through accommodating the following:

i) a variety of furniture arrangements,
ii) a range of activities and privacy levels between different spaces within the apartment,
iii) flexible room sizes, proportions or open plans,
iv) ensuring circulation by stairs, corridors and through rooms is planned as efficiently as possible thereby increasing the amount of floor space in rooms.

C8. Apartment layouts shall be designed to respond to the natural environment and optimise site opportunities by:

i) orienting main living spaces toward the primary outlook and aspect and away from neighbouring noise sources or windows,
ii) locating main living spaces adjacent to main private open space,
iii) locating habitable rooms, and where possible kitchens and bathrooms, on the

external face of the buildings thereby maximises the number of rooms with windows,

iv) maximising opportunities to facilitate natural ventilation and to capitalise on natural daylight, for example by providing corner apartments, cross-over or cross-through apartments, split-level or maisonette apartments and shallow, single-aspect apartments.

C9. Avoid locating kitchens as part of the main circulation spaces of an apartment, such as a hallway or entry space.

C10. Apartment layouts and dimensions shall facilitate furniture removal and placement.

3.10. Flexibility and Adaptability- Residential Mix

Objectives

O1. Ensure the design of apartments meet the broadest range of occupants needs possible.

O2. Promote buildings that can accommodate whole or partial changes of use.

O3. Provide a diversity of apartments types, which cater for different household requirements now and in the future.

O4. To maintain equitable access to new housing by cultural and socio-economic groups.

Development Controls

C1. Design commercial uses to permit adaptation and flexibility for future development.

C2. Building configurations should provide multiple entries and circulation cores, especially in larger buildings over 15 m long by adopting the following:

i) Thin building cross sections which are suitable for residential or commercial uses,

ii) A mix of apartment types,

iii) Higher ceiling heights on the ground and first floors,

iv) Separate entries for ground floor uses and upper levels, and

v) Sliding and/or moveable wall systems.

C3. Apartment layouts are required to facilitate the change of use of rooms, including the provision of:

i) Windows in all habitable rooms and to a maximum number of non-habitable rooms, and

ii) Adequate room sizes or open-plan apartments that enable a variety of furniture layout opportunities,

iii) dual master-bedroom apartments, which can support two independent adults living together or a live/work situation,

C4. Structural systems are required to support changes in future building use or configuration including:

i) A structural grid that accommodates car parking dimensions, retail, commercial and residential uses vertically throughout the building;
ii) The alignment of structural walls, columns and services cores between floor levels;
iii) Minimising internal structural walls;
iv) Higher floor to floor dimensions on the ground floor and possibly the first floor; and
v) Knock out panels between two adjacent apartments to allow future amalgamation.

C5. Facilitate accessibility and adaptability of developments by:

i) Optimising the amount accessible retail, commercial, communal space;
ii) Maximising the number of accessible apartments; and
iii) Providing adequate pedestrian access and mobility in the development.

C6. Unless otherwise stated in Part M of this DCP, adaptable housing shall be provided in accordance with Part B of this DCP.

C7. Robust building configurations are to be provided, which utilise multiple entries and circulation cores, especially in larger buildings over 15 metres long, for example by:

i) thin building cross sections, which are suitable for residential or commercial uses,
ii) a mix of apartment types,
iii) higher ceilings on the ground floor and first floor,
iv) separate entries for the ground floor level and the upper levels,
v) sliding and/or movable wall systems.

C8. All commercial/retail components of mixed use buildings comply with AS1428-2001.

C9. Pre- and post-adaptive designs are required to be submitted at DA stage to demonstrate compliance with the relevant sections of the checklist provided in Appendix A of AS 4299-1995.

Apartment Mix

C10. A variety of apartment types between studio, one, two, three and three plus bedroom apartments shall be provided in each development.

C11. Studios and 1 bedroom apartments are not to exceed 20% of the total apartment mix within each development.

C12. A mix of one and three bedroom apartments are to be located on the ground level where accessibility is more easily achieved for disabled, elderly people or families with children.

3.11. Corner buildings

Corner site buildings play an important role within a town centre in providing legibility, reinforcing the road layout and can assist in creating a visually interesting streetscape.

Objectives

O1. Promote a strong and legible streetscape character by ensuring corner sites are visually significant elements.

O2. Require buildings at visually significant locations are well designed and respond to the different characteristics of the streets the address.

O3. Reinforce and clarify spatial relationships and street hierarchy in the centre and accentuate the topography.

Development Controls

C1. Generally, corner building shall be designed to:

i) Articulate street corners by massing and building articulation,
ii) to add variety and interest to the street,
iii) Present each frontage of a corner building as a main street frontage,
iv) reflect the architecture, hierarchy and characteristics of the streets they address, and
v) align and reflect the corner conditions.

3.12. Ground floor apartments

Ground floor apartments can offer many opportunities for various lifestyles and housing choices because of the potential for direct access from the street. Opportunities for private open space and landscape design, home office uses and accessibility should be explored, whilst maintaining privacy, safety and security.

Objectives

O1. Contribute to the creation of active, safe streets.

O2. Increase the housing and lifestyle choices available in apartment buildings.

Development Controls

C1. Opportunities for the provision of on grade private gardens, directly accessible from the street or from the main living spaces should be explored in ground floor apartments.

C2. The number of accessible ground floor apartments should be maximised.

C3. Ground floor apartments should support a change or partial change in use, such as home office or corner shops (where permissible).

C4. Individual entries from the street to ground floor apartments are encouraged in order to animate the street edge.

C5. Privacy, safety and security for ground floor apartments shall be optimised through design mechanisms such as:

- **i)** appropriate fencing, lighting and landscaping,
- **ii)** Minimising sight lines from the street into apartments through a change in levels,
- **iii)** requiring windows and doors facing the street,
- **iv)** stepping up the ground floor from the level of the footpath a maximum of 1.2 metres,
- **v)** designing balustrades and establishing window sill heights to minimise site lines into apartments, particularly in areas with no street setback,
- **vi)** determining appropriateness of individual entries,
- **vii)** ensuring safety bars or screens are integrated into the overall elevation design and detailing.

C6. Opportunities for solar access to ground floor units is to be increased by:

- **i)** providing higher ceilings and taller windows,
- **ii)** choosing trees and shrubs which provide solar access in winter and shade in summer.

3.13. Internal circulation & storage for residential uses

Amenity within apartments should be considered through the circulation design of apartments, as this can critically impact access to solar access and safety and security. Amenity in the form of access to storage facilities within and outside of apartments is important to cater to the lifestyle needs of residents.

Objectives

O1. Create safe and pleasant spaces for the circulation of people and their personal possessions.

O2. Facilitate quality apartment layouts, such as dual aspect apartments.

O3. To contribute positively to the form and articulation of the building façade and its relationship to the urban environment.

O4. To encourage interaction and recognition between residents to contribute to a sense of community and improve perceptions of safety.

O5. Provide adequate storage for everyday household items within easy access of the apartment and storage for sporting, leisure, fitness and hobby equipment within the development.

Development Controls

Internal circulation

C1. Where apartments are arranged off a double-loaded corridor, the number of units accessible from a single core/corridor is to be limited to eight.

C2. Better apartment layouts are to be supported by designing buildings with multiple cores which:

- **i)** increase the number of entries along a street,
- **ii)** increase the number of vertical circulation points,
- **iii)** give more articulation to the facade,
- **iv)** limit the number of units off a circulation core on a single level

C3. Amenity and safety in circulation spaces is to be increased by:

- **i)** providing generous corridor widths and ceiling heights, particularly in lobbies, outside lifts and apartment entry doors
- **ii)** providing appropriate levels of lighting, including the use of natural daylight, where possible,
- **iii)** minimising corridor lengths to give short, clear sight lines,
- **iv)** avoiding tight corners,
- **v)** providing legible signage noting apartment numbers, common areas and general directional finding,
- **vi)** providing adequate ventilation.

C4. Longer corridors are to be articulated by:

- **i)** changing the direction or width of a corridor,
- **ii)** utilising a series of foyer areas,
- **iii)** providing windows along or at the end of a corridor.

C5. Maintenance is to be minimised and durability is to be maintained by using robust materials in

common circulation areas.

Storage

C6. In addition to kitchen cupboards and bedroom wardrobes, accessible storage facilities shall be provided at the following rates as a minimum:

- i) Studio apartments 6m^2,
- ii) One bedroom apartments 6m^2,
- iii) Two bedroom apartments 8m^2, and
- iv) Three plus bedroom apartments 10m^2.

C7. The above minimum storage areas shall be excluded from apartment size calculations.

C8. Storage shall be located conveniently for apartments. This may be achieved through providing:

- i) At least 50% of the required storage within each apartment and accessible from either the hall or living area or from under internal stairs.
- ii) Storage as cupboards.
- iii) dedicated and/or leaseable storage in internal or basement car parks. Leasing storage provides choice and minimised the impact of storage on housing affordability.
- iv) Dedicated storage rooms on each floor within the development, which can be leased by residents as required; and

C9. Provide storage, which is suitable for the needs of residents in the local area and able to accommodate larger items, such as:

- i) Sporting equipment (skiing, surfing, golfing etc), and
- ii) Bicycles.

C10. Storage which is separated from apartments is secure for individual use and that the content of the storage space is not visible.

C11. Where basement storage is provided, ensure that it does not compromise natural ventilation in car parks or create potential conflicts with fire regulations.

C12. Consider providing additional storage in smaller apartments in the form of built-in cupboards to promote a more efficient use of small spaces.

3.14. Balconies

Balconies enhance the amenity and lifestyle of residents and provide private open space and can extending the living space of an apartment. Balconies are also important architectural elements, contributing to the form and articulation of developments.

Objectives

O1. Ensure every dwelling has access to a private, useable and functional private open space.

O2. Ensure balconies are functional and responsive to the environment, thereby promoting the enjoyment of outdoor living for apartment residents.

O3. Contribute to the safety and liveliness of the street by allowing for casual overlooking and address.

O4. Design balconies are integrated into the overall architectural form and detail of buildings.

O5. Contribute to the articulation and modulation of the building façade through the use of balconies and terraces.

O6. Extend the functionality of living spaces by locating balconies directly adjacent to living areas.

O7. Provide balconies and terraces of sufficient size and proportion, which are large enough to accommodate an outdoor dining table and seating.

O8. Ensure balconies provide an opportunity for planter boxes or alike.

Development Consent

C1. Each apartment shall have a minimum of at least one primary balcony.

C2. Primary balconies are to have a minimum depth of 2.4m and a minimum area of 10m^2.

C3. Primary balconies are be:

- i) located adjacent to the main living areas, such as living room, dining room, kitchen to extend the dwelling living space,
- ii) sufficiently large and well proportioned to be functional and promote indoor / outdoor living. A dining table and two to four chairs should fit on the majority of balconies in any development. Consider supplying a tap and gas point.

C4. Secondary balconies (including Juliet balconies or operable walls with balustrades) are encouraged to be provided to increase residential amenity and apartment choice in larger apartments and adjacent to bedrooms.

C5. Additional balconies should have a minimum depth of 1.5m.

C6. Where balconies are sited off laundries or bathrooms they are to be screened from the public domain.

C7. Balconies are to be detailed and designed in response to the local climate and context, thereby increasing their usefulness. This may be achieved by:

- i) locating balconies facing predominantly north, east or west to provide solar access,
- ii) utilising sun screens, pergolas, shutters and operable walls to control sunlight and

wind,

iii) providing balconies with operable screens, Juliet balconies or operable walls / sliding doors with a balustrade in special locations where noise or high winds prohibit other solutions—along rail corridors, on busy roads or in tower buildings,

iv) choose cantilevered balconies, partially cantilevered balconies and/or recessed balconies in response to daylight, wind, acoustic privacy and visual privacy,

v) ensuring that balconies are not so deep that they prevent sunlight entering the apartment below.

C8. Coordinate and integrate building services, such as drainage pipes and utilities/fixtures, with overall facade and balcony design, for example, drainage pipes under balconies are often visible from below in taller buildings and negatively impact the overall facade appearance.

C9. Provide for planter boxes to allow for plantings within private balconies.

C10. For clothes drying, site balconies off laundries or bathrooms; they should be screened from the public domain.

C11. Design balustrades to allow views and casual surveillance of the street while providing for safety and visual privacy. Design considerations may include:

i) Detailing balustrades using a proportion of solid to transparent materials to address site lines from the street, public domain or adjacent development. Full glass balustrades do not provide privacy for the balcony or the apartment's interior, especially at night, and

ii) Detailing balustrades and providing screening from the public, for example, for a person seated looking a view, clothes drying areas, bicycle storage or air conditioning units.

C12. Use mechanisms to reduce noise impacts such as glass shutters to balconies.

C13. Provide drying cupboards within balconies.

C14. Provide water and gas outlets on the main balconies, terraces and courtyards.

C15. Furniture layouts must accompany all development applications to ensure the useability of the balconies and terrace.

3.15. Natural Ventilation

Objectives

O1. To ensure buildings are designed to provide direct access to natural ventilation and to assist in promoting thermal comfort for occupants.

O2. To reduce energy consumption by minimising the use of mechanical ventilation, particularly air conditioning.

Development Controls

C1. Where possible, orient buildings and apartments to maximise prevailing breezes.

C2. Building and apartment depth, as required Part B or Part M shall be achieved.

C3. 80% of all dwellings within a residential apartment building should be cross ventilated.

C4. 25% of kitchens within a development must have direct access to natural ventilation.

C5. Ensure each dwelling can be naturally ventilated through the appropriate siting and layout of the rooms.

C6. Locate window and door openings to facilitate cross ventilation.

C7. Arrange windows, doorways and other openings to allow free internal air movements.

C8. Double loaded corridors in apartment buildings are limited to 8 dwellings per floor, unless these are cross-over apartments in which case the maximum number of dwellings shall not be more than 12.

3.16. Roof design

The architectural design of roofs can influence character within a centre and the composition of the building. It may provide amenity to residents through the provision of roof gardens or other environmental applications.

Objectives

O1. Contribute to the character of business centres.

O2. Incorporate well designed rooftops that add visual interest to the skyline when viewed from street level or surrounding key vantage points.

O3. Ensure the desired amenity for public spaces is achieved.

Development Controls

C1. Roof forms and styles shall reflect and related to the scale and context of the building and character of the street. Pitched roofs (i.e. Roof forms copying elements of single family homes) are discouraged and will not be permitted in the following circumstances:

- i) Where a pitched roof design does not relate to the existing urban context,
- ii) Where a pitched roof increases the visual bulkiness of a proposed building.

C2. Incorporate roof top elements such as lift overruns, service plants and other visually intrusive service elements and infrastructure into the design of the roof.

C3. Where flat roofs are proposed, lift overruns, rooftop plant and machinery should be obscured from view by parapets or be incorporated within rooftop activities/features.

C4. Wherever possible provide landscaped and shaded areas on roofs (i.e. roof gardens).

C5. Minimise the bulk and mass of roofs and the potential for overshadowing from roofs.

C6. Roof design is to respond to the orientation of the site through using eaves and skillion roofs to respond to sun access.

C7. Roofs may be articulated, or broken down its massing on large buildings, in order to minimise the apparent bulk or to relate to a context of smaller building forms.

C8. Consideration should be given to facilitating the use of roofs for sustainable functions such as:

- i) Installing rain water tanks for water conservation,
- ii) Orient and angle roof surfaces suitable for photovoltaic applications,
- iii) allow for future innovative design solutions such as water features or green roofs.

3.17. Maintenance

Detailed design and material selection support long-term maintenance of buildings and on going maintenance ensures the longevity of quality architectural and landscape design sustains and increases the value of property and minimises the life-cycle cost of a development to owners.

Objectives

O1. Ensure long life and ease of maintenance for developments.

O2. Provide infrastructure to enable the maintenance of building elements.

Development Controls

C1. The implementation of initial high quality design, construction and materials is the most effective way of ensuring the building has a long life and requires low maintenance.

C2. Windows shall be designed to enable cleaning from inside the building, where possible.

C3. Manually operated systems such as blinds, sun shades, pergolas and curtains are preferable to mechanical systems.

C4. Durable materials, which are easily cleaned and graffiti resistant, are to be selected.

C5. The area of painted exterior walls is to be limited, for example by incorporating colour in materials rather than painting over rendering.

C6. A fully automated commercial grade drip irrigation system shall be provided to all landscaped areas of the development.

C7. For developments with communal open space, a garden, maintenance and storage area are to be provided, which is efficient and convenient to use and is connected to water and drainage.

C8. Building maintenance systems are to be incorporated and integrated into the design of the building form, roof and façade.

C9. Appropriate landscape elements and vegetation are to be selected and appropriate irrigation systems are to be provided.

3.18. Waste Management

Objectives

O1. Minimise waste generation and disposal to landfill during demolition and construction works in accordance with the waste hierarchy - promoting source separation and subsequent reuse/ recycling of materials over and above disposal.

O2. Ensure that reuse/recycling options are utilised at every opportunity and that any necessary waste disposal is lawful and efficient.

O3. Ensure the provision of adequate and appropriate storage areas for waste and recyclables during all stages of development.

O4. Maximise the amenity of the development and the opportunity for reuse/recycling by future tenants through effective design of facilities.

Development Controls

C1. Integrate waste management processes in all stages of development.

C2. Source separation facilities (e.g. waste bays) should be provided on building sites so that different materials may be easily separated during construction and demolition. This will maximise the potential for reuse/recycling during demolition and construction works.

C3. Garbage/recycling storage areas must be located so as to be easily serviced and not cause any negative impacts in terms of visual appearance, noise or smell, to residents, adjoining properties or to the street. Storage areas for bins are to be located away from the front of the development in a location with a practical distance from the final collection point.

C4. Waste separation facilities must be provided in all kitchens to encourage the separation of waste at its source.

C5. All dwellings shall be provided with a waste cupboard or the like of a sufficient size to hold a day's waste.

C6. Ventilation stacks should be utilised wherever possible (and necessary) to vent shops and basements.

C7. A waste management plan must be submitted with any development application and approved prior to development approval.

4. Environmental

4.1. Wind Mitigation

Wind effects from development can be uncomfortable and dangerous for pedestrians within the centre, and can also affect the growth of trees. It is important that wind impact is considered in the design of new development, so ensure a high level of amenity for pedestrian and the usability of open spaces within the centre.

Objectives

O1. Ensure that new developments satisfy nominated wind standards and maintain comfortable conditions for pedestrians.

O2. Maintain the structural integrity of buildings.

Development Controls

C1. A wind effects report shall be submitted with development applications for buildings 41m or greater in height and for other buildings as required by Council. The report shall be prepared by a suitably qualified engineer and shall:

- i) Be based on wind tunnel testing, which compare analyses the current wind conditions and the wind conditions created by the proposed building,
- ii) Report the impacts of wind on the pedestrian environment at the footpath level within the site and the public domain,
- iii) Provide design solutions to minimise the impact of wind on the public and private domain,
- iv) Demonstrate that the proposed building and solutions are consistent with the provisions of this DCP.

C2. To ensure public safety and comfort, wind effects caused by development are not to exceed:

- i) 10 metres per second for active frontages,
- ii) 16 metres per second for all other streets.

C3. New development shall be designed to:

- i) Incorporate building site design and design features to ensure the above wind effect criteria can be achieved,
- ii) Comply with building setback and separation controls within this DCP in order to allow breezes into the centre,
- iii) Minimise adverse wind effects on recreation facilities and open spaces within, and outside of developments.

C4. Balconies shall be designed to minimise wind impacts and maximise useability and comfort through recessed balconies, operable screens, pergolas and shutters.

5. General

5.1. Public art

Objectives

O1. Provide art works which are integrated into broader development and planning of business centres.

O2. Avoid stand alone public art projects that fail to address the locality and its culture.

Development Controls

C1. Public Art is encouraged to be provided within the business centres, in accordance with Council's Public Art Policy 2012-2015.

C2. Public Art provided shall develop the cultural identity of the community and reflect the culture of the community.

C3. Artworks shall be integrated into the design of buildings and the landscape.

5.2. Signage

Signage plays a significant part in indicating retail and commercial uses and in creating a lively retail strip.

Objectives

O1. Ensure signage complements the built form and character of business centres.

O2. Ensure signage does not dominate nor detract from the existing architecture.

O3. Require signage to be integrated into the building design.

Development Controls

Note: Comply with Part F of Holroyd DCP 2013 and SEPP No. 64 (Advertising and Signage).

C1. Protect the visual quality and the amenity of the streetscape.

C2. Do not locate signage to obscure important architectural features.

C3. Do not locate signs so that they protrude, or stand proud of the awnings.

C4. Roof signs and any other advertising structures which project above the parapet of the building or any part of the building to which they are attached is not permitted.

C5. Fin signs and projecting wall signs are limited to 1 per every 25m street frontage or 1 per site.

C6. Fin signs and projecting wall signs must not project more than 900mm from the wall (facade) to which they are affixed and no part is to be on or within 300mm of a residential level of a building.

C7. The size of signs shall not dominate or obscure the architecture of the buildings.

C8. Painting entire or part of building facades and walls or their coverage with cladding or other material to act as a large billboard is not permitted.

C9. Size and shape of any other outdoor advertising must relate to the size of the building or space to which it is attached or placed.

5.3. Hours of Operation

It is important that the amenity of residents both inside and outside of business zoned land is maintained through trading hours which also acknowledge the role of the business centres, without causing unjustifiable restrictions to businesses.

Objectives

O1. Create vibrant centres by encouraging business activity.

O2. Ensure the operation of commercial or retail uses does not cause undue disturbance to the amenity of surrounding residential areas.

O3. Permit late night trading within the Merrylands Centre.

Commercial Development

Development Controls

C1. Hours of operation (customer trading) for commercial development are listed in the table below and are based on the street in which the primary premises entries are accessed from.

Suburb	Max. Trading Hours	Nominated Streets
B1 Neighbourhood Zone		
All Suburbs	7.00am- 9.00pm	All
B2 Local Centre Zone		
Toongabbie	6.00am-12.00am	Portico Pde, Junia St, Corneila Rd, Aureila Street (from 56 Aureila to Railway Station-both sides of street)
Pendle Hill		Pendle Way, Civic Ave, Joyce St
Wentworthville		The Kingsway, Dunmore St, Garfield St (north of Pritchard St East), Station St (north of Pritchard St East), northern side of Pritchard St East
Sth Wentworthville		Great Western Hwy, Old Prospect Rd, Centenary Rd,
Guildford		Military Rd, Guildford Rd (East of Kane Street)
Pemulwuy		Butu Wargun Dr
Greystanes		Merrylands Rd
Merrylands West		Merrylands Rd, Sherwood Rd
All suburbs	6.00am-10.00pm	All other streets
B4 Mixed Use Zone		
Merrylands	24 hours	McFarlane St, Miller St, Military Rd, Pitt Street (between Merrylands Rd and Terminal Pl), Merrylands Rd (south side of street only between Terminal Pl and Addlestone Rd)
Merrylands	6.00am-10.00pm	All other streets
B5 Business Development Zone		
All suburbs	6.00am-12.00am	All streets
B6 Enterprise Corridor		
Mays Hill	6.00am- 12.00am	Great Western Hwy
South Wentworthville		Great Western Hwy, Florence St, Quinn St, Centenary Rd
Merrylands		Merrylands Rd
All suburbs	6.00am - 10.00pm	All other streets

Note: Deliveries are to be within trading hours and other operations (preparation, stocking, packing, cleaning, etc.) should not generally extend more than 1 hour either side of trading hours times.

C2. For hours extending outside of6.00am-10.00pm, applicants must demonstrate that noise, amenity and light impacts and crime prevention factors have been considered and addressed, through the submission of the following reports for assessment:

- Acoustic report
- Social Impact Statement
- CPTED Report
- Plan of Management

C3. Trading hours for business uses located within residential and industrial zones shall be determined based on a merit assessment of the location and context of the premises, size and patron capacity, operational and amenity impacts on surrounding residents.

Note: Council may require a trial period in relation to trading hours for some licensed premises to enable the assessment of the management performance of the premises and its impact on the surrounding neighbourhood amenity.

6. Large Store/Mall Development

Objectives

O1. To integrate large stores to contribute to an activity centre's economic and social growth.

O2. To promote high level of street activity and provide a variety of services to the community.

O3. To sensitively integrate the entire development into the context of surrounding uses.

O4. To ensure that such developments maximise the opportunity for an increased mix of use.

Development Controls

Note: Large stores are defined as having an floor area of 1500m^2 and more, excluding parking.

C1. Avoid blank walls, car parks or service bays from facing streets and public spaces.

C2. Locate loading bays, site storage and access points for waste collection away from public spaces, streets and residential areas, preferably underground, to minimise amenity impact.

C3. Where unavoidable, the maximum access width off the main street frontage to the loading bays, site storage, etc shall be 6.0m.

C4. Locate multiple entries and exits of these uses to address principal and secondary street edges to establish linkages and pedestrian connectivity throughout the site.

C5. Provide openings in the large store facades to bring activity to the street.

C6. Sleeve large stores with smaller scale uses that have active frontages such as speciality shops, or small offices with frontages to the surrounding streets.

C7. Utilise the roof space of large stores for other small scale uses.

C8. Articulate large buildings through surface treatments, bulk and massing to reflect the existing scale in the street, particularly if adjacent to existing residential uses.

C9. Large block redevelopments should prepare their own site specific master plan addressing all the relevant urban design principles.

C10. If the new development proposes multiple site consolidation, introduction of new street hierarchy to create a permeable street pattern must be considered.

C11. Design malls/large stores to address surrounding streets to ensure high quality pedestrian connectivity between all uses in a mixed use development.

Note: Consider office, community, educational, residential and residential uses within a large store/mall development.

7. Residential Mix for business zoned land

Objectives

O1. To ensure development in centres provides a mix of residential unit types and sizes to accommodate a range of family types.

O2. To require apartment sizes and room proportions to be adequate to meet the needs of the occupants and to afford a range of activities.

Development Controls

C1. Mixed use developments and shop top housing shall provide a variety of residential unit mix and layouts within each residential development.

C2. A mix of residential unit accommodation shall be provided, involving no less than 10% of either: studio/one bedroom, two-bedroom, three-bedroom units. Minimum net unit area as follows:

- Minimum studio size of 40m^2
- One bedroom unit size 50m^2
- Two bedroom unit size 70m^2
- Three bedroom unit size 95m^2

C3. Studios and one bedroom units are not to be greater than 20% of the total mix within each development.

C4. The applicant will be required to demonstrate that a studio unit can be combined with other units for form large units.

8. Operation Management

Objectives

O1. Ensure the operation of a commercial or retail use does not cause an undue disturbance in a town centre or the surrounding neighbourhood.

O2. To clarify the expected operation of activities appropriate to business location.

O3. To ensure reasonable public access is maintained while a town centre is operating.

Development Controls

C1. In the case of a proposed intensification of use within a building, the number of staff, patrons or customers on to a premises, will be limited by the number of car parking spaces provided in the initial development of that component of the buildings/site.

9. Environmental Health

Objectives

O1. To ensure a satisfactory hygiene standard and public health is achieved.

O2. To ensure the storage and removal of waste is undertaken satisfactorily.

O3. To ensure that skin penetration use and operation comply with relevant regulations.

O4. To ensure that the installation, use and maintenance of regulated systems comply with relevant regulations.

Development Controls

Food Premises

C1. Premises used in the manufacture, preparation, storage, packaging or cartage of food shall be constructed and fitted out to comply with the Food Act 2003 and regulations thereunder, Food Standards Code and Australian Standard 4674- Design, Construction & Fitout of Food Premises.

Note: All retail food premises are required to register the business with the NSW Food Authority and Council, prior to occupation.

Refuse and Trade Waste

C2. Refuse and trade waste material shall be stored either within the building or in an area outside the building suitably screened and approved by Council.

C3. Refuse and trade waste material shall be removed from the premises at regular intervals to the satisfaction of Council's Environmental Health Manager. Council offers a user pays commercial waste service for lunch room scraps and commercial recycling for small to medium businesses.

Note:

- Premises used in the manufacture, preparation, handling, storage and packaging of foods, including milk bars, take-away food shops, restaurants, bakeries, fruit shops and butchers are required to apply for and obtain a trade waste dischargers licence from Sydney Water.
- A trade waste dischargers licence is also required for photographic processing, commercial laundries, dry cleaners, medical centres, hotels, motels, car washes and service stations. Applicants in the first instance should contact Sydney Water.

Skin Penetration

C4. The use and operation of the skin penetration premises shall comply with the requirements of Schedule 2 "Standards Enforceable by Orders" of the Local Government (General) Regulation 2005.

Note:

- The use and operation of the skin penetration premises shall comply with the requirements of the Public Health (Skin Penetration) Regulation 2000. All equipment, appliances and devices shall comply with the NSW Health Department Skin Penetration Guidelines and Schedule 2 "Standards Enforceable by Orders" of the Local Government (General) Regulation 2005.

- All skin penetration premises are required to be registered with Council prior to the commencement of the business.

Regulated Systems

Note:

- All regulated systems (including warm water and water cooling systems) shall be designed, installed and maintained in accordance with the requirements of the public Health Act 1991 (Part 4 Microbial Control) and Regulations and AS 3666-2002 Air Handling and Water Systems in Building- Microbial Control.
- It is recommended that applications obtain a copy of Councils Contaminated Lands Policy for further information.

10. Amusement Machines and Centres

Objectives

O1. To ensure amusement centres do not impact the amenity of surrounding commercial and/or residential areas.

O2. To require adequate amenities to be provided for amusement centres.

O3. To protect the safety of patrons of amusement centres.

Development Controls

C1. No person shall increase or cause to be increased the number of amusement devices within an amusement centre except in accordance with the provisions of this plan.

C2. An application for Consent for an amusement centre shall be accompanied by an accurate floor plan of the premises to a scale of 1:50 showing:

i) The position and type of amusement devices;
ii) The position of toilet facilities and access thereto;
iii) Any partitioned areas and their proposed use;
iv) Seating arrangements;
v) Any additional ancillary uses.
vi) A car parking layout, drawn to a suitable scale.

Note: Parking shall be provided to conform with Council's car parking standards contained in Part A.

C3. The maximum number of amusement devices that can be installed in any premises shall be as determined by the Council after considering the circumstances applicable to each individual case, but generally shall be limited by the available floor space at the rate of 1 amusement device for every 5m^2.

C4. The provision of toilet facilities is to be in compliance with the requirements of the Building Code of Australia.

C5. The provision of light and ventilation to amusement centres shall be strictly in compliance with the requirements of Part F of the Building Code of Australia, as amended.

C6. The means of egress in the event of fire shall be strictly in compliance with the requirements

of Part D of the Building Code of Australia, as amended.

C7. The internal design and layout shall be such that, from at least one nominated supervision points within the building located on each floor occupied wholly or in part by the amusement centre, the whole of that floor space may be clearly viewed. The supervision point shall be (a) near the main entry point, and (b) near any other entry point or, where only one entry point exists, at a distance of not less than 5 metres from supervision point (a).

C8. Amusement devices shall be located wholly within the premises so that persons operating such devices stand wholly within the premises.

C9. Amusement Centres shall be conducted in an orderly manner at all times and in particular, the owners, lessors or occupiers shall be wholly responsible at all times to ensure that:

- **i)** the premises will be attended during all hours of operation by a responsible person, who shall readily recognisable as an attendant, acting pursuant to the instructions of the Owner of the Amusement Centre;
- **ii)** where the use occupies more than one floor in a building, the owner of the centre shall ensure that, for each floor so used, at least one responsible attendant, as specified in i) above, shall be in attendance during all hours of operation.

C10. The operation of the premises shall be controlled to ensure that noise is not created so as to interfere with the amenity of the neighbourhood. Noise levels are to conform with the corrected noise levels recommended in the Australian Standard A.S.A. 1055/1973 (Noise Assessments in Residential Areas).

C11. The owners, lessors or occupiers shall maintain the premises and all buildings appurtenant to the premises, if any, in a clean condition and in a state of good repair.

C12. Where it is intended to provide refreshments for patrons, the area set aside for the preparation and dispensing of food or drink shall conform to the requirements of the Food Act 2003 and Regulations there under, the Food Standards Code and Australian Standard 4674 – Design, Fitout and Construction of Food Premises.

C13. The use of premises as an amusement centre shall not interfere with the use or enjoyment of adjacent premises by their owners or occupiers or with public amenity, and in particular, the behaviour of persons frequenting or likely to frequent the premises, shall not be offensive to the public, and;

C14. The premises shall meet such other requirements as may be considered appropriate by the Council, having regard to the circumstances of the case and the public interest.

11. Business, Commercial and ancillary uses on Residential zoned land

Objectives

O1. To protect the amenity of residential areas.

O2. Provide controls that support the objectives of residential zones.

Development Controls

C1. Home business, occupation or industry uses located within residential zones land shall not occupy more than 10% of the gross floor space of the building occupied for the purposes of home business, occupation or industry.

C2. Vehicles with a gross vehicle mass greater than 4.5 tonnes or together with any load or projection is 7.5 metres or greater in length, are not permitted to be parked on a residential property.

Note:

- Such vehicles include semi-trailers, prime movers, earth moving machinery, large rigid and tabletop trucks and the like.
- One commercial vehicle may be regarded as ancillary to residential occupation. Such vehicles include taxis, plumber's van, courier van, and building utilities including vehicles up to one tonne.

C3. A maximum of 4 vehicles are permitted to be sold within a 12 month period from a lawful residential property.

C4. Consent must not be granted to development for the purposes of a restaurant on land in Zone R4 High Density Residential if the gross floor area of the restaurant is more than 100 square metres.

12. Health consulting rooms

11.1. General Provisions

Objectives

O1. To facilitate the provision of basic health care services in locations convenient to existing and proposed residential development.

O2. To provide controls which will lead to the provision of professional consulting rooms which are compatible and sympathetic with adjoining residential development, be it detached or otherwise;

O3. To ensure a satisfactory aesthetic standard in professional consulting rooms through adequate and suitable provision of landscaping.

O4. To ensure adequate off-street parking for residents, visitors, doctors, employees and patients in order to maintain the free flow of traffic.

O5. To ensure that buildings converted or erected for the purposes of a professional consulting room are used appropriately having specific regard to the Building Code of Australia, including fire safety standards, and access and facilities for disabled and elderly persons.

Development Controls

C1. Any site that has frontage to or gains access to a road:

i) which is subject to a clearway or other no parking restriction; or

ii) which is a state or arterial classified road,

shall not be developed for the establishment or erection of a professional consulting room.

C2. Dual occupancies, units within a multi unit development or dwellings within a residential flat building shall not be developed for the purposes of a professional consulting room.

C3. Development must demonstrate to Council that cumulative impacts will not be unreasonable for a primarily residential environment in terms of, but limited to:

i) vehicular traffic & parking;

ii) noise emissions; and

iii) sign proliferation.

C4. When considering an application for the establishment of professional consulting rooms, Council will consider the likelihood of the development creating a traffic hazard, given its proximity to a frequently used intersection, pedestrian crossing, traffic signals or the like.

11.2. Access

Objectives

O1. To ensure accessibility for people with limited mobility.

O2. To meet the needs of residents within Holroyd.

Development Controls

C1. Access to and from the building for people with disabilities must be provided in accordance with Part D3 of the BCA. Sanitary and associated disabled facilities are also required to be installed in accordance with the provisions of Part F2.4 of the BCA.

C2. Appropriate on site car parking spaces for disabled persons are required to be provided in accordance with Part A of this DCP.

Note: The provisions of the Commonwealth Disability Discrimination Act, 1992 will be considered during the assessment of all development applications.

11.3. Vehicular Access and Driveways

Development Controls

C1. Vehicular access off public road reservations shall be located so as to minimise traffic impacts on the surrounding road network. Access shall avoid disturbances to existing trees, street construction, sewer vents, service poles, light standards, Telstra frames and junctions, transformer units and the like which may be located in the footpath area, unless the applicant is able to make arrangements for the relocation of the equipment not owned by Council at no expense to Council.

C2. Car parking spaces and driveways associated with a professional consulting room shall be arranged to facilitate safe and efficient vehicular access. Vehicles shall be able to ingress and egress the site in a forward direction with minimal on-site manoeuvring.

C3. Driveways shall be located a minimum of 1.5 metres from side property boundaries. The area between the driveway and the property boundary shall be suitably landscaped to Council's satisfaction.

Note: All driveways are to be suitably paved and drained to the satisfaction of Council's Engineer. Preference should be given to 'natural' or earth coloured paving material. The extent of driveways shall be minimised as far as practicable to avoid excessive amounts of hardstand surfaces. Details regarding all hard paved areas shall be submitted with the development application for approval by Council. Applicants are also advised to consult Part A of this DCP relating to Guidelines for Parking for further controls on driveway design.

11.4. Privacy

Objectives

O1. To provide a high level of visual and acoustic privacy for residents and neighbours in dwellings and private open spaces.

Development Controls

Visual Privacy

C1. Dwelling conversions, extensions or new buildings used for the purposed of a professional consulting room shall be designed to provide a reasonable level of privacy to and from the building.

C2. Windows are to be located so they do not provide direct and close views into the windows of

habitable rooms and private open spaces of adjoining dwellings. The placing of windows shall be based on the detailed site analysis prepared for the development proposal.

C3. Appropriate landscaping should be designed to provide screening and filtering for the control of privacy and to reduce the overlooking of adjoining dwellings.

C4. Traditional screening measures such as durable lattice screens, external Venetian blinds, canvas blinds, window hoods and shutters should be considered and shall be compatible with the building materials and character.

Acoustic Privacy

C5. All development shall comply with the requirements of the Building Code of Australia (BCA) which deal with noise transmission.

C6. Professional consulting rooms shall be designed to minimise noise transmission between buildings and from the development to adjoining dwelling houses or other buildings.

C7. Sources of noise such as driveways, parking areas, air conditioning plants and any other externally located machinery shall be sited away from adjoining properties and shall, where necessary, be screened by walls or high trees. Where appropriate, an acoustically enclosed cover designed by a suitably qualified acoustic consultant may be required in some instances to contain noise emissions.

C8. To minimise the transmission of sound, the maximum amount of planting and grassed areas should be provided around the development.

Part D

Industrial Development

Holroyd Development Control Plan 2013

Holroyd City

Industrial Controls

Contents

Industrial Controls

Introduction

Land covered by this Part

This Part applies to development on land zoned Industrial under Holroyd Local Environmental Plan 2013 and for development types permissible within Industrial zones as detailed within this Part.

Relationship of Part D to Holroyd Development Control Plan 2013

Part D of Holroyd DCP 2013 shall be read in conjunction with the following Parts of Holroyd DCP 2013, which contain objectives and development controls that relate to development in this Part:

Part A - General Controls

Part B - Residential Controls

Part C - Commercial, Shop top housing and Mixed use Development Controls

Part E - Public Participation

Part F - Advertising and Signage Controls

Part G - Places of Public Worship Controls

Part H - Heritage and Conservation Controls

Part I - Child Care Centre Controls

Part R - Definitions

Objectives

O1. To ensure that sites of new industrial developments are of a sufficient size to provide a functional and efficient area for building(s), vehicle parking and movement, landscaping and the storage of raw materials, finished products, trade waste and recycling bins.

O2. To ensure that all loading and unloading, turning movements, queuing, and parking of vehicles, including delivery vehicles associated with the new development, occurs wholly within the site.

O3. To allow for a wide range of industrial activities without prejudicing the opportunities for business concerns requiring a range of floor areas to locate within the City.

O4. To ensure that site dimensions are sufficient to allow adequate landscaping.

1. Subdivision

Objectives

O1. To establish minimum allotment dimensions for industrial subdivision which ensure that allotments are of suitable sizes and shapes to economically accommodate industrial buildings and activities.

O2. To encourage variety and choice in industrial accommodation.

O3. To maintain and protect the environmental amenity of adjacent land uses.

O4. To ensure that heavy vehicle movements:

a) are segregated from other local traffic;

b) provide a safe road environment which reduces traffic conflicts;

c) have convenient access, bearing in mind their particular requirements.

O5. To permit urban subdivisions that provide a safe and convenient environment for pedestrians, cyclists and motorists.

O6. To provide a high level of human amenity within each subdivision.

O7. To provide appropriate levels of service utilities and road network.

O8. To reconcile issues associated with development of land such as access, car parking and manoeuvring.

O9. To ensure that each lot has a satisfactory ratio of depth-to-frontage, having regard to the purpose for which the allotment is to be used.

Development Controls

C1. Make adequate allowance for the manoeuvring and turning of heavy vehicles on site. The design standards for "large rigid truck" must be applied, in accordance with the Traffic Authority of NSW's Policies, Guidelines and Procedures for Traffic Generating Developments.

C2. Ensure that the width of an industrial allotment at the building line of a minimum area of 1200m^2 is equal to or greater than 24m , and the average depth is equal to or greater than 45m. Refer to the Lot Size Map in Holroyd LEP 2013 to ensure the resultant minimum allotment size is consistent with the Map.

C3. Ensure that the width of an industrial allotment at the building line of an area less than 1,200m^2 is a minimum frontage of 20m and a minimum depth of 40m.

C4. Ensure that corner allotments have a minimum width of 28m to allow for the required setback to both frontages stipulated in Section 2.5 of this part. Also provide these lots with 6m cut-offs for splay purposes. In special circumstances, a deeper cut-off may be required.

Note: Any proposal for a smaller lot size in the IN2 zone should be accompanied by a business development plan for each subdivision request, to prevent fragmentation of lots.

Battleaxe -shaped allotments

C5. Battleaxe-shaped lots are only permitted at locations where subdivision by the opening of an industrial road is not possible or the circumstances of the particular proposal do not, in

Council's opinion, warrant the opening of a road.

C6. From calculation of the area of battleaxe-shaped allotments exclude the area of the access corridor (see Figure 1).

C7. Ensure that a Battleaxe-shaped allotment has a minimum width of 24m, and a minimum land area consistent with the Lot Size Map in Holroyd LEP 2013 exclusive of the access handle which shall have a minimum width of 9m.

C8. Where two access handles adjoin and each has reciprocal rights over the other, the minimum width of each access handle may be reduced to between 6.2-6.5m.

C9. Where two access corridors are shared, reciprocal rights of way and easements for drainage and services shall be granted over the access corridors for the benefit of both allotments.

C10. Construct an access corridor to a single allotment (or two shared access corridors) with full width heavy duty concrete paving 6m wide, to Council's Engineer's requirements, and consistent with clause 3.5 of Part A on Internal Roadways.

C11. Ensure sufficient space is provided for compliance with Part D of this DCP requiring that turning movements of delivery vehicles occur wholly within the site.

Note: Requirements for road design and construction within all industrial zones can be found in Part A of this DCP.

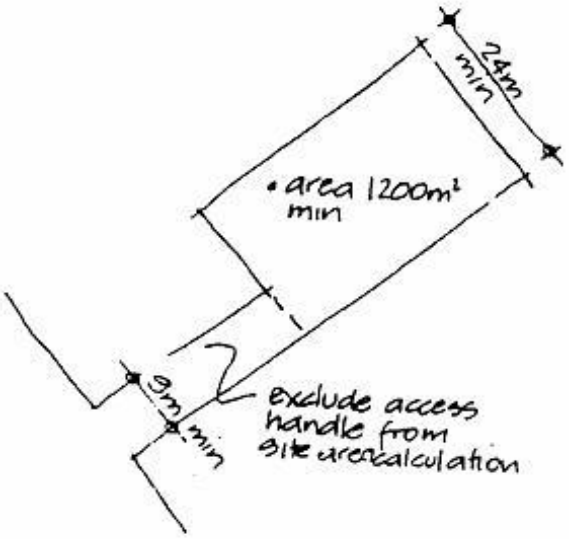


Figure 1: Battleaxe allotment configuration

2. Design Guidelines

2.1. Site Area, Frontage and Gross Floor Area

Objectives

O1. To encourage the consolidation of small-sized allotments in the established industrial areas.

O2. To achieve density controls in industrial areas that allow a reasonable balance between the amount of activity generated by buildings and the external space around them, plus accommodate the movement of people and vehicles.

Development controls

C1. Provide, where possible in new developments, a minimum street frontage width of 24m to accommodate side access for goods vehicles.

C2. Areas and sites zoned for industrial with currently less than 24m at the street front shall meet the other design objectives & controls. Such new developments should demonstrate that they exceed the minimum development controls for other urban design principles.

C3. Specific street setbacks should comply with those detailed in Section 2.5 of this part.

C4. Consent must not be granted to development for the purposes of a food and drink premises on land in Zone IN1 General Industrial or Zone IN2 Light Industrial if the gross floor area of the food and drink premises is more than 300 square metres.

2.2. Site Layout

Objectives

O1. To plan the site's layout so as to minimise any adverse environmental effects from development.

O2. To ensure the development is compatible with the streetscape and addresses the public domain.

Development Controls

C1. Locate buildings within the site to reinforce the streetscape in terms of height, bulk and scale.

C2. Satisfy the operational requirements of the particular land use whilst providing a safe, pleasant and convenient work environment.

C3. Where in close proximity to residential areas, design new buildings to minimise any adverse effects on the amenity of residential areas, including such effects as overshadowing, overlooking, lighting, dust, noise or fumes.

C4. Locate offices to address and activate the street/s.

C5. Locate the warehouse/factory functions as well as car parking, manoeuvring areas, loading and unloading facilities within the site.

C6. Where a site adjoins a non- industrial use other than residential, provide side and rear building setbacks of a minimum 4m.

2.3. Amenity Impacts on Nearby and Adjoining zones

Note: "Nearby and Adjoining" is defined as adjacent, opposite and within the vicinity,

Objectives

O1. To reduce land use conflict between residential and non-residential uses.

O2. To ensure that development relates sympathetically to nearby and adjoining developments, through careful design of buildings and associated parking, storage and landscaped areas.

O3. To ensure industrial development does not overly dominate the visual amenity and character of its surrounds.

O4. To ensure that developments minimise any overshadowing, loss of privacy and impacts on adjoining residential properties and the public domain.

O5. Where development is proposed on major traffic routes or on land near to or adjoining a Residential zone, or within Open Space, or involving sensitive Special Uses such as schools, to provide a standard of amenity and visual impact consistent with the adjoining land use.

O6. To ensure industrial building height, scale and mass is similar to adjacent development.

Development Controls

Height

C1. Where industrial development abuts residential, public open space or sensitive land uses (e.g. schools), ensure height of such industrial development does not exceed (in metres) the height allowed for the adjoining use along the common boundary, subject to meeting the controls of overshadowing.

C2. Ensure building height does not involve the loss of significant views from adjoining residential areas, both adjacent and across the street.

Solar Access

C3. Where adjoining or opposite to a residential property and proposed structures are over 6m high, provide shadow diagrams:-

a) demonstrating the impact on adjoining residential properties or public domain;

b) based on a survey of the site and adjoining development; and

c) for 9.00 a.m., 12.00 noon and 3.00 p.m. at 21st June.

C4. Structures adjacent to a residential zone must continue to meet the solar access requirements elsewhere in this DCP, or if the existing lot or open space already receives less than 4 hours of sunlight, does not significantly reduce the access to solar radiation for other adjoining residential, public open space or sensitive land uses (e.g. schools).

Buffers

Note: Residential/Industrial buffer controls are detailed in Holroyd Local Environmental Plan 2013.

C5. Provide appropriate buffer mechanisms to ensure that:

a) neighbourhood residential amenity is maintained,

b) the primary buildings and structures on the industrial land are visually separated from neighbouring residential dwellings, and

c) overshadowing does not occur (see solar access below).

Note: residential amenity includes levels of noise, vibration, smell, fumes, smoke, vapour, steam, soot, ash, dust, waste water, waste products, grit or oil that are acceptable to residential conditions without preventing the operation of general industrial land uses.

C6. Provide window placement and/or tall trees as ways to protect privacy, reduce noise and light pollution.

C7. Provide a 3.0m wide mature planting buffer and secondary acoustic fence within the industrial lot.

Site Design

C8. Design new development so that noise-producing activity is remote from the interface boundary.

C9. Site sources of noise such as garbage collection, deliveries, machinery, motors, parking areas and air conditioning plants away from adjoining properties; and where necessary, screen them by walls or other acoustic treatment.

C10. Do not locate new manoeuvring areas and parking areas adjacent to existing residential areas where noise resulting from such activities may have a negative impact on residential amenity.

C11. On sites with a road frontage to residential areas, locate any new offices towards the residential areas and restrict access points onto the residential fronted road.

C12. Locate the warehouse/factory functions of a new development away from the residential areas.

C13. Ensure loading and unloading times do not detract from the amenity of nearby residential areas, or residentially zoned land. Where loading and unloading movements are likely to affect residential areas or residentially zoned land, provide schedules of vehicle movements and their routes, which may be regulated in conditions of consent.

C14. Accompany all Development Applications for potential noise generating industries adjacent to residential zoned land with documentation from a qualified Acoustic Engineer specifying noise standards.

C15. Ensure compliance with the relevant requirements such as the Noise Guide for Local Government and the New South Wales Industrial Noise Policy.

Walls / Fences

C16. Treat walls of industrial buildings adjoining residential zones aesthetically as well as acoustically (see figures 2 & 3).

C17. The use of light coloured galvanised iron and other reflective materials is discouraged near and adjacent to residential areas (especially balconies) due to their ability to cause glare. If these materials are proposed in these areas, applicants are required to demonstrate to Council that the materials will not adversely affect residents' enjoyment of their neighbourhood.

C18. If the side or rear boundary of an industrial land use faces a side or rear boundary of a residential premises, a timber paling/colourbond fence (commencing at the front building alignment) is permitted along with acoustic fencing and planting.

Views

C19. Ensure views to the development from through roads and adjoining land do not create a negative impact (Figure 4).

C20. Provide measures to enhance the appearance of the development from elevated residential areas. For example, by the use of non-reflective building materials, the use of materials which blend with the landscape background and attention to the skyline treatment of buildings.

Setbacks

C21. Industrial development adjoining residential or open space land zones shall comply with the setbacks in Table 1.

Note: For front setbacks refer to Section 2.5 of this Part.

Figure 2: Poor example of blank wall treatment

Figure 3: Good example of blank wall treatment

Figure 4: Poor residential/industrial inteface

Table 1. Setback Controls

Boundary	Minimum Building Setback (includes the landscape setback required)	Landscaping Setback (within the building setback)
Side – adjoining a non-industrial use/zone other than residential	4.0m (Refer to C4 for exceptions)	2.0m
Side – adjoining a residential use/zone	6.0m	3.0m
Rear – adjoining a non-industrial zone other than residential	4.0m (Refer to C4 for exceptions)	2.0m
Rear – adjoining a residential use/zone	6.0m	3.0m

2.4. Building Design and Appearance

Objectives

O1. To achieve a high standard of environmental design within new and existing industrial areas.

O2. To achieve high quality and innovative architectural design for industrial buildings.

O3. To ensure industrial development presents attractive facades to adjoining uses.

O4. To ensure industrial development activates the public domain.

O5. To provide attractive building designs with a high aesthetic standard by variations in fascia treatments, roof lines and selection of building material.

O6. To achieve both functional and visually attractive new buildings.

O7. To provide buildings that are functional in design and compatible with adjoining development.

O8. To encourage innovative and imaginative design to result in a more visually pleasing and harmonious environment.

O9. To provide an enjoyable working environment for employees.

Development Controls

Building Siting & General Design

C1. Use non-industrial aspects of a development (e.g. offices) to address the street.

C2. Avoid long blank walls of warehouse units facing the street or public domain.

C3. Provide articulation to the façade or division of massing.

C4. Architecturally express the structure of the building externally and minimise use of reflective glass or large blocks of one material.

C5. Visually reinforce entrances, office components and stair wells to create rhythm on long facades and a reduction of perceived scale. Strongly express structural bays and bracing.

C6. Introduce variation in unit design.

C7. Introduce solid surfaces, with a mix of materials; incorporate horizontal and vertical modulation including windows in appropriate proportions and configurations.

C8. Address the street to which it presents, with architectural elements.

C9. Enhance architectural elements that express structure.

Fire Safety

C10. Comply with the fire safety provisions for industrial buildings

Note: refer to the Building Code of Australia, giving particular attention to Part C2 'Compartmentation and Separation', Part C3 'Protection of Openings', Section D 'Access and Egress' and Section E 'Services and Equipment'.

Building facades

C11. Painted masonry will not be accepted unless the applicant can demonstrate that the building has outstanding architectural merit incorporating special features such as glass curtain walls.
Note: Applicants may be required to submit specific description and samples of facing for approval.

Side and rear walls

Note:

- Side and rear walls, not visible from the street can be constructed in galvanised iron, zincalume, fibre cement or pre-colour coated metal sheeting. Council encourages the use of pre-colour coated metal sheeting, as this cladding is more aesthetically and environmentally pleasing.
- refer to the Fire Resistance and Stability section of the Building Code of Australia.

Frontage Walls

C12. Where blank walls on street frontages are unavoidable in new development, treat them as sculptural elements incorporating public art or murals or similar, reflecting modern architectural design.

C13. Ensure frontage walls are finished to a high standard and minimise the potential for graffiti or other vandalism.

C14. Construction of screen walls on or behind the building line will be required when open yard activities and storage are involved.

C15. Construct screen walls of brick, split masonry block or pre-case exposed aggregate panels with a minimum of 3.5m aggregate finish. No standard concrete blocks will be permitted. The screen wall finish should match or be compatible with the finish of the industrial buildings on the site.

Corner Sites

C16. New development on corner sites is to address both street frontages in terms of facade treatment, fenestration and articulation of elevations to achieve a high standard of environmental design.

Roofs

C17. Roof ventilation, exhaust towers, hoppers and the like should be located so as not to be readily visible from any public or residential area.

C18. Integrate all rooftop or exposed structures including lift motor rooms, plant rooms, etc., together with air conditioning, ventilation and exhaust systems, into the building design in order to ensure interesting and high quality appearance.

Toilets and Amenities

C19. Include suitable employee toilets and amenities within the industrial development.

2.5. Setbacks

Objectives

O1. To minimise any adverse impact of development and buildings on the surrounding area.

O2. To create a pleasant visual amenity within and external to the site.

O3. To provide adequate acoustic buffers so that any impact is minimised.

O4. To enable the landscaping treatment of street frontages when viewed from public areas.

O5. To ensure adequate building access consistent with fire safety for industrial buildings.

O6. To provide public parking within the street frontage.

O7. To ensure that the physical separation between industrial and residential land uses characteristic of the existing development on site are maintained over the longer term.

Development Controls

Note: All development shall comply with site specific setbacks detailed in this section.

C1. Landscape all front setbacks to provide a high quality street presence.

C2. Front setback areas shall not be used for storage or display of goods or excessive signage, loading/unloading or large areas of carparking.

C3. Proportionately increase any setbacks between the development and adjoining residential properties relative to the height of the development, to reduce bulk/overbearing form & overshadowing on the street and adjoining properties.

Note: Where the rear or side of a property abuts a roadway, the setback is defined by the frontage to the roadway.

C4. Minimum 1 metre setback is required to at least one side boundary.

C5. Building setbacks must provide fire resistance and stability.

C6. Where basement carparking extends beyond the building envelope, a minimum soil depth of 1.0m is to be provided, measured from the top of the slab.

C7. Ensure landscaping setbacks are free from overhangs, hard elements such as paths, ramps, signs (including pole signs) and parking (both above ground with exceptions and underground) and advertising structures (including pole signs).

Note: Landscaping setbacks may be used in calculation of landscaped area.

Corner Lots

C8. Ensure that setbacks for new development on corner sites are consistent with setback requirements for each particular street.

Note: Setbacks on corner blocks must enable sufficient sightlines for traffic in accordance with the relevant Australian Standards and RMS requirements.

C9. In locations where a 30.5 metre or 15 metre building line to the principal street frontage of a corner lot is required, maintain minimum requirements for the secondary frontage . However, car parking and access driveways may be located in part of the setback to the secondary frontage, provided a 6 metre wide landscaped strip is provided along the public road.

C10. In locations where less than 15 metre building line is required to the principal street frontage , provide a minimum building line of 4.5 metres to the secondary frontage. (In certain circumstances Council may accept parking within this 4.5 metre setback as long as not less than a 2 metre wide landscaping strip is maintained).

Padmount Substations

C11. Padmount Substations may be located within the building setback, but must not be located closer than 7.5 metres from the road and should be screened by landscaping from the street. Council's preference is for Padmount Substations to be located at the rear of buildings with access provided at the side of the building.

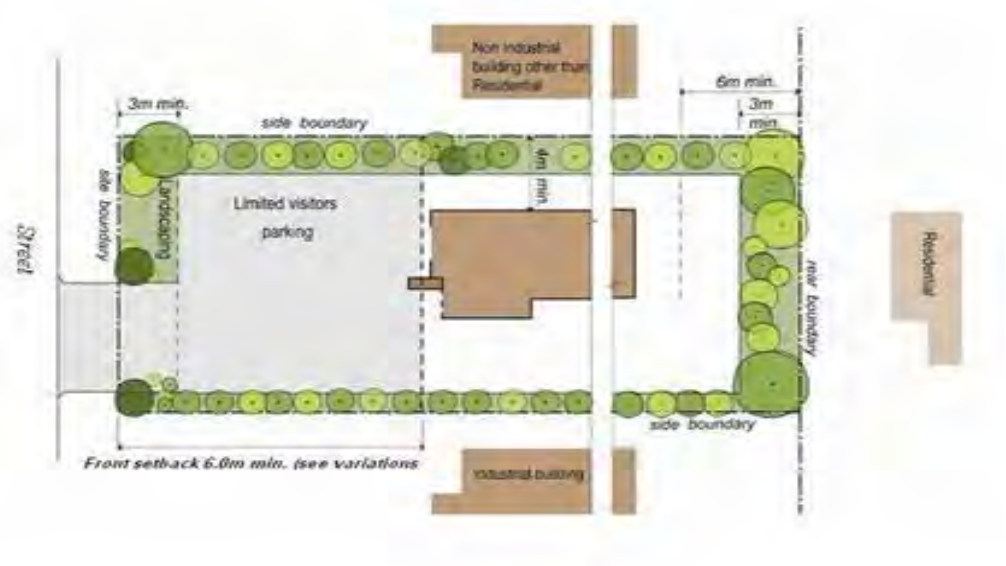


Figure 5: Setbacks for Industrral Development

Setbacks for Specific Street Frontages

C12. The following building lines apply to the principal street frontage of land zoned General Industrial IN1 and Light Industrial IN2 within Holroyd City. They are based on a conversion from the previous imperial measures into metric.

Note: Smaller lot sizes tend to require setbacks smaller than 15 metre. Buildings of greater bulk and scale on larger lots, and located opposite residential zones, tend to require setbacks larger than 15 metres.

Smithfield Industrial Lots

All Streets (west of Fairfield Road)	- 15.0 metres
Yennora Industrial Area Fairfield Road (south of Dursley Road) Pine Road, Loftus Road (between Pine Road and Norrie Street) Nelson Road (west of Yennora Ave) Norrie Street (west side) Boola Avenue (east side between Loftus Road and Bend)	- 15.0 metres
Dursley Road	- 10.0 metres
Nelson Road (north of Yennora Ave)	- 2.0 metres
Loftus Road/Military Road (between Boola Avenue and Byron Road) Byron Road (west side between Dennistoun Avenue and Miliary Road)	- 15.0 metres
Loftus Road (south side between Norrie Street and Yennora Avenue) Boola Avenue (north side Between Norrie Street and Yennora Avenue) Yennora Avenue (west side between Boola Avenue and Loftus Road), Kiora Crescent Norrie Street (east side between Boola Avenue and Loftus Road)	- 7.5 metres
Loftus Road (south side between Yennora Avenue and Boola Avenue) Boola Avenue (between Yennora Avenue and Bend), Boola Avenue (west side between Bend and Loftus Road), Yennora Avenue (east side),	- 4.5 metres
Military Road Boola Avenue (south side between Norrie Street and Yennora Avenue), Yennora Avenue (west side between Boola Avenue and Military Road),	- 3.5 metres

Military Road (north side between Norrie Street and Yennora Avenue), Norrie Street (east side between Boola Avenue and Nelson Road)	- 5.5 metres
Boola Lane (r.o.w.)	- 6.00 metres
Dennistoun Avenue (south side)	- 30.5 metres
Fairfield Road (east side between Dennistoun Avenue and Dursley Road)	- 10.0 metres

Guildford Industrial Area

Carrington Road (south side), Cann Street, Guernsey Street, Clarke Street, Military Road (between Byron Road & Carrington)	- 4.5 metres
Byron Road (east side between Military Road and Dennistoun Avenue)	- 4.5 metres
Byron Road (west side between Military Road and Dennistoun Avenue)	- 15.0 metres

Holroyd Industrial Avenue

Walpole Street (north side between the Creek and Crescent Street) Crescent Street	- 7.5 metres
Walpole Street (north side between Fox Street and the Creek), Peel Street, Fox Street, Robert Street (south side between Fox Street and Peel Street)	- 4.5 metres

Girraween/Toongabbie Industrial Area

Toongabbie Road, Amax Avenue Mandoon Road, Magowar Road Gilba Road, Wiltona Place	- 10.0 metres
Oramzi Road (west side between Gilba Road and Wiltona Avenue) Great Western Highway	- 30.5 metres
Great Western Highway (between Toongabbie Road and Girraween Road)	- 15.0 metres

Greystanes Industrial Area

Great Western Highway (west of Greystanes Road)	- 7.5 metres

2.6. Parking and Vehicular Access

Objectives

O1. To ensure sufficient car parking is provided on-site to satisfy the likely peak parking demands of the development.

O2. To reduce potential conflict with street traffic and pedestrians.

O3. To require the provision of disabled parking where appropriate, in accordance with the RMS Guidelines and Australian Standards.

O4. To create attractive landscaped car parking throughout the development.

O5. To ensure adequate facilities are provided within an industrial development for the loading and unloading of goods.

Development Controls

Parking Spaces

Note: For general car parking requirements refer to Part A of this DCP.

C1. For major industrial undertakings, provide at least one courier car space in a convenient and appropriately signposted location. The car space should preferably be located with access off the principal street frontage.

C2. Parking and manoeuvring areas must be adequately dimensioned to facilitate convenient and safe usage. Refer to the design standards for "large rigid truck". See Figure 10.

C3. Integrate parking into the site planning with high quality landscaping. See figures 9 & 12.

C4. Suitably cover car parking areas with canopy trees. See section below on Landscaping.

C5. Screen parking areas from the street with landscaping.

C6. No tandem parking facilities will be accepted for new developments.

C7. Permit only limited visitor & disabled car parking at the front of buildings where the front setback equals or exceeds 15m (Refer Figure 12), excluding Multi Unit Industrial Development.

C8. Limit visitor parking to 50% of the street frontage. Also refer to the section on setbacks in corner lots for car parking within the secondary setback.

C9. For new or major redevelopment (excluding Multi Unit Industrial Development), provide all loading and unloading facilities and the majority of car parking required for the development at the rear or at the side of any buildings.

C10. Car parking and loading/unloading facilities are prohibited within the front setback for Multi Unit Industrial Development. Provide all car parking and loading/unloading facilities from a central courtyard within the site.

Access & Circulation

C11. Ensure that parking areas are readily accessible and useable, and adequately provide for circulation and manoeuvring of vehicles. Refer to Part A

C12. Design vehicular movements to and from the site to reduce potential conflict with street traffic

and pedestrians.

C13. Provide vehicular crossings with a maximum width of 8 metres at the boundary line. This however this is dependant upon the traffic flows, sight distances, manoeuvring and the type of vehicles using the crossing.

Note: Refer to specifications for vehicular crossing standard requirements in the Council's Vehicular Crossing Policy.

C14. Minimise driveway width in front of the building line.

C15. Locate driveways on side or rear road frontages where available.

C16. Do not locate driveways off an arterial road, unless no other option is available.

C17. Ensure all vehicles enter and leave the site in a forward direction (Refer Figure 10). Provide for turning circles to accommodate the largest type of truck which could reasonably be expected to service the site. Turning circles should not encroach upon any building footprint.

C18. Ensure the location of entry gates allow the largest vehicle to enter the site without blocking the footway when the gate is closed.

Note: Requirements for Road Design and Construction within all Industrial Zones can be found in Part A of this DCP.

Loading/Unloading Areas

C19. Provide separation between parking and service areas (i.e. loading/unloading areas). Locate and design service areas to facilitate convenient and safe usage. (Figures 7 & 8.)

C20. Locate loading docks so they do not:

a) interfere with visitor and employee parking spaces;

b) interfere with pedestrians or vehicles circulating on the site or adjacent streets; and

c) require or permit, when in use, delivery vehicles to stand on any public road, footway, laneway or service road.

C21. For small factories and factory units, provide one small truck bay for each factory or factory unit.

C22. For other developments requiring loading facilities, applicants need to justify to Council the size and number of docks required by providing information regarding the size, number and frequency of goods vehicles likely to be visiting the premises.

C23. Design loading areas so that goods vehicles enter and leave the site in a forward direction. Provide adequate manoeuvring space on site to facilitate this.

Note: Make reference to the relevant templates prepared by the Roads and Maritime Service of New South Wales to justify design of the loading areas.

C24. Maintain proposed parking areas, truck docks, driveways, vehicular ramps and turning areas so they are clear of obstruction. Under no circumstances are such areas or any portion thereof to be used for the storage of goods and waste materials.

C25. Ensure loading/unloading areas are physically line marked and are maintained free of obstruction for the sole use of delivery vehicles. (Figures 8 and 9)

C26. Ensure parking areas, truck docks, driveways, vehicular ramps and turning areas are used exclusively for the purposes of car parking, loading or unloading and vehicular access

respectively.

Service Areas

C27. Ensure all garbage collection is carried out wholly within the site, with suitable collection points at convenient locations.

C28. Do not locate service areas adjacent to a non-industrial adjoining use.

C29. Garbage storage and location areas are to be designed so as to be readily serviced within the confines of the site with minimum impact on adjoining uses.

Note: Refer to Part A, for Waste Management controls.

Design of Paved Areas

C30. Do not provide large expanses of bland concrete paving in the car parking and driveway areas. Provide a contrast of paving materials throughout the development i.e. unit pavers and concrete. Stencilled concrete will not be permitted.

C31. Council requires:

a) Unit pavers to the front setback and carparking in central courtyard;

b) Plain concrete to the rear, as long as it is broken into smaller patches with other contrast paving materials.

Figure 7 : Setbacks for industrial development

Figure 8 : Setbacks for industrial development

Figure 9 : Setbacks for industrial development

Figure 10 : Indicative site layout and design

Figure 11 : Front parking dimensions

2.7. Road Design and Construction within Industrial Zones

Development Controls

C1. Ensure that new roads are constructed with kerb and gutter and are sealed from gutter to gutter. Construction is to be of a standard not less than Council's standard specification for heavy duty roads.

C2. Ensure that the minimum width of carriageway plus verge is 20 metre wide with 12 metre carriageway and 4 metre verges .The construction of 1.2 metre wide concrete footpaths will be required.

Note: Complete standard specifications for road and drainage works may be purchased or inspected at the Council Chambers.

C3. Cul-de-sac roads will only be accepted where surrounding land has been fully developed, or where the site specific controls for the area provide for cul-de-sac roads.

C4. Ensure that cul-de-sac roads have an 18 metres radius turning circle with 18 metres radius reverse curves on boundary alignments. See Figure 7.

C5. Provide a higher strength pavement for cul-de-sacs at intersections in industrial areas. Generally a minimum of 1 metre clearance is required.

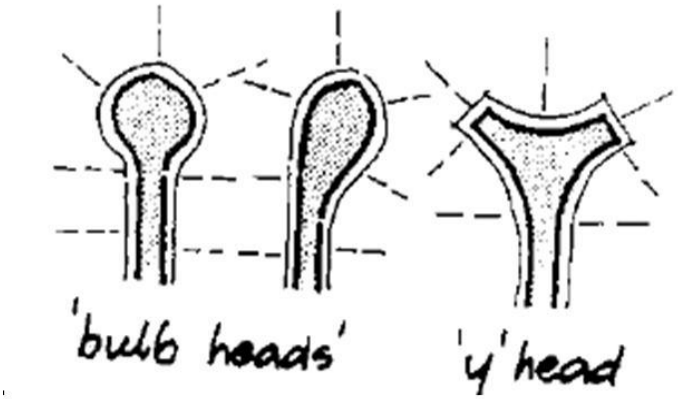


Figure 7

2.8. Fences

Objectives

O1. To minimise any visual impacts to the streetscape.

O2. To provide site security, whilst allowing passive surveillance from the public domain.

O3. To ensure that the fencing proposal complements the building and landscape design for the site

Development Controls

C1. Locate fences within the 3 metre wide landscaped frontage i.e. between front parking and front boundary.

C2. Ensure all fencing along the principal street frontage is an open (permeable) style, incorporating pickets, slats, palings or the like or lattice style panels with a minimum aperture of 25mm, finished in a suitable colour - dark colours are preferable.

C3. Ensure a maximum height of 1.2 metres for fences within the front setback, or 2.1 metres for fences behind the front setback.

C4. Ensure that chain wire fencing is:

a) only on the side and rear boundaries;

b) not visible from the public domain (Figure 12);

c) commencing at the front building alignment, not the front boundary; and

d) black PVC coated.

C5. Restrict the masonry element of walls within the frontage to 1200mm in height.

C6. Solid metal panel fences (sheet metal or similar) of any height are not permitted along the street frontage or in front of the building alignment. The exception is where a 1.8m high opaque fence is required to screen a storage area within the front setback.

C7. If the side or rear boundary faces a side or rear boundary of a residential premises, a timber paling/colourbond fence (commencing at the front building alignment) is permitted along with acoustic fencing and planting.

Figure 12: Chain wire is not permitted for front fencing

Figure 13: Masonry fencing higher than 600mm high requires consent

3. Landscaping of Industrial Sites

Objectives

O1. To screen unsightly land uses and open storage areas and provide buffers between industrial development and other land uses, especially residential.

O2. To provide pedestrian linkages to surrounding streets on larger sites.

O3. To provide recreation areas for workers in larger developments.

O4. To provide aesthetic and environmental amenity.

Development Controls

Note: Refer to Part A, of this DCP for General landscape and tree works controls.

C1. Landscape and maintain the landscaping in all setback areas.

C2. Landscape all unbuilt-upon areas of a site to soften the impact of buildings and car parking areas.

C3. Provide and maintain a minimum of 10% of the site as landscaped area, with lawns, trees and shrubs. The landscaped area includes the landscaped parts of all setbacks, but in the case of lots greater than 2,000m^2, provide and maintain a minimum of 15% of the site as landscaped area.

C4. Use contrasting finishes to break up large sections of paving and to delineate pedestrian areas, entries or car parks. Use porous paving wherever possible.

C5. Stabilise undeveloped areas to prevent soil erosion. Provide landscaping around the perimeter of undeveloped areas.

C6. Provide earth mounding within the setback area. Ensure that embankments that are not developed with rockeries or walls are no steeper than one (1) vertical: four (4) horizontal gradient in order to enable grass to be grown and maintained.

C7. Harmonise landscaping with buildings, the form of grass or ground cover, trees, shrubs and paving.

C8. Ensure landscaping proposals for a car park on an industrial site are treated in accordance with Part A.

C9. Provide landscape along the building façade.

C10. Ensure landscaping in the public domain reinforces existing streetscape planting themes and patterns. Provide street tree planting to match existing or to Council requirements, grasses, shrubs and accent planting or any combination of these.

C11. Effectively screen storage areas and other potentially unsightly areas from adjacent properties.

C12. Provide a continuous landscaped buffer strip between the driveway and side boundary, in accordance Section 2.5 of this Part. Within the buffer strip, provide tall screen planting that retains foliage to the ground. Plant driveways central to the site with avenue trees.

C13. Ensure landscaping within setback areas is of a similar scale to buildings on the industrial site. Separate all landscaped areas from vehicular areas by means of a kerb, dwarf wall, or other

effective physical barrier.

C14. If underground parking is to be provided, ensure that it does not interfere with the provision of deep soil planting areas.

C15. Ensure that underground OSD (stormwater) detention tanks do not interfere with the provision of deep soil planting areas. An alternative location is suggested underneath driveways, car parks or pavements. See Council's On-Site-Detention Policy.

C16. An above ground OSD system should not have an adverse impact on the streetscape. Highly vegetate the area around the OSD basin to minimise the impact.

C17. Locate stormwater inlet pits or piping beyond the drip line of existing trees, where possible.

4. Retail & Commercial uses in Industrial Zones

Objectives

O1. To serve the daily convenience retail needs of the people working in an industrial area.

O2. To protect the Industrial land use as the predominant use of the industrial zone.

O3. To preserve the amenity of neighbouring occupations.

Development Controls

C1. In the General Industrial IN1 and the Light Industrial IN2 zones, Council will only permit business and office premises and non-retail showrooms which:

a) are ordinarily incidental or subsidiary to and situated on the same land as an industry ;

b) cover no more than 20% of the gross floor area of the industrial building; and

c) provide no retailing or over-the-counter sales.

C2. The maximum floor area of Food & Drink Premises are:

a) 100m^2 in General Industrial IN1;

b) 300m^2 in Light Industrial IN2.

Hours of Operation

C3. The Council, under normal circumstances, restricts the hours of industrial operations to the hours of 7.00am to 7.00pm, Monday to Friday; 7.00am to 12 noon, Saturday and no work on Sunday.

Note: Retail in industrial zones land located on a classified road shall have hours of operation 7.00am to 10.00pm Monday to Saturday and 7.00am to 8.00pm Sunday and Public Holidays

C4. The Council, under normal circumstances, restricts the hours of retail trade in industrial zones to the hours of 7.00am to 8.00pm, Monday to Saturday and 7.00am to 2.00pm on Sunday.

C5. Provide a noise impact assessment with Development Applications that propose activities with operating hours outside Council's standard business hours.

Note:

- 24 hour operation of business use is not prohibited on noise criteria, providing the residential receiver noise criteria (as mentioned above) are achieved.
- An extension of these hours requires an application under Section 96 of the Environmental Planning and Assessment Act 1979, accompanied by reasons for seeking the variation. In certain circumstances, a variation will only be considered upon submission of a satisfactory acoustical engineer's report.

5. Pollution Control

Objectives

O1. To ensure that industrial activity causes no interference to the existing and future amenity of the adjoining industrial occupations and the neighbourhood in general.

O2. To ensure that satisfactory measures are incorporated to alleviate negative environmental impacts associated with industrial zones.

O3. To ensure minimal emissions.

O4. To ensure that the use of the land does not create an offensive noise or add significantly to the background noise level of a locality.

Development Controls

Air Pollution

C1. Control the emission of air impurities, as defined under the Protection of the Environment Operations Act, 1997, to the satisfaction of Council at all times.

Note: If any proposed use or activity within the site falls into Schedule 1 of the Protection of the Environment Operations Act 1997, the occupier must also hold a licence from the NSW OEH, or its equivalent.

C2. Obtain written consent from the Council to install any furnace, kiln, steam boiler, chemical plant, sand blast or plant for spraying paint or the like. Submit plans and specifications for any such equipment for approval prior to installation.

C3. During construction, implement appropriate mitigation measures such as truck washing bays and wetting of dirt roads.

C4. Within the Statement of Environmental Effects of a Development Application, include an assessment of air quality according to EPA standards.

Water Pollution (Industrial Waste & Stormwater)

C5. Do not discharge industrial waste water onto the site, nor onto neighbouring land, nor into any road, drain, pipeline or watercourse.

C6. Submit details of the chemical and/or biological composition of liquid waste with the Development Application.

C7. If the premises are subject to licence under the Protection of the Environment Operations Act, 1997, comply with any conditions of such licence that form part of any building approval.

C8. Erosion and Sediment Control Plans (ESCP) are required for new developments to prevent pollution of the creeks during the construction phase of development. The plans must be prepared in accordance with Managing Urban Stormwater: Soils and Construction, published by the NSW Department of Housing.

C9. Treat on-site stormwater in accordance with Part A of this DCP.

Noise Pollution

C10. Adequately sound-proof any machinery or activity that creates a noise nuisance in accordance with the provisions of the Protection of the Environment Operations Act, 1997.

C11. Conduct the industry so as to avoid unreasonable noise and cause no interference to adjoining industrial occupations. Take special precautions to avoid nuisance in neighbouring residential zones, particularly from warning sirens, public address systems, heavy-duty compressors and the like.

Refuse and Trade Waste

Note: For controls for Refuse and Trade Waste, see Part A of this DCP,

C12. Council does not permit Incinerators for waste disposal.

C13. Consult with Sydney Water regarding whether a Trade Waste Discharger's Licence is needed. If required, it should be obtained prior to occupation of the industrial premises.

Hazardous Goods and Chemicals

C14. Where a development involves the storage and/or use of hazardous goods or chemicals, full details of the type of goods and chemicals are to be submitted with the development application, together with the storage location and the use intended for the goods and chemicals. The requirements and conditions of the Storage and Handling of Dangerous Goods: Code of Practice (WorkCover NSW; 2005) shall form part of the building approval.

Note:

- Under SEPP No. 33 – Hazardous and Offensive Development, all applications to carry out potentially hazardous development must be advertised, and applications to carry out potentially hazardous development must be supported by a preliminary hazard analysis (PHA). The SEPP also requires specified matters to be considered by the consent authorities for development proposals which are 'potentially hazardous' or 'potentially offensive'. Details of the policy are obtainable from the Environmental and Planning Services Department of Council.
- For controls for Site Contamination and Land Filling, see Part A of this DCP.

6. Factory Units

Note: The following controls for factory units shall be read in conjunction with all other objectives and controls in this Part.

Floor Area

C1. Provide a minimum of 140 sq metres floor area for each factory unit, which can include employee toilets and amenities.

Construction

C2. Ensure that the total building containing the factory units is of a brick or masonry construction, with all internal divisions, separating the various units, similarly of brick or masonry construction.

C3. Ensure that the internal walls separating the factory units are carried to the underside of the roof and sealed to Council's satisfaction.

Vehicular Access

C4. Ensure at least 9 metres width to all access roads to prevent obstruction to driveway and to allow reasonable entry to factory units.

C5. Keep driveway free of parked vehicles or stored materials at all times. Narrow the width of driveway to 6 metres across the landscaped strip. If it is anticipated that future tenants will require deliveries by semi-trailers or large trucks, in general, provide for turning circles to accommodate the largest type of truck which could reasonably be expected to service the site. Ensure turning circles do not encroach upon any building.

Note: Requirements for Road Design and Construction within all Industrial Zones can be found in Part A of this DCP.

Numbering of the Units

C6. In a development application to Council, label each unit in the building numerically. Each unit is to retain such identification unless otherwise approved by Council.

Amenities

C7. Provide individual male and female toilets in each unit with connection to the sewer. Provide each unit with its own employee amenities.

Industrial Activity

C8. Conduct all industrial activity within the building such that the activity shall not occur externally to the building, and this shall deem to include loading and unloading and also storage of new and waste materials unless special areas have been set aside for these activities with the consent of the Council.

Advertising

Note; Signs and advertising in Industrial Zones shall comply with Part F of this DCP.

C9. Limit advertising to one uniform sign on each unit. Identify both lessee and unit number with an index board at the front of the property.

Consent for the Use of each Factory Unit

C10. As well as obtaining development consent for the erection of a factory unit building, obtain the consent of the Council for the specific use of each individual unit before each unit can be occupied.

Trade Waste

C11. Store trade wastes within each unit. Indicate the area to be set aside for this purpose on the Development Application.

Note: Requirements for commercial / industrial waste & recycling storage areas found in Part A of this DCP

Strata Subdivisions

C12. Where there is to be a strata plan of subdivision, any space for parking or other purposes to form a part of a sole occupancy unit must be included in the strata lot, as required by Council. All areas required by Council as private court, service area, or unbuilt space for an individual unit, require identification as forming part of the lot of the appropriate unit on any strata plan of subdivision.

C13. In any strata plan of subdivision, include as common property all landscaped areas, access areas and directory board signs that do not form part of an individual unit.

7. 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 Holroyd Local Environmental Plan 2013, 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 6.9 controls Riparian Land and Waterways and local clause 6.10 controls Biodiversity.

Development Controls

C1. In addition to the requirements for land within the Environmental Conservation zone and the local clauses of the HLEP 2013, 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 officers of Council's Environmental and Planning Services.

8. Planning Controls for Sex Services Premises

Planning controls for Sex Services Premises are designed to ensure that Sex Services Premises are operated in appropriate locations so that they do not give offence to the community or result in a loss of amenity for residents.

The passing of the Disorderly Houses Amendment Act, 1995 means that it is not a common law offence to operate a brothel, nor for the owner/operator of a brothel to live on the earnings of prostitution carried out on brothel premises. Sex Services Premises do however, require Development Consent from Council before they can operate, and must also comply with Council's planning controls. These controls are contained in the Holroyd Local Environmental Plan 2013 and the provisions of this Development Control Plan.

Objectives

O1. The principal objective of this DCP is to implement the aims and objectives of the Holroyd LEP 2013 relating to Sex Services Premises by providing detailed planning controls to ensure that the location, design and operation of Sex Services Premises do not adversely affect the amenity of the area.

O2. To provide more certainty in the development control process and assist the community and applicants to understand Council's requirements relating to Sex Services Premises.

O3. To nominate the location requirements and development standards for Sex Services Premises which reflect broad community attitudes and expectations.

O4. To provide appropriate guidelines which will prevent a concentration of Sex Services Premises in close proximity to one another.

O5. To identify appropriate health and hygiene standards relating to the management of Sex Services Premises.

O6. To ensure that adequate measures address safety and security issues for Sex Services Premises.

Development Controls

Time Limited Consent

C1. Development consents granted to brothel applications may be initially limited to a period of twelve (12) months. At the completion of this period, Council will re-evaluate the proposal in terms of any complaints received regarding the approved operations, and compliance with any conditions of development consent.

C2. If Council is satisfied that the brothel has operated in an orderly manner and with limited impact upon surrounding and nearby land uses, it shall then grant a permanent development consent.

C3. Council may also impose conditions of consent relating to the hours of operation. This will also be the subject of review after 12 months. If after the 12 month trial, the approved hours of operation are causing a disturbance in the neighbourhood, the Council may further restrict operating hours.

C4. Where consent is granted, a specified operator will be nominated on the consent. Should the operator change, Council must be notified prior to work commencing. If the number of

sex workers, hours of operation, or signage are proposed to be changed, a new development application may be required.

8.1. Location, Access and Layout

Objectives

O1. To ensure that Sex Services Premises are sensitively located and designed so that they do not create adverse social impacts;

O2. To ensure that Sex Services Premises do not cause overt offence to community values at large.

O3. To ensure that Sex Services Premises do not result in any other adverse environmental effects.

Development Controls

Note: Holroyd Local Environmental Plan 2013 indicates the areas in which development for the purpose of a sex services premises are a permissible use,

C1. The preferred location for a brothel is either on first floor level or below street level. However, access may be provided from street level. If the brothel is at street level it should not be in a street front location.

C2. The brothel building shall not be in a prominent position or at a focal road intersection.

C3. The appropriate location of Sex Services Premises should also have regard to whether the operation of the brothel could cause a disturbance in the neighbourhood when taking into account other Sex Services Premises operating in the neighbourhood. In this regard, Council may not permit "congregation" of sex services premises in close proximity to each other so as to form or potentially form "red light districts".

C4. The sex services premises should not be located so as to have an adverse social or environmental effect on existing surrounding and adjoining land uses and businesses in the locality or within the same site.

C5. The sex services premises should not be located within 200m of community sensitive sites such as schools and residences in residential zones, recreation areas, cycleways and places of public worship.

Access

C6. Provide sufficient off-street parking to cater for the specific needs of the brothel having regard to the scale of the activity and other activities situated on the same property.

C7. Access to the premises shall not be visible from a public place.

C8. Carparking areas, access corridors and entrances are to be adequately lit for the security of both workers and clients.

Layout

C9. It is imperative that suitable reception/waiting areas be provided to the brothel so as to prevent clients loitering outside these premises.

C10. The layout of the proposed brothel when in operation shall not cause any disturbance in

the neighbourhood that is a direct result of its scale, (including the number of sex workers, support staff, clients, lighting and/or noise).

C11. In no circumstances should sex workers be visible in windows or doorways of their related premises.

8.2. Parking

Objective

O1. To ensure that any development provides adequate off-street car parking facilities for the traffic it is likely to generate.

Development Controls

C1. Parking for Sex Services Premises is to be at the rate of 1 space for each 2 employees on the premises at any given time.

C2. One space should be suitable for disabled parking.

C3. Parking areas are to be well lit and signposted.

8.3. Hours of Operation

Objectives

O1. To ensure that Sex Services Premises operate at times where they will have least impact on the community, the environment and nearby land uses.

Development Controls

C1. The hours of operation are not specified by this DCP. In the case of each development proposal, Council will exercise its discretion in relation to permitted hours of operation of Sex Services Premises in the circumstances of each case, taking into consideration the nature of adjoining land uses, hours of operation/use of those premises and possible conflicts with such uses.

8.4. Security and Public Safety

Objectives

O1. To ensure that adequate measures are taken to protect the personal safety of workers, clients and the general public, especially when approaching, entering and leaving the premises.

Development Controls

C1. Ensure that the development conforms to the objectives and controls within Section 10 of Part A of this DCP.

C2. Provide details on measures to be undertaken to safeguard workers, clients and the general

public. Such details are to include:

a) security personnel;
b) the lighting of access ways and car parking areas, particularly in respect of isolated premises;
c) security doors;
d) 'active' uses presented to the street to promote surveillance and safety;
e) premises clearly numbered, with the number clearly visible from the street;
f) avoid the use of isolated back lanes and poorly lit areas;
g) any landscaping that is proposed must not obstruct the visibility from public areas of entrances and exits.

C3. The licensing of premises for the sale or consumption of alcoholic beverages is strictly prohibited.

8.5. Health and Building

Objectives

O1. To ensure Sex Services Premises are operated in a manner which will not assist the spread of communicable diseases.

O2. To promote education of sex industry workers and their clients so as to minimise the risk of contracting sexually transmitted infectious diseases.

O3. To ensure that reasonable working conditions are provided for sex industry workers.

O4. To provide for an acceptable level of fire protection and safety for persons accommodated in or resorting to the building.

Development Controls

Health

C1. Make adequate provision for amenities (showers, toilets, basins, etc) for use by workers and clients, having regard to the scale of the proposed development.

C2. Council's health requirements are specified in Council's Policy "Health Standards for sex services premises" and must be complied with. A summary of the requirements is as follows:-

- **a)** the cleanliness of the premises;
- **b)** sanitary facilities;
- **c)** the safe storage and handling of contaminated waste (including its disposal by the OEH Licensed collectors);
- **d)** the provision and cleaning of linen and laundry items;
- **e)** pool and spa water complying with the NSW Health Department's "Guidelines for Disinfecting Public Swimming Pools and Spa Pools";
- **f)** education of workers and their clients;
- **g)** the provision and storage of condoms and other approved latex products under the Therapeutic Goods Accreditation;
- **h)** health of sex workers;
- **i)** the examination of clients;
- **j)** ventilation and lighting;
- **k)** noise; and
- **l)** bars and food preparation areas.

Fire Safety

C3. Keep passageways, hallways, corridors, egress paths and the like clear of obstructions and accessible to a minimum width of one (1) metre or a greater distance if so directed by Council.

C4. Provide fire safety equipment, emergency lighting, exit signs, smoke detectors and any other essential services to the satisfaction of Council.

C5. Provide the correct type of portable fire extinguishers (for example, water-based extinguishers for paper and wood fires; dry chemical extinguishers for electrical fires). These must be appropriately identified, accessible and their location(s) made known to all employees.

C6. Ensure all essential services are serviced by a suitably qualified person and a Certificate of Compliance must be forwarded to Council annually.

C7. Establish and signpost evacuation procedures with instructions, and carry out emergency drills on a regular (minimum 3 monthly) basis. Ensure adequate general maintenance of all work buildings and structures. This should cover, for example, electrical safety and maintenance of floors to avoid trip hazards.

Application to Close a Brothel

Note: Council can make an application to the Land and Environment Court under Sections 121B and 121ZR of the Environmental Planning & Assessment Act for premises not to be used as a brothel.

C8. Council will consider taking action under current legislation where evidence is submitted to Council's satisfaction that the premises is causing sufficient disturbance to the neighbourhood to warrant action.

9. Yennora Distribution Park

The following controls apply to Yennora Distribution Park, being land described as Lot 2 DP 711948, and known as 14-54 Dennistoun Avenue, Yennora.

Introduction

The subject property is one of the most significant industrial sites in Sydney and in the Holroyd local area. The combination of size, location, accessibility and the well developed railway infrastructure provides a strategically important asset having local, regional and state status.

The site has been used historically as a major wool warehousing and distribution centre. In recent times other storage and distribution activities have developed on the site.

In the short to middle term, the property will continue to be used for wool related activities and other conforming uses.

The vision for the site is to maximise its efficient use and development as a strategic industrial property, which will be a major employment and business centre in Holroyd and the greater metropolitan area.

This vision, including redevelopment and change of use of existing buildings and development of vacant land, must be carried out while ensuring operations and activities have regard to the impact on the features of the site and surrounds.

Objectives

O1. To establish a strategic planning framework to guide the future development of the site.

O2. To acknowledge the strategic importance of the site as a generator of major economic and employment activity for both the Holroyd area, and for the Sydney Region.

O3. To recognise the regional significance of the site as a potential major inter-modal distribution centre servicing western Sydney.

O4. To identify opportunities to enhance the economic potential of the site as an inter-modal distribution centre servicing western Sydney.

O5. To ensure that future development on the site satisfies environmental and design standards and satisfies community expectations.

9.1. Building Form

Objectives

O1. To ensure that any new building works comply with the Building Code of Australia.

O2. To ensure a high standard of visual and environmental quality.

Development Controls

C1. All building works associated with the construction of new stand alone premises are to comply with the Building Code of Australia.

C2. The compliance of existing buildings with contemporary building and fire standards will be determined when alterations are proposed to such buildings.

C3. Any future building works proposed to take place on those parts of the site in close proximity to adjacent residential zones must have regard to the following:

a) The visual appearance of the development when viewed from surrounding areas.

b) The reflective qualities of proposed external building treatments and their potential to cause nuisance glare.

c) The possible impact of noise, vibration and dust generated by operations and activities in the proposed building or surrounds.

C4. Building facades to all street frontages and a minimum of a 3 metre return, shall be constructed of brick, split masonry block or pre-cast exposed aggregate panels, with a minimum of 3.5mm aggregate. No standard concrete block work can be permitted. Painted masonry will not be accepted unless the applicant can demonstrate that the building has outstanding architectural merit incorporating special features.

C5. Side and rear walls, not visible from the street, can be constructed in galvanised iron, zincalume, fibre cement or pre-colour coated metal sheeting. Council encourages the use of pre-colour coated metal sheeting, as this cladding is more aesthetically pleasing and environmentally sustainable.

C6. Roof cladding is acceptable in tiles, galvanised iron, zincalume, or pre-colour coated metal sheeting. Locate roof ventilators, exhaust towers, hoppers and the like, as far as practicable, so as not to be readily visible from any public or residential area.

9.2. Building Setbacks

Objectives

O1. To ensure suitable setback from street frontages to enable the landscaping treatment of such when viewed from public areas; and

O2. To ensure that the physical separation between industrial and residential land uses, which is characteristic of the existing development on site can be maintained over the longer term.

Development Controls

C1. A minimum setback of 30.48 metres from the frontage to Dennistoun Avenue;

C2. All buildings and hardstand areas must be setback a minimum of 15 metres from boundaries to all other public roads; and

C3. Car parking and hard stand areas may be permitted within the setback distance subject to Council consent.

9.3. Fire Safety

Development Controls

Given the size of the tenancies and the current nature of activities and uses on the site, fire safety is one of the major issues relating to any new use or development proposed.

C1. In any development proposal on this site, provide detailed information on the proposed uses or activities, so that Council can assess the likely fire hazard of the proposed use and ensure appropriate fire fighting measures are implemented.

C2. Attention is also drawn to the fire safety provisions for industrial buildings contained in the Building Code of Australia (BCA) and the Environmental Planning and Assessment Act 1979 (EP & A Act). Particular attention should be given to Part C2 of the BCA - "Floor Area Limitations", Part D - "Means of Egress" and Part E1 - "Fire Fighting Services and Appliances". Development applications lodged with Council for approval, may be referred to the NSW Fire Brigades.

9.4. Vehicle Access

Objectives

O1. To ensure that vehicle movements generated by the existing and future uses of the property are concentrated on non-residential streets surrounding the property.

O2. To ensure the safe and efficient movement of vehicles within the site.

Development Controls

C1. Works to Council satisfaction are to be carried out on the entry point to the site from Dennistoun Avenue to physically restrict the ability for trucks to enter or exit the site from this point.

C2. All proposals for additional development are to demonstrate how heavy vehicle movements associated with the additional development will be minimised on neighbouring residential streets.

C3. Heavy vehicle access to the site is permitted only through the existing main site entrance on Loftus Road and the entrance on Byron Road.

C4. No access to and from the site is permitted from Dennistoun Avenue after 7.00pm and before 6.00am Monday to Friday and is to be closed all day on Saturday and Sunday.

C5. No new site access points are permitted onto Dennistoun Avenue or Byron Road.

C6. New vehicle access points to the site may only be obtained from Loftus Road.

C7. Access to and from the site between the hours of 7.00pm and 6.00am is restricted to those occupiers who have written approval from Council for hours of operation extending into that

time period. During these times access will be restricted to the Loftus Road entrance where a security guard is to deny access to vehicles attempting to enter the premises without consent to operate during these hours. A logbook documenting after hours access shall be available for inspection by Council upon request.

C8. Development proposals must be supported by a description of proposed internal site movements.

C9. Development applications will be referred to the Roads and Maritime Service in accordance with the provisions of Schedule 3 of the State Environmental Planning Policy (Infrastructure) 2007.

C10. Traffic generation rates for future development will be assessed to determine whether developer contributions will be conditioned for traffic calming devices on Dennistoun Avenue.

C11. Trucks accessing and leaving the site northwards are required to utilise:

a) The Cumberland Highway via Woodpark Road, Fairfield Road and Dursley Road and Loftus Road; or

b) McCredie Road and Sturt Street. (When traffic signals are provided at Sturt Street and Cumberland Highway, then the McCredie Road and Sturt Street route will be the only access route permitted.)

C12. Trucks accessing and leaving the site southwards are required to utilise Fairfield Road, Dursley Road and Loftus Road; or Pine Road and Loftus Road

C13. Trucks accessing the site are not to use Military Road, Chetwynd Road, Sherwood Road/ Centenary Road, Fowler Road, Dennistoun Avenue or Byron Road (between Carrington Road and Guildford Road West).

Signs must be erected on all entrance gates advising truck drivers that they are not to park or queue in Dennistoun Avenue, Byron Road or any other residential street in the vicinity of the Yennora Distribution Park. Such signs are to include details of the required access and egress routes to and from the Yennora Distribution Park as set out in Part D.

9.5. Car Parking Provision

Objectives

O1. To ensure that adequate car parking exists for persons employed on the site.

O2. To ensure that the amount of car parking on site has regard to the unique characteristics of car parking demands generated by land uses on the property.

Development Controls

C1. Provide car parking for any warehousing, non-warehousing and distribution related activities on the site consistent with the provisions of the parking section in Part A of this DCP.

C2. Ensure the design of any future car parking areas complies with Council's requirements specified in the parking section in Part A of this DCP.

9.6. Amenity Issues

Objectives

O1. To ensure that existing and proposed land uses on the site have minimal impact on nearby residential amenity.

Development Controls

C1. Stack shipping containers to a maximum height of four containers, unless it can be shown that shipping containers stacked to a greater height will not adversely affect the visual amenity of the adjoining residential area or be unsafe.

C2. Demonstrate to Council's satisfaction that any proposed development will have minimal impact on the amenity of adjacent residential areas. Comply with the requirements of Section 3.3 of this Part this DCP.

C3. Hours of operations will be determined accordingly. Such assessment must comply with the acoustic standards set out in the OEH's "Industrial Noise Policy";

C4. Operations are restricted to the hours of 7.00am - 6.00pm Monday to Friday and 7.00am - 12 noon Saturday with no operations on Sundays or public holidays.

C5. Operations outside these hours, up to 24 hour operations, will be considered by Council upon submission of an acoustic report which is deemed 'acceptable' by Council and prepared by a suitably qualified acoustic engineer.

Notes:

In order to determine the acceptability of an acoustic report, Council's officers may, depending on the level of complexity of the acoustic report, refer such report to a second acoustical engineer for appraisal at full cost to the applicant.

The proposed occupations of existing or future buildings within the YDP that are located adjacent to residential areas must be industries prepared to operate within the restricted hours. Consideration of 24 hour operations within buildings adjacent to residential areas will only be given under particular circumstances where an acceptable acoustic report has been received for an industry that has an operation that will not interfere with the peace and repose of nearby residents.

9.7. Landscaping

Objectives

O1. To ensure that all future development is appropriately landscaped in order to contribute to the aesthetic appeal of workplace environments.

O2. To contribute to a reduction in building mass and bulk when buildings are viewed from public areas and from nearby residential areas.

O3. To increase the likelihood of long-term survival of landscaping by using species which are adapted to the local environment, and to minimise the potential for exotic species to invade remnant bushland on the site.

Development Controls

C1. Proposals for new building works are to incorporate landscaping as part of overall building design.

C2. Landscaping is to be conducted utilising locally indigenous native plant species.

C3. Landscaping works adjacent to the locally and regionally significant remnant vegetation on the site are to be designed as a buffer zone to reduce building impact, weed invasion and assist in the long term preservation of Areas "A" and "B" on the plan contained in Appendix 2 in this DCP.

Note: See also Section 3.0 of this Part.

9.8. Remnant Vegetation

Objectives

O1. To recognise the local and regional significance of remnant vegetation this exists on the site.

O2. To recognise the State (Schedule 2, Threatened Species Conservation Act 1995) and National (ROTAP - Rare or Threatened Australian Plant) significance of Acacia pubescens which is present in the undeveloped north-eastern portion of the site.

O3. To recognise the presence of any Endangered Ecological Communities and species listed under schedule 1 of the Threatened Species Conservation Act (TSCA) 1995 which contained on the site.

O4. To ensure that all future development addresses the provisions of the Environmental Planning and Assessment Act, 1979 and the Threatened Species Conservation Act 1995, especially the specifications contained in any relevant Recovery Plan in respect of vegetation communities and individual species present on the site.

Development Controls

C1. No development is permitted within Areas "A" and "B" on the plan contained in Appendix 1 of this DCP without consideration of the provisions of the Threatened Species Conservation Act 1995.

C2. Development immediately adjacent to the Areas "A" and "B" on the plan contained in Appendix 1 must demonstrate that it causes minimal impact on remnant vegetation.

C3. Development outside of Areas "A" and "B" must ensure there is no threat to any threatened species.

C4. A management plan for the native vegetation present at the Yennora Distribution Park has been prepared. The long-term aim of this plan is the retention and management of an Endangered Ecological Community and a threatened plant species. The management plan incorporates the following:

a) a description of the flora species present in the remnant native vegetation on the site;
b) evaluation of the conservation significance of the native vegetation on the site;
c) recommendations to minimise the impact of proposed additions to the existing industrial development on the site;
d) recommendations for the management of the native vegetation on the site; and
e) recommendations for future site landscaping.

9.9. Stormwater Management

Objectives

O1. To ensure that stormwater is controlled so as to avoid damage to private and public property.

O2. To ensure that any new hard stand and roofed areas do not result in any net increases in down stream flows during storm events.

O3. To ensure that uncontrolled stormwater flows do not threaten the long term survival of remnant vegetation.

Development Controls

C1. Provide all roofing and hard stand areas with adequate drainage systems.

C2. Incorporate on site stormwater detention systems in the design of any new hard stand area or new building works. The design of such detention works are to be in accordance with Council's "On-site Stormwater Retention Policy" and certified to:

- Council's satisfaction upon completion of works; and
- Compliance with Council's other drainage requirements.

9.10. Infrastructure and Services

Objectives

O1. To ensure that all required services and infrastructure are provided in accordance with appropriate standards.

Development Controls

C1. Provide water, sewer, telecommunication, gas and electricity to new development to Council's and servicing authority standards.

C2. Construct all new roads and hardstand areas to Council's satisfaction (see Part A of this DCP, Section 5.8 - Road Design and Construction within all Industrial Zones).

C3. Carry out bulk earthworks to Council's satisfaction.

9.11. Site Contamination and Land Filling

Objectives

O1. To recognise that existing undeveloped areas on site are largely free of contamination.

O2. To recognise that no data exists on the possible contamination of developed land on site.

O3. To ensure that Council is satisfied that no new building works take place on land contaminated by previous land uses.

O4. To ensure future building works are constructed on stable sub-surfaces.

Development Controls

C1. Council requires evidence of existing site contamination prior to the approval of new building works on the site.

C2. New building works are to demonstrate the geotechnical stability of sub-surface conditions prior to Council issuing a Construction Certificate.

9.12. Railway Infrastructure

Objectives

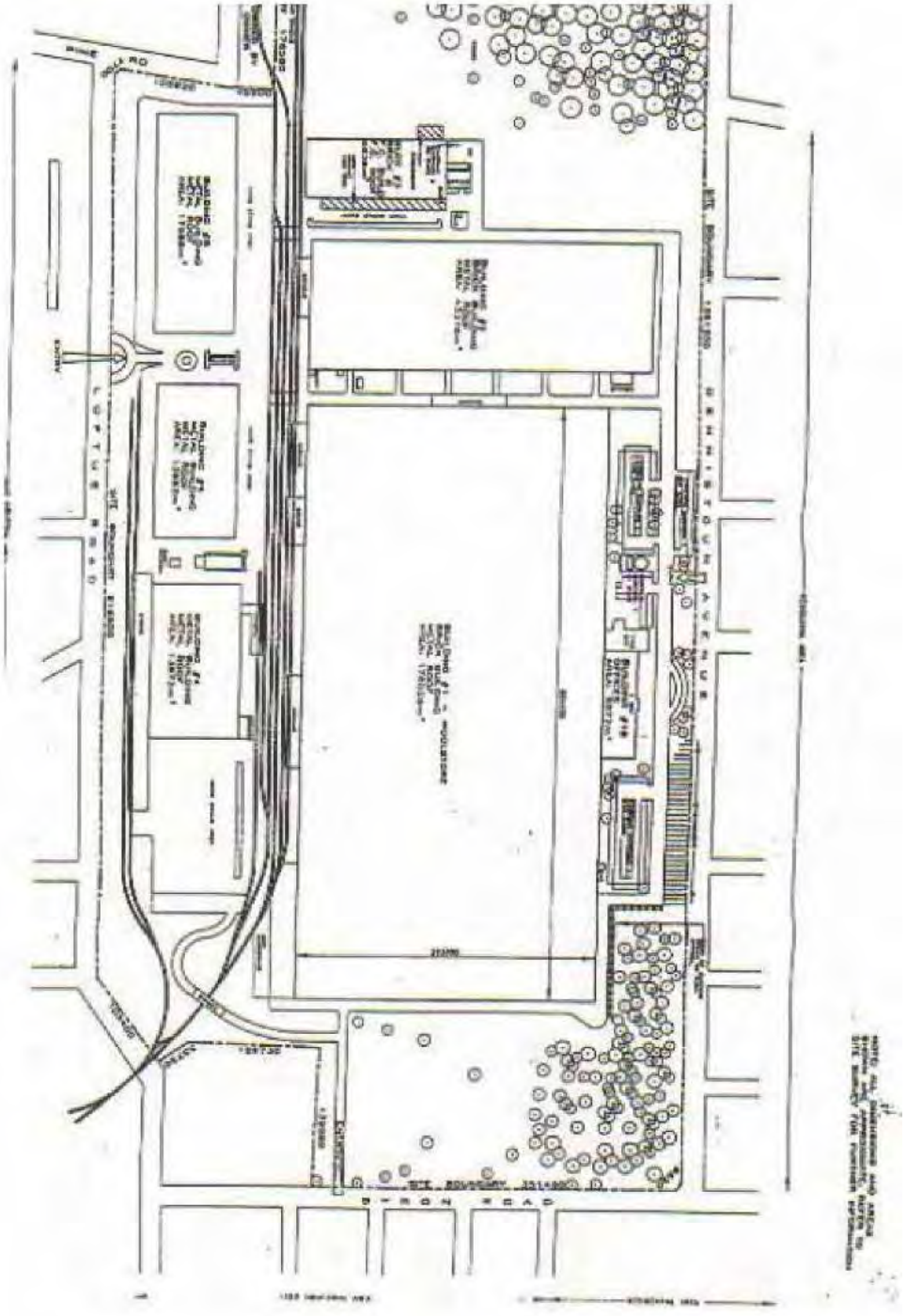
O1. To ensure that the future development of the railway infrastructure does not negatively impact upon the amenity of surrounding residential development.

Development Controls

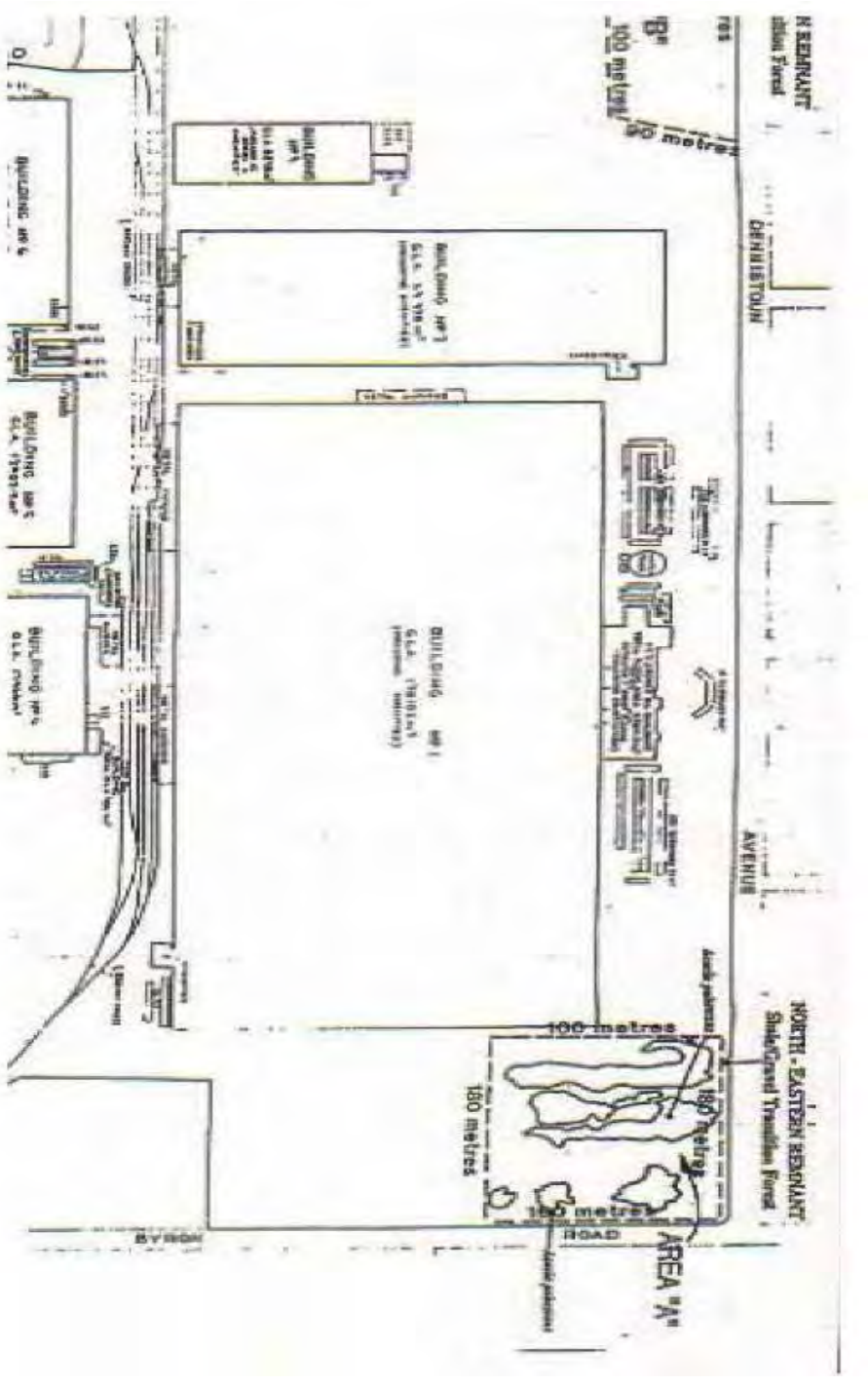
C1. Future development applications involving the upgrading and development of new rail infrastructure are to provide a detailed description to Council of the nature of use of such infrastructure.

C2. Ensure that train arrivals and departures and carriage shunting operations are restricted to between the hours of 7.00am to 6.00pm Monday to Friday, 7.00am to 12.00 noon Saturday, with no operations on Sundays and public holidays. Where this cannot be achieved, written evidence as to why these hours cannot be met should be provided for consideration by Council.

Appendix 1: Site Plan for Yennora Distribution Park



Appendix 2: Remnant Vegetation Areas in Yennora Distribution Park



Part E

Public Participation

Holroyd Development Control Plan 2013

Holroyd City

Public Participation

Contents

Public Participation

Introduction

Land to which this Part applies

Land to which this Part applies includes all land zoned or unzoned under Holroyd Local Environmental Plan 2013.

Relationship to other Parts of Holroyd Development Control Plan 2013

Part E of Holroyd DCP 2013 shall be read in conjunction with the following Parts of Holroyd DCP 2013, which contain objectives and development controls that may relate to development in this Part:

Part A - General Controls

Part B - Residential Controls

Part C - Commercial, Shop Top Housing and Mixed Use Development Controls

Part D - Industrial Controls

Part F - Advertising and Signage Controls

Part G - Places of Public Worship Controls

Part H - Heritage and Conservation

Part I - Child Care Centre Controls

Part J - Site Specific Controls

Part K - Holroyd Gardens Controls

Part L - Town Centre Controls

Part M - Merrylands Centre Controls

Part N - Transitway Precinct Controls

Part O - Guildford Pipehead Site Controls

Part P - Pemulwuy Residential Controls

Part Q - Pemulwuy Industrial Controls

Part R - Definitions

Objectives

The principal objectives of public participation are to implement the aims and objectives of Holroyd LEP 2013 and fulfil the requirements of the EP&A Act 1979, relating to public participation by controlling development:

O1. To identify the types of development for which public participation will be invited.

O2. To identify the types of development for which the public will be notified but comment not invited.

O3. To outline the procedures by which development applications (DAs) submitted to Council (for which public participation is invited) are advertised and notified.

Public Participation

O4. To outline the procedures to be taken by private certifiers to notify adjoining owners of proposed complying development.

O5. To provide a consistent and integrated approach to the public participation process.

O6. To ensure that public consultation is an integral part of Council's decision making process by providing the community with a reasonable opportunity to comment on proposed developments and draft plans and studies.

O7. To ensure an efficient development assessment process by providing a logical timeframe for community consultation and the determination of DAs.

O8. To ensure that the appropriate owners and/or occupiers are notified of development occurring on adjoining and adjacent properties.

1. Notification Requirements

1.1. Development Applications (Residential Subdivision)

Type of development	Advertising/ notification period	Notification process	Comments
Residential subdivision involving the construction of a roadway	Fourteen (14) Days	Written notice to adjoining and opposite owners Notice on the site Notice in the local press	If re-notification is necessary it will be for a period of seven (7) days and will only involve re-notification of adjoining and opposite owners by way of a written notice
Other Residential Subdivision	Nil	Nil	Nil

1.2. Development Applications for up to Two Dwelling Houses and Ancillary Development

Type of development	Advertising/ notification period	Notification process	Comments
Residential dwellings (dwelling houses, dual occupancies, semi-detached dwellings), residential additions, garages, outbuildings, swimming pools, secondary dwellings (other than exempt and complying development above), and development described in other sections of this Plan.	Fourteen (14) Days	Written notice to adjoining owners	If re-notification is necessary it will be for a period of seven (7) days and will only involve re-notification of adjoining owners by way of a written notice
		Written notice to adjoining owners	

1.3. Development Applications for Three or More Dwellings

Type of development	Advertising / notification period	Notification process	Comments
Residential Flat Buildings, multi-dwelling housing, and attached housing that require development consent and one or more approvals under certain Acts - see clause 91 of EP&A Act).	Twenty One (21) days	Written notice to adjoining and opposite owners. Notice in the local press. Notice on the site	If re-notification is necessary it will be for a period of fourteen (14) days and will only involve re-notification of adjoining and opposite owners by way of written notice.

1.4. Development Applications (Boarding Houses)

Type of development	Advertising / notification period	Notification process	Comments
Boarding Houses in Residential zones.	Fourteen (14) days	Written notice to adjoining and opposite owners. Notice in the local press. Notice on the site	If re-notification is necessary it will be for a period of fourteen (14) days and will only involve written re-notification of adjoining and opposite owners.

1.5. D.A.s for New Non-Residential Development Within Residential Zones

Type of development	Advertising/ notification period	Notification process	Comments
Certain new non-residential development within residential zones that may impact on residential amenity, including: - Educational establishments - Hospitals - Medical Centres -Neighbourhood Shops - Places of worship - Recreation areas - Restaurants	Twenty one (21) days	Letter to owners of properties either side of the development site, any other adjoining properties and on the opposite side of the street. Notice in the local press. Notice on the site.	If re-notification is necessary it will be for a period of seven (7) days

Note: See also:

- Commercial development adjoining or opposite to residential development; and
- Industrial development adjoining or opposite to residential development.

1.6. D.A.s for New Non-Residential Development Within Residential Zones (lesser impact)

Type of development	Advertising/ notification period	Notification process	Comments
Certain new non-residential development within residential zones that may impact on residential amenity to a lesser extent than uses in 1.5, including: - Child Care Centres - Community Facilities - Health consulting Rooms - Bed & Breakfast Premises - Shops with existing use rights - Advertisement Signs for a non-conforming use enjoying existing use rights in residential zones	Fourteen (14) days	Letter to owners of properties either side of the development site, any other adjoining properties and on the opposite side of the street. Notice in the local press. Notice on the site.	If re-notification is necessary it will be for a period of seven (7) days
Advertisement Signs for a non-conforming use enjoying existing use rights in residential zones		Written notice to adjoining owners	

1.7. Development Applications (Industrial Development)

Type of development	Advertising /notification period	Notification process	Comments
Industrial development	Nil	Nil	Nil
Industrial development adjoining or adjacent to residential development Or Industrial use adjoining or adjacent to residential area outside standard hours of operation	Fourteen (14) Days	Letter to owners of properties either side of the development site, any other adjoining properties and properties on the opposite side of the street. Where the development application proposes to exceed the height specified in Council's planning instruments, or operates outside business hours of 9am to 5pm limit Monday to Saturday, letter to owners within a 100 metre radius as a minimum. Notice in the local press. Notice on the site. Letter to public authorities which may have an interest.	If re-notification is necessary it will be for a period of fourteen (14) days and will involve re-notification of original notified parties.
Industrial development with existing use rights		Written notice to adjoining and opposite owners . Notice on the site	If re-notification is necessary it will be for a period of seven (7) days and will only involve re-notification of adjoining and opposite owners by way of a written notice
Industrial development covered by the provisions of an environmental planning instrument requiring advertising	As required by that specific environmental planning instrument but not less than fourteen (14) days	Written notice to adjoining and opposite owners Notice on the site Notice in the local press (as required by that environmental planning instrument)	

1.8. Development Applications (Commercial Development)

Type of development	Advertising /notification period	Notification process	Comments
Any development in Business zones adjoining or opposite to residential development (unless certain uses within residential zone – see above)	Fourteen (14) days	Written notice to adjoining and opposite owners. Notice on the site.	If re-notification is necessary it will be for a period of seven (7) days and will only involve re-notification of adjoining and opposite owners by way of a written notice If re-notification is necessary it will be for a period of seven (7) days and will only involve re-notification of adjoining and opposite owners by way of a written notice
Commercial development with existing use rights (unless for new shops within residential zones – see above)			
Commercial development covered by the provisions of an environmental planning instrument requiring advertising	As required by that specific environmental planning instrument but not less than fourteen (14) days	Written notice to adjoining and opposite owners Notice on the site Notice in the local press (as required by that environmental planning instrument)	

1.9. Development Applications (Designated and Nominated Integrated Development)

Type of development	Advertising/ notification period	Notification process	Comments
- Designated development* (requires an Environmental Impact Statement) - Nominated integrated development	Minimum of thirty (30) days, or as required by that specific environmental planning instrument	Written notice to adjoining and opposite owners Notice on the site Notice in the local press	Designated development is to be advertised in accordance with the provisions of the EP&A Act & Regulation 2000.

* Designated development is development that is declared to be designated development by an environmental

planning instrument or by the EP&A Regulation 2000.

1.10. Development Applications (Home Industry and Home Business)

Type of development	Advertising/ notification period	Notification process	Comments
"Home Industry"* and Home Business Note: "Home Industry" is Exempt if as defined in the HLEP 2013	Fourteen (14) Days	Written notice to adjoining and opposite owners. Notice on the site	If re-notification is necessary it will be for a period of seven (7) days and will only involve re-notification of adjoining and opposite owners by way of a written notice.

1.11. Development Applications (Demolition or non-conforming use of an item of Environmental Heritage)

Type of development	Advertising/ notification period	Notification process	Comments
Demolition or non-conforming use of an item of environmental heritage	Fourteen (14) Days	Written notice to adjoining and opposite owners. Notice in the local newspaper. Notice on the site.	If re-notification is necessary it will be for a period of seven (7) days and will only involve re-notification of adjoining and opposite owners by way of a written notice

1.12. Development Applications (Telecommunications)

Type of development	Advertising/ notification period	Notification process	Comments
"Not low impact" telecommunications facilities, as defined by the Telecommunications (Low Impact Facilities) Determination 1997	See timeframe under the Telecommunications Code of Practice	Conditions of Deployment of Mobile Phone Network Infrastructure Industry Code	The draft Australian Communications Industry Forum (ACIF) Code further requires that the applicant undertake community consultation.
"Low impact"* facilities, as defined by the Telecommunications (Low Impact Facilities) Determination 1997 (i.e.: as proposed by holders of a Carrier Licence under the Telecommunications Act 1997).			
Communications dishes (radio and satellite) - Not Exempt + Not a public authority	Fourteen (14) Days	Written notice to adjoining and opposite owners.	If re-notification is necessary it will be for a period of seven (7) days and will only involve re-notification of adjoining and opposite owners by way of a written notice

*Typical "low impact" telecommunications facilities are 'unobtrusive' small dishes, antennae, underground cables, dishes mounted on existing buildings/towers/poles (often co-located), pits in footpaths, public phone booths, and others listed in the Schedule of Facilities and Areas in the Telecommunications (Low-impact Facilities) Determination 1997. Location will also affect whether a facility is low-impact. For example a dish is low-impact in Residential zones if it is a max 1.2m wide, but a max 1.8m wide for Industrial zones.

See Holroyd City Council Interim Telecommunications Code (2000) regarding Council's policy for microwave radiation emitting facilities.

** Typical "not low impact" facilities include:

- towers (free-standing, or >5m high, or extensions, especially in residential/commercial zones);
- overhead lines (cabling >13mm);
- radio terminal antennas or dishes (>1.2m diameter &/or >1.8m above roofline);
- other structures (e.g.: equipment inside a structure, larger roadside cabinets & equipment shelters);
- structures on heritage sites (cultural and natural).

1.13. Development Applications (Brothels and Adult Book and Sex Shops)

Type of development	Advertising/ notification period	Notification process	Comments
Brothels and Adult Book and Sex Shops	Fourteen (14) Days	Written notice to adjoining and opposite owners . Notice on site.	If re-notification is necessary it will be for a period of seven (7) days and will only involve re-notification of adjoining and opposite owners by way of a written notice

1.14. Modification of Development Consents

C1. Pursuant to Section 96 of the EP&A Act, Council shall readvertise any application to modify an existing development consent in accordance with the relevant clauses of this Part E of the DCP in the following cases:

- Section 96 (1a) – For minor modifications with low environmental/amenity impact.
- Section 96 (2) - For modifications that require public notification due to the increase in the level or any perceived increase in the level of impact.

C2. Pursuant to Section 96 of the EP&A Act, Council shall not readvertise any application to modify an existing development consent in accordance with the relevant clauses of this Part E of the DCP in the following cases:

- Section 96 (1) – To correct a minor error, misdescription, misinterpretation, miscalculation, exempt development, or applications deemed to be of minimal environmental impact (such as internal changes where the modifications have no impact on the external façade or building footprint).

1.15. Review of Development Consents and Determination of a Development Application that is subject to an application for review pursuant to Section 82A of the EP&A Act 1979

C1. If you wish to ask for a refused development to be reviewed under the Environmental Planning and Assessment Act 1979 Section 82(A), any application to reconsider an existing development refusal will be advertised in accordance with Section 3.2 below - Determination of a Development Application that is subject to an application for review pursuant to Section 82A of the Act.

C2. Where a Section 82A application has been made for a review of a determination of a development application, Council will write to each person who made a submission in relation to that Section 82A application.

C3. Notification or advertising will be in the same manner as the original application, and for a period not exceeding 14 calendar days.

C4. If amended, the notice to the applicant will specify the altered conditions of approval or reason for refusal

1.16. Information

- Where advertising fees are listed in Council's Adopted Fees & Charges, should the need arise to publish a notice in a local newspaper, this will be charged on a cost recovery basis, with the exact fee to be determined at the time of advertising. Such notices generally become necessary where a development is of a scale and nature such that its impact goes beyond the local neighbourhood.
- In the case of certain industrial and commercial development proposals, those which are either adjacent to residential development, or of a scale or nature to potentially impact on neighbouring developments (such as creating significant traffic, noise, emissions, etc impacts), will be notified by written notice to adjoining and opposite owners plus notice in the

local press. The cost will be in accordance with clause 252 of the Environmental Planning &Assessment Regulation 2000. These are addressed below.

- Notwithstanding the above provisions of this Plan, Council may give public notice of a development application if, in Council's opinion, the impacts of the development are such that notification is considered necessary. Advertising fees will be payable.
- If Council decides that a public hearing is to be held under Section 57(5) of the EP&A Act the Council must give notice of the public hearing in the following manner:
  - By letter to each person who requested a public hearing when making a submission about the draft local environmental plan; and
  - By a notice in the local newspaper.
- The letter or newspaper notice must contain details of the arrangements for the public hearing and must be sent or published, as the case requires, at least 21 days before the start of the public hearing.
- In regard to development covered by clauses where an "Advertising/Notification Fee" is charged, this fee also covers the cost of re-advertising or re-notifying a development application where amended plans warrant such re-advertising or re-notification.\
- Notices other than those referred to in Section 82(A) Reviews under the EP&A Act 1979 shall contain:

a) A description and address of the land to which the application or draft plan relates;

b) A description of the application or draft plan;

c) The name of the applicant (in the case of development applications);

d) A statement that the application or draft plan or study and documents accompanying the application or draft plan or study are in the custody of the Council and may be inspected free of charge at any time during the ordinary office hours of the Council;

e) A statement that any person during the period specified under paragraph (f) may make a written submission in relation to the development application to the consent authority,

f) The period during which written submissions may be made to the Council;

g) The name of the relevant contact person at Council and the Council file number;

h) An A4 reduced scale dimensioned plan showing site layout, elevations and outline plans, together with shadow and/or streetscape diagrams as appropriate (in the case of development applications);

i) An indication of whether or not a 3D model is available for inspection.

j) In the case of development that is integrated development, the written notice and the published notice:
   - must contain a statement that the development is integrated development, and
   - must state the approvals that are required and the relevant approval bodies for those approvals, and

k) In the case of development that is threatened species development, must contain a statement that the development is threatened species development.

l) The period referred to in subclause (f) must include:
   - in the case of nominated integrated development or threatened species development, the period of 30 days, and

Part F

Advertising and Signage Controls

Holroyd Development Control Plan 2013

Holroyd City

Advertising and Signage

Contents

Advertising and Signage

Introduction

Land covered by this Part

This Part applies to development for the purposes of Advertising and Signage.

This section aims to maintain the characteristics of buildings, streetscapes and vistas to encourage clear, concise and well designed signage that will contribute to the character of Holroyd, while having regard to the amenity of residents, pedestrians and the safety of motorists.

Relationship of Part F to Holroyd Development Control Plan 2013

Part F of Holroyd DCP 2013 shall be read in conjunction with the following Parts of Holroyd DCP 2013, which contain Objectives and Development Controls that relate to development in this Part:

Part A - General Controls

Part B - Residential Controls

Part C - Commercial, Shop top housing and Mixed use Development Controls

Part D - Industrial Controls

Part E - Public Participation

Part G - Places of Public Worship Controls

Part H - Heritage and Conservation Controls

Part I - Child Care Centre Controls

Part J - Site Specific Controls

Part K - Holroyd Gardens Controls

Part L - Town Centre Controls

Part M - Merrylands Centre Controls

Part N - Transitway Station Precinct Controls

Part O - Guildford Pipehead Site Controls

Part P - Pemulwuy Residential Controls

Part Q - Pemulwuy Northern Employment Lands Controls

Part R - Definitions

Note: State Environmental Planning Policy No. 64 – Advertising and Signage and "Transport Corridor Outdoor Advertising and Signage Guidelines – Assessing Development Applications under SEPP 64" may apply in some instances.

1. General Signage Controls

Objectives

O1. To ensure that advertising signs and structures are consistent with the range of permitted land uses and objectives of each zone.

O2. To ensure that outdoor advertising and advertising visible from outdoors conveys advertisers' messages and images while complimenting and conforming to both the development on which it is displayed and the character of the surrounding locality.

O3. To ensure that outdoor advertising does not adversely affect the area in which it is located in terms of appearance, size, illumination, overshadowing or in any other way.

O4. To ensure that outdoor advertising does not lead to visual clutter through the proliferation of signs.

O5. To ensure that advertisements and advertising structures do not disrupt vehicular or pedestrian traffic flow.

O6. To ensure that the content of advertising will not interfere with the amenity of the locality or cause offence to the general public.

O7. To ensure that advertising structures, signs and banners do not impair the safe operation of the M4 carriageway.

O8. To ensure that advertising structures, signs and banners erected on the M4 carriageway do not detract from the amenity of residential areas adjacent to the M4 Motorway.

Development Controls

General Considerations

C1. All signs must:

- be compatible with the scale, proportion and other characteristics of the site and/or building on which they are to be located;
- respect important features of the site and/or building;
- not reduce safety for road vehicles, cyclists or pedestrians by obscuring sightlines.

C2. Where signs include illumination, they must:

- not result in unacceptable glare;
- not affect safety for pedestrians, vehicles or aircraft;
- not detract from the amenity of any residence or other form of accommodation;
- permit the level of illumination to be varied according to time of day.

C3. Advertising signs and structures are to conform to the relevant design specifications contained in Section 7.0 of this Part of the DCP.

Note: Applications for signs must include details of any safety devices, platforms, lighting devices or logos as an integral part of the signage or structure on which it is to be displayed.

General Exclusions

C4. 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, construction hoardings or the like;
- be of a portable nature, such as a sandwich board, 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;
- include inflatable signs or structures, other than temporary signs (see Section 6 of this Part of the DCP);
- be located on or above awnings, except within business zones; and
- be located on or above rooftops.

Streetscape and Views

C5. With regard to streetscape and local visual character, the proposed sign must:

- be compatible with the existing or desired future character of the area or locality;
- not detract from the amenity or visual quality of any environmentally sensitive areas, heritage areas, natural or other conservation areas, open space areas, waterways, rural landscapes or residential areas;
- have a scale, proportion and form of the proposal appropriate for the streetscape, setting or landscape;
- contribute to the visual interest of the streetscape, setting or landscape;
- not protrude above buildings, structures or tree canopies in the area or locality.

C6. With regard to views and vistas, the proposed sign must:

- not obscure or compromise important views;
- not dominate the skyline or reduce the quality of vistas; and
- respect the viewing rights of other advertisers.

C7. With regard to existing advertising, the proposed sign must:

- be consistent with a particular theme for outdoor advertising in the area or locality; and
- reduce clutter by rationalising and simplifying existing advertising.

Height

C8. The maximum height (in metres) for all development, including advertising and signage, is detailed within Holroyd Local Environmental Plan 2013, as a written statement and associated maps.

2. Signs in Residential Zones

Objectives

O1. To permit an approved use to adequately identify their premises while maintaining the amenity and residential character of the area.

Development Controls

Note: All signs erected on land within a residential zone must comply with Section 7.0 Sign Specifications.

C1. Advertisements and signs are not to be erected on land within a residential zone except where the sign is associated with an approved:

- bed and breakfast accommodation;
- child care centre;
- community facility;
- exhibition home;
- home occupation;
- home industry;
- neighbourhood shop within either the R3 and R4 zone;
- place of public worship;
- professional consulting room;
- premises having existing use rights for a non-residential use;
- school.

C2. Despite C1, the following signs may be erected on land with a residential zone:

- real estate signs; and
- public notices.

C3. Signs associated with neighbourhood shops, within the R3 and R4 zones, and premises having existing use rights (for a non-residential use) must comply generally with the requirements for signage in business zones under Section 3 of this Part.

C4. Signage related to child care centres must:

- be limited to one sign;
- not be illuminated;
- only display the name, telephone number and hours of operation of the centre;
- be located behind the building line to the primary street frontage.

C5. Signs related to the following uses and premises must not be illuminated unless it is demonstrated that this will not adversely affect the amenity of the area:

- premises having existing use rights (for a non-residential use); and
- Health Consulting Room signs.

C6. Signs related to Health Consulting Rooms must comply with all controls contained in Section 4 of this Part 3.

C7. Signs related to home occupations and home industries must not be illuminated.

3. Signs in Business Zones

Objectives

O1. To provide the opportunity for an approved use to adequately identify the nature of the business conducted on the premises.

O2. To ensure that signage is designed to be sympathetic to the architectural treatment of the building and surrounding streetscape.

O3. To limit the total number of signs per premises, in order to prevent visual clutter.

Development Controls

Note: All signs erected on land within a business zone must comply with Section 7.0 Sign Specifications.

C1. Total signage per street frontage must not exceed one top hamper, one fascia, one wall sign or projecting wall sign and one under awning sign.

C2. No advertising structure is to extend beyond the vertical projection of the awning.

C3. Advertising located more than 3.5 metres above ground level must be either form part of the building or otherwise be sympathetic to the general form and character of the building and the surrounding streetscape.

C4. Advertising structures must not be erected on top of awnings unless:

- alternative forms of above awning advertising cannot be provided on the building facade; and
- the size, shape and scale of such advertising is sympathetic to the general form and character of the building and the surrounding commercial streetscape and skyline.

C5. Wall signs, including painted wall signs, must not exceed one per street frontage.

C6. Window signs are to be limited to 30% of the area of the window and are permitted on ground floor windows only.

4. Signs in Industrial Zones

Objectives

O1. To provide the opportunity for an approved use to adequately identify the nature of the business conducted on the premises.

Development Controls

Note: All signs erected on land within an industrial zone must comply with Section 7.0 Sign Specifications.

C1. Advertising signs and banners must be located behind any building line, except for business identification signs and logos and trademarks forming part of plantings under an approved landscaping design.

Single Occupier Buildings

C2. Wall signs, including painted wall signs, must not exceed one per street frontage.

C3. Wall signs must not exceed one-third of the length of the wall. Where the building has more than one frontage, the dimensions for the wall signs, on any side elevation, must be appropriate to the context of the size, scale and character of the subject building.

C4. Business identification signs must not exceed one per site, with maximum dimensions of 0.5m x 1.5m and a maximum height above natural ground level of 1.5 metres.

Factory Unit Development

C5. Wall signs must not exceed one permitted per occupancy, on the facade of the unit with which that occupancy is associated. The dimensions of such signage must be appropriate to the context of any existing signage on other units in the same complex and must be visually consistent with such existing signage. Each unit is to be numbered conspicuously with numbering being uniform in design, location and style.

C6. Directory boards must not exceed one per site and be of a single background colour with dimensions consistent with an area of 0.2m^2 per strata unit or occupancy. Directory boards must only identify the number and occupant of each unit.

C7. Directory boards must be located:

- at least 3.0 metres from the front property boundary;
- 1.0 metre from the edge of any driveway;
- to ensure that the sight-lines of vehicular drivers are not impeded; and
- either on or behind the building line setback adjacent to the entrance to the site, or within the building line setback, if forming part of an approved landscaping plan.

5. Signs in Open Space and Infrastructure Zones

Objectives

O1. To minimise the impact of advertising signs on the amenity of open space.

O2. To permit signs in the SP2 Infrastructure Zone where the impact on the amenity of any adjoining residential area is minimal.

O3. To maintain the character of Holroyd by limiting the location of pole signs to suitable sites zoned for infrastructure purposes adjoining major roads and railways.

Development Controls

Note: All signs erected on land within an open space or infrastructure zone must comply with Section 7.0 Sign Specifications.

C1. The location of advertising signs in open space zones must minimise their visual and other impacts on the amenity of the open space and any adjoining residential land.

C2. Signs on land within the SP2 Infrastructure Zone must be located to minimise their visual impact when viewed from adjoining residential land or open space.

C3. Signs on land within the SP2 Infrastructure Zone must address the relevant roadway or railway and not address adjoining land.

C4. Signs on land within the SP2 Infrastructure Zone must not impair drivers' vision or distract drivers' attention. Animated, rotating or mechanised signs for the purpose of moving displays or variable messages must not be used other than for the provision of road information to drivers.

6. Special Provisions

Objectives

O1. To minimise the impact of temporary signs on the amenity of the area.

Development Controls

Temporary signs

C1. Temporary signs shall be restricted to advertising a short-term event such a seasonally-extended hours of operation or a sale.

C2. Temporary signs shall comply with controls under other Sections of this Part of the DCP.

C3. Temporary Signs may only be displayed for a period of not more than fourteen (14) days prior to the event and must be removed within forty-eight (48) hours after the event.

6.1. Real Estate Signs

Objective

O1. To minimise the impact of real estate signs on the amenity of the area.

Development Controls

C1. Real estate signs related to letting, sale by private treaty or sale by auction of residential property must:

a) not exceed 1.2m² in area, for any individual sign;
b) not have returns exceeding 180mm;
c) not exceed a height of 1.8 metres to the top of the sign;
d) not exceed 1 sign per agent per property per street frontage; and
e) be located wholly within the property and not less than 1.0 metre behind the property boundary.

C2. Real estate signs related to letting, sale by private treaty or sale by auction of commercial and industrial premises must:

a) not exceed 2.5m² in area;
b) not exceed one sign per agent per property per street frontage; and
c) must be located wholly within the property, and not less than 1.0 metre behind the property boundary.

C3. Real estate signs must not be displayed for no more than ten (10) days after letting or exchange of contract for the sale of the property.

Note: For the purposes of controls C1-C2, as they can relate to land under strata title, "property" refers to the whole of the land comprising the lots and common property but does not refer to individual lots in a strata plan.

6.2. Brothels

Objectives

O1. To ensure that advertising in connection with brothels is discreet and does not cause offence to the general public.

Development Controls

C1. Signs should be limited to identification of the premises by its name only. No other characters, depictions, pictures or drawings are to be displayed on the sign.

C2. Only one sign per premises shall be permitted.

C3. The sign shall not exceed 1.5m² in area.

C4. The content, illumination and shape of the sign must not interfere with the amenity of the locality. Signs must not display words or images which are, in the opinion of the Council, sexually explicit, lewd or otherwise offensive.

C5. The sign shall not be visible from a church, hospital, school, shopping centre or any place frequented by children for recreational or cultural activities.

7. Sign Specifications

Objectives

O1. To specify appropriate dimensions and design criteria for different advertising signs and structures.

O2. To ensure illuminated signs and advertising structures do not unduly affect the amenity of surrounding areas or interfere with driver's vision.

Development Controls

Illuminated Signs

C1. The maximum luminance for illuminated advertising signs must not exceed the following levels:-

C2. Where a sign is externally illuminated by flood or concealed lighting, such lighting must be directed solely on the advertisement, and its surrounds, and shielded so that glare does not extend beyond the advertisement.

C3. Illuminated signs or signs of a reflective nature must:

- **a)** be displayed and located in a manner that does not cause glare;
- **b)** not otherwise dazzle or distract drivers of vehicles; and
- **c)** not adversely affect the amenity the surrounding area.

C4. Illuminated signs on land adjacent to residential zones, or on existing non-conforming uses in residential zones, must not unduly affect the amenity of adjoining residences.

Pole and Pylon Signs, and Flag Poles

C5. A pole or pylon sign must:

- **a)** not project over the boundary of the premises;
- **b)** where illuminated, include a timer to be fitted to extinguish illumination between certain hours at Council's discretion;
- **c)** not have a sign panel underside less than 2.6 metres above ground but more than 0.9 metres above ground;
- **d)** have a height and dimensions having regard to-
- **e)** the character of the surrounding area,
  - **i)** the amenity of surrounding land uses,
  - **ii)** the landscape quality of the area,
  - **iii)** driver safety and
  - **iv)** the circumstances of the case;
- **f)** not have a pole exceeding 12 metres in height, when measured from natural ground level adjacent to the base of the pole to the underside of the sign;
- **g)** not exceed 15 metres in height to the highest point of the sign;
- **h)** not exceed one (1) sign per site;
- **i)** be securely fixed and stable; and

j) be maintained in a structurally adequate and safe condition at all times.

C6. Flag poles for the purpose of displaying flags with company name and/or logo must to not:

- exceed one pole per premises;
- exceed a height of 15 metres;
- exceed a flag or flags exceeding 28m² in area;
- allow the flag underside to fly less than 2.6 metres above the ground level surrounding the pole.

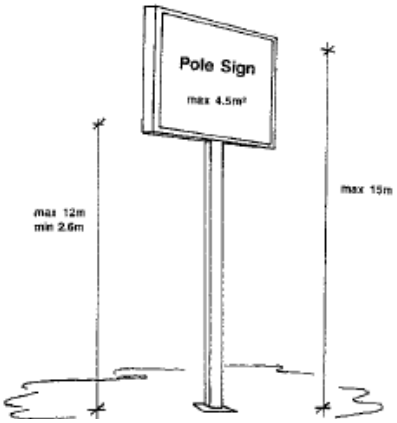
Identification Signs and Directory Boards

C7. Identification signs must:-

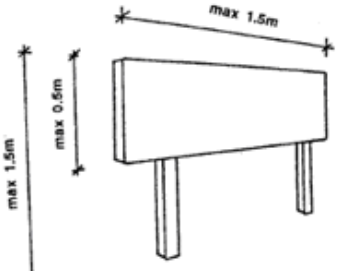
a) not project over a public place;
b) have dimensions exceeding 0.5m x 1.5m;
c) not exceed a height from the ground of 1.5 metres;
d) not exceed one (1) sign per premises;
e) be securely fixed and stable; and
f) be maintained in a structurally adequate and safe condition at all times.

C8. Directory boards in connection with factory unit development must:

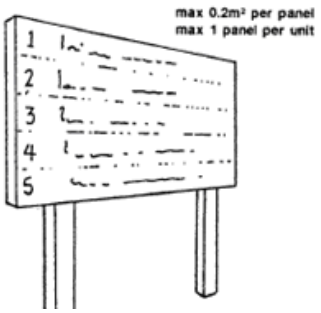
a) not project over a public place;
b) be located on or behind the building line adjacent to the entrance to the site other than with the prior consent of Council. Where the directory board is proposed to be located within the building line setback it shall be incorporated into the landscaping to Council's satisfaction;
c) be comprised of not more than one panel per factory unit, with each panel having uniform size, colour and dimensions but not exceeding 0.2m² per panel. Each panel shall serve only to identify the number of the unit and the name of the respective occupant;
d) be securely fixed and stable; and
e) be maintained in a structurally adequate and safe condition at all times.



Pole Sign



Identification Sign



Directiory Board

Wall Advertisements and Painted Wall Signs

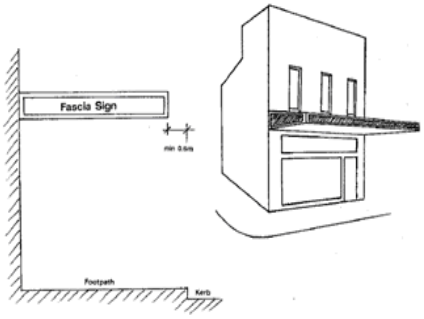
C9. Wall advertisements and painted wall signs must:

- **a)** be limited to one (1) wall advertisement per building elevation;
- **b)** be integrated with the design of the building on which it is to be displayed;
- **c)** not exceed the following areas –
  - **i)** 20% of the above ground elevation, where the building has an above ground elevation of 100m² or less, or
  - **ii)** 20 m², where the building has an above ground elevation of more than 100m² but less than 200m², or
  - **iii)** 10% of the above ground elevation, where the building has an above ground elevation of 200m² or more;
- **d)** not protrude more than 300mm from the wall, unless occupational health and safety standards require a greater protrusion; and
- **e)** not protrude above the parapet or eaves; and
- **f)** does not extend over a window or other opening; and
- **g)** does not obscure significant architectural elements of the building; and
- **h)** not be located on the same building elevation as a building identification sign or business identification sign

Awning Fascia Signs

C10. An awning fascia sign must not:

- **a)** project above or below the fascia or return end of the awning to which it is attached;
- **b)** extend from the fascia or return end of the awning;
- **c)** extend or project beyond a point 600mm within the vertical projection of the kerb line; and
- **d)** exceed an area of 3m².



Awning fascia Sign

Under Awning Signs

C11. Where an advertisement is displayed under an awning, the sign to which the advertisement is attached must:

a) have a length of 2.5 metres or less;

b) have a height of 0.5 metres or less;

c) have a thickness of -

- 300mm or less, where the sign is illuminated or
- 80mm or less, where the sign is not illuminated;

d) be erected approximately horizontal to the ground and at no point less than 2.6 metres from the finished ground level;

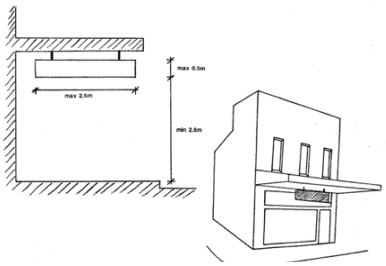
e) be erected at right angles to the building to which the awning is attached, unless otherwise approved by Council;

f) be securely fixed to the awning;

g) have no projection beyond the edge of the awning;

h) extend or project to a point 600mm or more from the vertical projection of the kerb line; and

i) be maintained in a structurally adequate and safe condition at all times.



Under Awning Sign

Top Hamper Signs

C12. A top hamper sign is a sign located above a doorway or window and it must not:

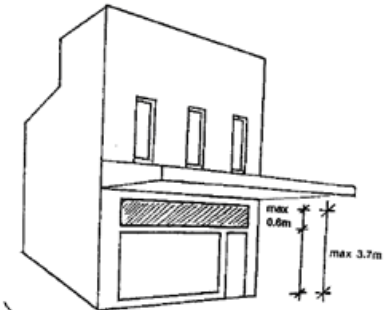
a) extend beyond any building line;

b) extend below the level of the head of the doorway or window above which it is attached;

c) be located more than 3.7 metres above the ground;

d) have an area greater than 5m²; and

e) exceed 600mm in height.



Top Hamper Sign

Projecting Wall Signs

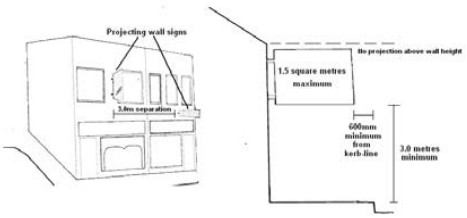
C13. A projecting wall sign is a sign attached to the wall of a building, projecting more than 300mm, and it must:

a) be located above an awning;
b) be located on the same building elevation as a wall sign or painted wall sign;
c) be located less than 3.0 metres from another projecting wall sign;
d) not project above the highest-most point of the wall to which it is attached;
e) not extend or project to a point less than 600mm from the vertical projection of the kerb line;
f) not be less than 3.0 metres above the ground directly below;
g) not have an area greater than 1.5m² (per side);
h) not have a thickness of –
   - more than 300mm, where the sign is illuminated or
   - more than 80mm, where the sign is not illuminated;
i) not be poorly fixed to the building; and
j) be maintained in other than a structurally adequate and safe condition at all times

Advertisement on Bridges

C14. Advertisements attached to bridges must:

a) be located on or contained within the main horizontal span of the bridge or, in the case of a railway bridge, on an abutment to the bridge;
b) not protrude below the structure of the bridge; and
c) in the case of a pedestrian or road bridge -
   i) not protrude more than 1.0 metres above the road level of the bridge, and
   ii) not obstruct the sightlines of people using the bridge;
   iii) in the case of a rail bridge -
   iv) not protrude above the top of any solid part of the bridge, and
   v) inot cover any part of the bridge that is open, or
   vi) be displayed on an abutment of the bridge;
d) in the case of a bridge built before the commencement of SEPP 64, not adversely impact upon the original architecture of the bridge.



Projecting Wall Signs

Part G

Places of Public Worship

Holroyd Development Control Plan 2013

Holroyd City

Places of Public Worship

Contents

Places of Public Worship

Introduction

Land covered by this Part

This part applies to development for the purposes of Places of Public Worship.

Relationship to Holroyd Development Control Plan 2013

Part I of Holroyd DCP 2013 shall be read in conjunction with the following Parts of Holroyd DCP 2013, which contain objectives and development controls that relate to development in this Part:

Part A- General Development Provisions

Part B - Residential Development

Part C -Commercial, Business and Mixed Use Development

Part D - Industrial Development

Part E - Public Particpation

Part F - Advertising and Signage

Part H - Heritage and Conservation

Part J - Site Specific Controls

Part K - Holroyd Gardens

Part L - Town Centres

Part M - Merrylands Centre

Part N - Transitway Station Precincts

Part O - Guildford Pipehead Site

Part P - Pemulwuy Residential

Part Q - Pemulwuy Northern Employment Lands

Part R - Definitions

Places of Public Worship

1. Locational requirements

Objectives

O1. To guide the appropriate location of places of public worship to ensure that amenity for surrounding residents and businesses is maintained.

O2. To ensure the dimensions for sites of places of public worship are appropriate with regard to the character and use of the area.

O3. To ensure sites and streets are capable of containing the required parking and stormwater management facilities on site.

O4. To minimise the locating of conflicting land uses within the vicinity of places of public worship.

Development Controls

C1. The minimum lot size for a place of public worship in the R2, R3 and R4 zones is 900m^2.

Note: There is no minimum lot size for places of public worship in all other zones.

C2. Places of public worship are not permitted on roads with a carriageway width less than 10 metres.

C3. Places of Public Worship are not permitted to be located on cul-de-sacs.

C4. Places of public worship shall be not be located within pedestrian view from a existing or approved sex industry premises.

2. Floor Space ratio and Site coverage

Objectives

O1. To ensure places of public worship development is consistent with the streetscape character and future amenity of its locality.

O2. To allow for adequate landscaping, including deep soil zones and private open space.

O3. To minimise potential privacy issues on surrounding residences and their private open space through floor space ratio and site coverage controls.

Development Controls

C1. Places of public worship proposed in residential zones must have a site coverage no greater than 50%.

Note: The maximum floor space ratio is detailed within Holroyd Local Environmental Plan 2013, as a written statement and associated maps.

3. Setbacks

Objectives

O1. To establish setbacks for places of public worship.

O2. To integrate places of public worship into existing streetscapes.

O3. To ensure sufficient separation between buildings to allow for visual and acoustic privacy and solar access to surrounding residential development.

O4. To establish setbacks that allow for landscape area and planting.

Development Control

Front Setback

C1. The minimum setback from the principal street frontage in residential zones is 6 metres.

Note: An increased setback may be required depending on the proposed location of parking and access to the site or where located on classified roads.

Side and Rear Setbacks

C2. Setbacks from the side boundaries in residential zones are to be a minimum of 3 metres.

C3. The minimum setback from rear boundaries in residential zones shall be at least 6 metres.

Note:

- The minimum setback requirements for industrial zones are stated in Part D.
- The minimum setback requirements for business zones are stated in Part C. In some instances setback requirements may be also detailed as site specific controls within this DCP.

4. Built Form

Objectives

O1. To ensure residential amenity and street character are maintained through appropriate design and controlling the bulk and scale of places of public worship.

O2. To preserve the amenity of adjoining development and minimise the impact on the streetscape.

O3. To minimise the visual impact of new development.

O4. To ensure new development have facades that define and enhance the public domain and desired street character.

O5. To ensure that building elements are integrated into the overall building form and façade design.

O6. To ensure development addresses all street frontages.

Development Controls

Building Height

Note: The maximum height for a place of public worship is detailed within Holroyd Local Environment Plan 2013, as a written statement and associated maps.

C1. There is no specific storey limit for places of public worship.

Bulk, Scale and Design

C2. Places of public worship in or adjacent to residential areas shall be of a bulk and scale that is consistent with the character of the streetscape.

C3. The front entrance of all places of public worship shall be in clear view of the street.

C4. Where a place of public worship has two dual frontages, the development shall be designed to address both streets, by way of windows, architectural features and surveillance.

C5. In residential zones, where a place of public worship has a continuous side wall length longer than 10 metres, the wall shall incorporate some form of articulation

Fencing

C6. Where fencing is proposed for places of public worship, it must comply with fencing provisions in the following parts, depending on the zoning of the site:

- Residential Zone- Part B
- Business Zone- Part C
- Industrial Zone- Part D

5. Landscaping and Open Space

Objectives

O1. To maintain and enhance the existing streetscape and landscaped character of the residential neighbourhoods in Holroyd LGA.

O2. To retain existing trees where possible.

O3. To provide privacy and shade for residential developments.

O4. To minimise hard paved surfaces and promote rainwater infiltration.

Development Controls

Residential Zones

C1. Landscaped area shall be a minimum of 2 metres wide.

C2. Where places of public worship are proposed in residential zones, a minimum of:

- 25% of the site area shall be landscaped area.
- 50% of the front setback shall be landscaped area.

C3. In residential areas, a minimum 1 metre landscaping strip between side setbacks and the driveway is required.

Industrial and Business Zones

C4. Landscaped area shall comply with the relevant sections within Part C and Part D of this DCP.

6. Amenity

Objectives

O1. To provide a high level of visual and acoustic privacy for the development and surrounding land users.

O2. To ensure the design of places of public worship and the use of materials provide acoustic privacy to surrounding residential and business users.

O3. To provide places of public worship with adequate solar access and to ensure that surrounding residential land uses sunlight access is maintained.

O4. To require the provision of accessibility measures to ensure all members of the community can access places of public worship.

Development Controls

Sunlight Access

C1. Places of public worship shall comply with sunlight access provisions in the following parts, depending on the zoning of the site:

- Residential Zone- Part B
- Business Zone- Part C
- Industrial Zone- Part D

Visual Privacy

C2. Places of public worship shall be sited to not cause loss of visual amenity to surrounding residential land uses.

C3. The location of windows, doors or balconies within a place of public worship shall have regard to adjoining properties and ensure that direct overlooking or loss of privacy does not occur.

C4. The use of landscaping as a visual privacy buffer is encouraged by Council.

Acoustic Privacy

C5. A Noise Impact Statement shall be submitted where a proposed place of public worship is located within a residential zone, any zone which permits residential development, or is adjoining a zone that permits residential development.

Note: A Noise Impact Statement shall include:

- Details on hours of operation- including regular services and special events and ceremonies.
- Proposed levels of noise (in dBA and LAeq).
- Any proposed building devices proposed to limit the noise affectation of adjoining residences.

Note: Where minor alterations are proposed, Council may waive the need for a Noise Impact Statement to be prepared.

C6. Places of public worship shall be designed to increase acoustic privacy, through building layout, site design, landscaping and materials.

Accessibility

C7. A place of public worship shall be designed to minimise any barriers to less mobile persons.

C8. A place of public worship should be, where possible, level and the main entrance shall enable wheelchair access.

C9. Access shall be provided in accordance with the relevant Australian Standard for access and mobility.

7. Parking and traffic

Objectives

O1. To ensure the provision of adequate car parking spaces for places of public worship.

O2. To ensure the safety of both pedestrians and other vehicle users in the surrounding locality.

O3. To require that the provision of vehicular parking does not reduce opportunities for deep soil zones within a site.

O4. To ensure that the impact of parking and vehicular movement for a place of public worship is assessed and does not affect the amenity of the surrounding locality.

Development Controls

C1. Car parking for places of public worship shall comply with Part A of this DCP.

C2. All parking shall be provided on site, through on- grade or basement parking.

C3. All vehicles shall be able to enter and leave the site in a forward direction.

C4. The provision of parking shall not reduce the required landscaped area for the site.

C5. Traffic impact statement shall be submitted for the establishment of a place of public worship or where alterations and additions are proposed that increase the capacity to 50 persons or more.

Note: A Traffic Impact Statement, at a minimum, shall assess the number of parking spaces required for such development, the impact of the proposed place of public worship on the surrounding locality and the measures taken to minimise any potential issues. The statement shall also detail the impact of any festivals or functions (i.e. Weddings) and their impact in relation to car parking and vehicular access.

8. Operational management

Objectives

O1. To ensure the amenity of residents within the vicinity of a place of public worship is maintained and any potential impacts are minimised.

O2. To create a balance of flexibility of hours of use for a place of public worship, whilst maintaining adequate amenity for surrounding residents.

O3. To ensure any ancillary uses of a place of public worship are adequate and do not impact on the amenity on the surrounding area.

Development Controls

C1. An operation management plan is to be submitted to Council that shall at a minimum address the following:

- The frequency of all proposed services, events and the like;
- The proposed hours of operation for all proposed services and events and the like;
- The likely number of persons to attend each type of service, event etc;
- Whether street parades or road closures are proposed;
- Any other uses that may take place within the place of public worship (i.e. community uses- youth group, community colleges etc), the frequency of these uses and the number of patrons proposed for these.
- Any particular custom or practice (such as ringing bells) that may occur and the frequency and length of such rituals.
- The nomination of a contact person that will be responsible in responding to any issues or complaints raised by the community or Council.

Part H

Heritage and Conservation

Holroyd Development Control Plan 2013

Heritage and Conservation

Contents

Land covered by this Part

Land to which this Part applies includes land identified under Holroyd Local Environmental Plan 2013 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.

Relationship of Part H to Holroyd Development Control Plan 2013

Part H of Holroyd DCP 2013 shall be read in conjunction with the following parts of Holroyd DCP 2013, which contains objectives and Development Controls that relate to development in this Part:

Part A - General Controls

Part B - Residential Controls

Part C - Commercial, Shop Top Housing and Mixed Use Development Controls

Part D - Industrial Controls

Part E - Public Participation

Part F - Advertising and Signage Controls

Part G - Places of Public Worship Controls

Part I - Child Care Centre Controls

Part J - Site Specific Controls

Part K - Holroyd Gardens Controls

Part L - Town Centre Controls

Part M - Merrylands Centre Controls

Part N - Transitway Station Precinct Controls

Part O - Guildford Pipehead Site Controls

Part P - Pemulwuy Residential Controls

Part Q - Pemulwuy Northern Employment Lands Controls

Part R - Definitions

1. Development Requirements for Heritage Items

Objectives

O1. To ensure that the development assessment process in relation to heritage items and heritage conservation areas is appropriate to the needs of the community.

O2. To specify development that is considered minor by Council regarding heritage items and heritage conservation areas.

O3. To specify development that is not considered minor by Council.

O4. To assist in the preservation of the integrity of any item of environmental heritage identified in the Holroyd Local Environmental Plan 2013 or a Conservation Instrument under the Environmental Planning & Assessment Act 1979 and/or Heritage Act 1977.

O5. To ensure the preservation of heritage significance of any item of environmental heritage located adjacent to proposed development whether or not on the same allotment.

O6. To promote sympathetic redevelopment of or surrounding a heritage item, that complements the style and character of any item of environmental heritage.

Development Controls

Consent requirements

C1. Holroyd Local Environmental Plan 2013 specifies development consent and additional information requirements for development involving heritage, heritage conservation areas and development in the vicinity of a heritage item.

C2. For land that contains a heritage item or is located within a conservation area, a development application may need to be lodged with Council to undertake works on site. This includes:

- Any alterations, additions or extensions to a heritage item;
- Structural or non-structural changes or changes to the fabric;
- Adaptive reuse, or
- Changes to a garden or grounds which have been identified as having heritage significance.

Note: State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 may apply to heritage items and heritage conservation areas in some instances.

C3. Works that Council considers minor in nature, or is for the maintenance of a heritage item, archaeological site or a building, work, relic tree or place with a heritage conservation area will not require development consent. These works are listed in Table 1.

C4. Before undertaking any works listed in table 1, applicants shall contact Council in writing about the proposed works and how they may affect the significance of the heritage item/conservation area. Council will then advise the applicant and confirm in writing that it is satisfied that these works will not require a development application.

C5. Works listed in Table 2 require development consent from Council.

TABLE 1: WORKS THAT DO NOT REQUIRE A DEVELOPMENT APPLICATION

TYPE OF WORKS	CRITERIA	ADVICE
Repainting surfaces that are already painted	Surfaces that are already painted can be repainted without consent of Council.	Colours chosen for paintwork should be in keeping with heritage significance or style of the property or conservation area.
Maintenance or repair work on external fabric and gardens	General external maintenance or repair works on a heritage item or buildings within a conservation area do not need the consent of Council. This includes treating timber, replacing broken windows, rehinging doors/gates, replacing or establishing gutters and down pipes, repointing brick work, restoring verandah posts or fence posts or repairing stone work and plasterwork, underpinning and damp proofing, general maintenance of heritage gardens (e.g. pruning or replanting of original species).	For replacement of original materials with modern on front or side walls, such as timber windows with aluminium casement, or for the addition of new decorative elements (e.g. which did not exist on the subject building or those of its style), consent will be required to be obtained from Council. Where a garden forms part of the significance of a property, or has been identified as a heritage item, consent will be required from Council for major changes. (See Table 2).
Internal alterations	In general, non-structural internal alterations of locally listed heritage items do not need the consent of Council, unless where an items interior is listed as significant. However, you will need to lodge a development application with Council for any internal works which involve structural changes.	For the modification of any significant, intact interiors or for those buildings identified on the State Heritage Register, a development application is required to be lodged with Council (see Table 2).
Installation of skylights, solar panels, roof vents, water heaters or communication facilities.	These features are permissible without consent only where they are not visible from the street or from a public place, and where aerials or antennae do not project more than 2 metres from the building roof line.	State Environmental Planning Policy (Exempt and Complying Development) may apply in some instances for these development types.
Erection of minor outbuildings or detached structures.	Minor outbuildings and detached structures such as cabanas, cubby houses, garden sheds, gazebos and green houses are permissible without the consent of Council only where they are not visible from the street or a public place and they do not affect the heritage significance of the building or its garden or curtilage.	State Environmental Planning Policy (Exempt and Complying Development) may apply in some instances to these development types.
Demolition or erection of rear or side fences or walls	The demolition or erection of fences or walls located behind the front setback of the main building, generally does not require the consent of Council.	Any proposed changes to old masonry walls and fences which form an important part of the property and which contribute to its heritage significance, will require the consent of Council.

TABLE 2: WORKS THAT REQUIRE A DEVELOPMENT APPLICATION

TYPE OF WORKS	COMMENTS
Alterations, additions or extensions to a heritage item or building within a conservation area.	Proposed extensions or additions will require a development application to be lodged, and the potential impacts of such additions to the significance of the item will be assessed.
Structural or non-structural changes to the exterior of a heritage item or building in a conservation area, including to the fabric, detail, finish or appearance (other than those works listed in Table 1); also structural changes to the interior.	Proposed structural/non-structural changes to the exterior of a heritage item or building located within a conservation area, or structural changes to the interior will require a development application to be lodged, and the potential impacts of such additions to the significance of the item will be assessed.
Moving a heritage item or building within a conservation area.	Generally, Council does not support the relocation of a heritage item unless there is strong justification for its removal. Where removal is proposed, a heritage impact assessment should clearly show why this is the preferred action in light of the heritage significance of the item or area. Any recommendations for removal should be based on the heritage significance of the item, not on the development potential of the land it is situated on. Note: All development applications for removal will be referred to Council's Heritage Adviser for comment, and will be considered by Council with reference to the recommendations from the Adviser.
Erecting an additional building or subdividing land on which a heritage item is located or which is within a heritage conservation area.	For the proposed addition of a building or subdivision on land with a heritage item, the impacts of these works on any important landscaping or curtilage (heritage boundary) will be assessed.
Structural or non-structural changes to the interior of a building which is on the State Heritage Register, or which has been identified as having significance.	A development application is to be lodged with Council, and referral will be made to the Heritage Branch of the Department of Planning for items listed on the State Heritage Register (in certain cases involving major development).
Modifications to significant gardens or curtilages, or the installation of driveways or paths for significant heritage items.	Where the garden or curtilage has been identified as being an important part of a heritage item or building within a conservation area, any major changes (e.g. new driveways and pathways) will need to be lodged with Council through a development application.
Works involving the removal/ demolition of later additions or alterations to a heritage item or building within a conservation area.	The removal of later alterations or additions to a heritage item or building within a conservation area will generally require a development application to determine whether these changes will affect the heritage significance of the building or character of the conservation area.
Replacement or repair of existing walls to a dwelling/carport/garage, or the erection of a new garage or open car port.	To ensure that important structures such as garages or carports are in keeping with the character of a heritage item or conservation area, a development application will need to be lodged with Council.
Replacement of original materials with modern materials on front or side walls or for the addition of new decorative elements.	The introduction of new materials, such as the replacement of timber windows with aluminium casement windows, or the introduction of new decorative elements (e.g. a verandah where one did not exist previously) should be avoided as these can reduce the significance of a property. Where they are proposed, an application will need to be lodged with Council and the impacts assessed.

Documentation

C6. A Heritage Impact Statement shall be submitted with development applications for land that

- Contains a heritage item;
- Is within a conservation area, and;
- located within the vicinity of a heritage item or conservation area;

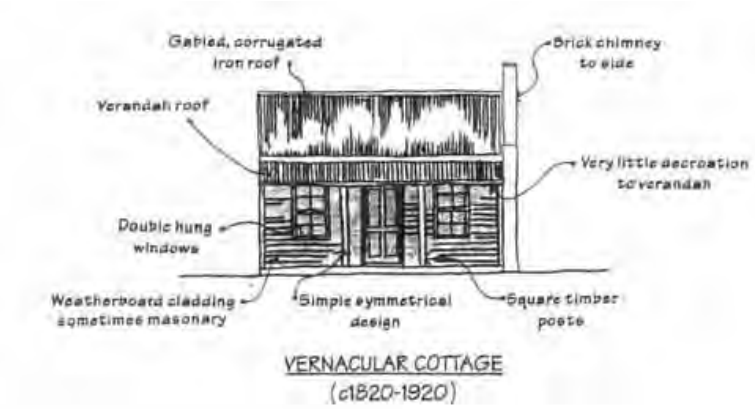
C7. Council may waive the need for applicants to submit a Heritage Impact Statement, if it deems the development and its potential impacts are minor in nature.

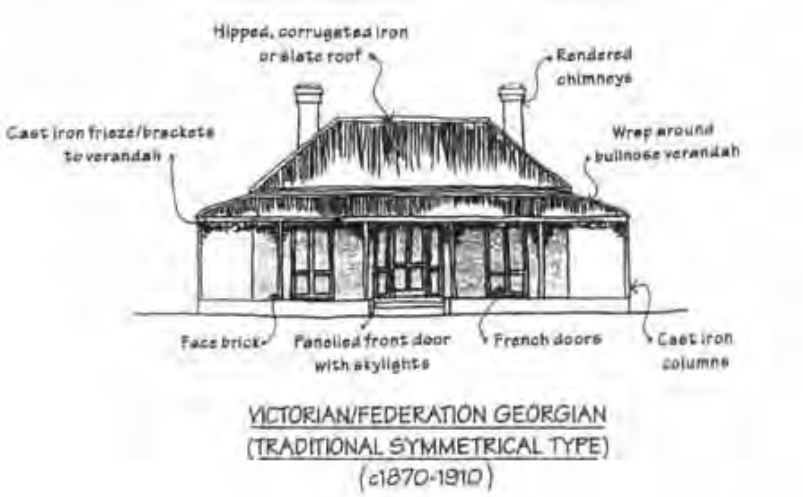
C8. Heritage impact statements shall at a minimum:

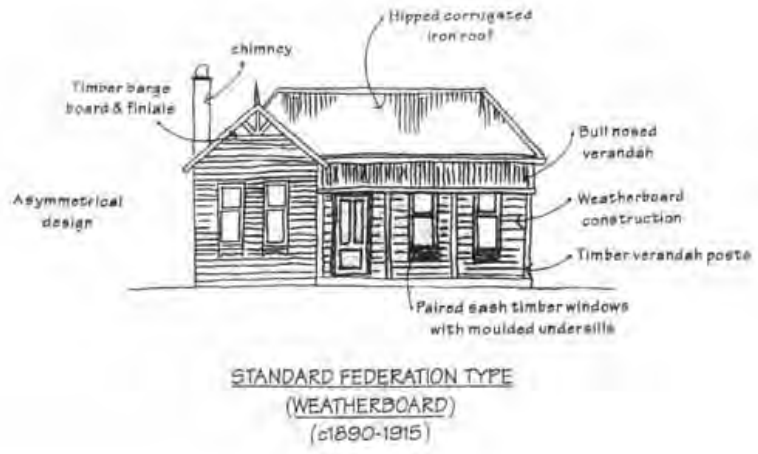
- Identify why the item, place or area is of heritage significance (i.e. Statement of Heritage Significance).
- Provide a description of works and/or change of use and any physical changes to the place.
- Identify the impact or impacts the proposed changes to the heritage item will have on its heritage significance (including its setting and any landscape features).
- Identify and describe any measure being proposed to lessen negative impacts of he proposed changes.
- Identify why more sympathetic solutions to those being proposed are not viable.

C9. 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.

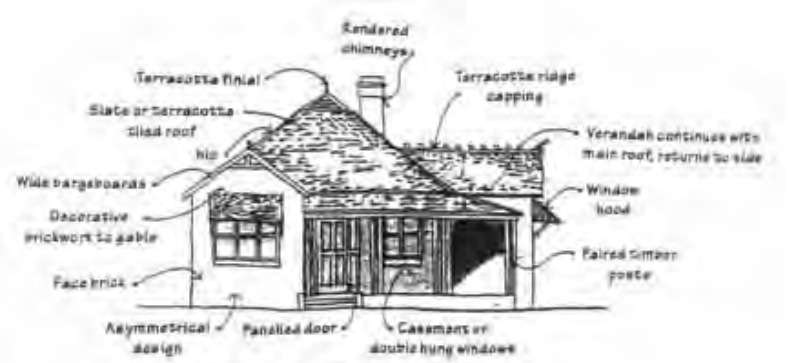
C10. Development applications and their assisting documentation shall be prepared in accordance with the Burra Charter.



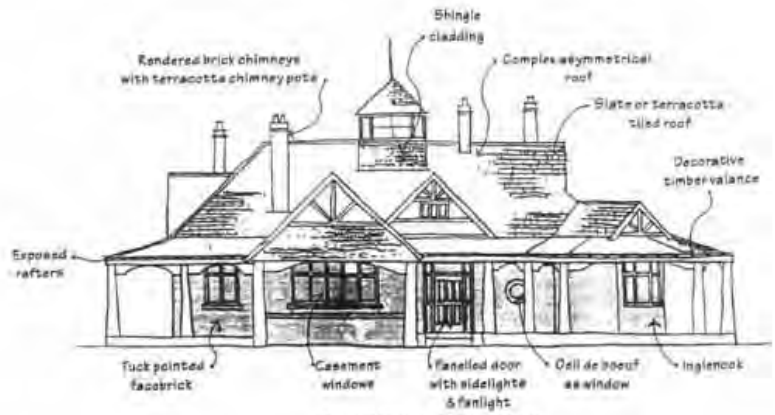




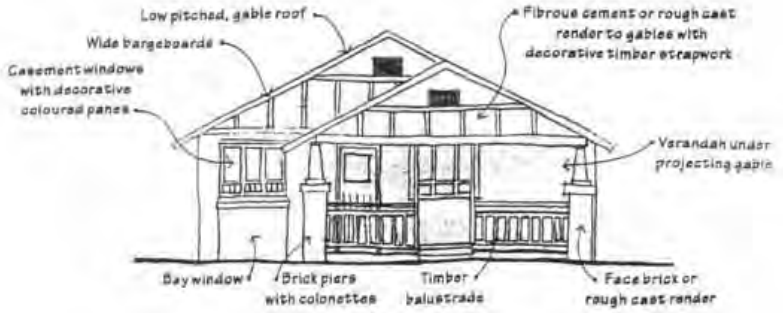
Examples of Architecture of heritage items



STANDARD FEDERATION TYPE (BRICK)
(c1890-1915)



GRAND FEDERATION HOUSE
(c1890-1915)



INTER-WAR BUNGALOW
(c1918-1930)

2. Conservation and development works on Heritage Items

The following controls aim to encourage sympathetic conservation works to heritage items, whilst enabling appropriately designed alterations and extensions which complement the style of the building and the character of the streetscape.

Objectives

O1. To provide guidance for development to ensure that all new development is sympathetic to the identified heritage values of heritage items.

O2. To ensure that development does not damage the heritage item or heritage conservation area.

O3. To encourage an understanding of heritage significance and to promote the conservation of heritage within Holroyd;

O4. To 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.

O5. That additions and/or extensions to heritage items are located and designed to complement the existing scale, character and amenity of the streetscape.

O6. To ensure that additions and/or extensions to heritage items do not dominate the appearance of the heritage item from the street and are consistent with the style of the item.

O7. To ensure that all new development within the curtilage of a heritage item is suitably located, and retains the visual dominance of the heritage item with minimal impact upon the fabric and significant landscaping associated with the item.

O8. That 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.

O9. To ensure that alterations or additions to existing commercial or civic heritage items are 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.

O10. To 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.

Development Controls

Note:

- Council's heritage adviser can provide information about the use of traditional materials and techniques for a heritage item.
- New development should be consistent with the guidelines and policies of any relevant conservation plan adopted by Council, and where appropriate, with the requirements of the Heritage Branch of the NSW Department of Planning.

C1. 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.

Conservation and maintenance works- General

C2. When undertaking any form of development, conservation or maintenance works on a heritage item, the materials, colours and maintenance techniques used shall be appropriate to the style and age of the heritage item.

C3. Original face brick should generally not be rendered as it removes and covers over the original colours and textures of the building.

C4. New roofing materials should match or be sympathetic in style and colour to the appearance of original materials.

C5. Construction techniques should reflect original building techniques where possible, such as the use of lime based mortars for re-pointing bricks rather than the use of cement based mortars.

C6. 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.

C7. Where original design features, such as bull nosed verandahs, have been removed, these should be replaced where possible on a heritage item, as they are important to the design and appearance of the building and generally serve a useful function.

C8. 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

C9. 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.

C10. 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.

C11. Where an upper storey extension is proposed to a single storey heritage item, the extension should be contained within the roof form. This may mean constructing an addition that has a minimum ceiling height on the ground floor, or an attic-style pitched ceiling on the first floor. Where this is not possible, the extension should be located to the rear of the property and incorporate a transition from the single storey scale of the original house (at the front) to the two storey scale of the new structure at the rear. This transitional form may be building form (such as roofs that step up progressively), or may be a space or void which helps to separate the two height forms.

C12. Rear second storey additions should use recessive colours and should not visually dominate the existing building to the front.

C13. 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

C14. The treatment of design details, such as verandah posts, doors or windows, on new extensions to heritage items should be consistent with those of the original building. It is 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

C15. 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.

C16. If a solid garage is proposed for a heritage item, the garage should generally be located away from (i.e. detached from) the main house structure, or set back from the side or rear of a property.

C17. Garage or carport designs should use design detailing, materials and colours that refer to, and are compatible with, the original building.

Landscaping and gardens

C18. The siting of buildings should respect any significant trees and gardens identified on the site.

Curtilage Development

C19. 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.

C20. The colours and materials used within the new development shall be recessive and complement the colours and materials of the heritage item.

C21. 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.

C22. Significant gardens should be retained in any curtilage redevelopment.

C23. New development within the curtilage should not adversely impact upon the significant fabric of a heritage item.

C24. The height of new buildings shall not exceed that of the original heritage building.

C25. The new development shall be massed so that lower-scale buildings act as a transition between the new and the old.

C26. New development within the curtilage of a heritage item should not block the sight lines from public areas to the original building.

Civic, Commercial development and adaptive reuse

C27. Where redevelopment is proposed for heritage items that are of a commercial or civic nature, the new development shall meet the controls contained in this section

C28. Retention of the original streetscape facades is required, with extensions or redevelopment to be located to the rear of the property.

C29. 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

C30. 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.

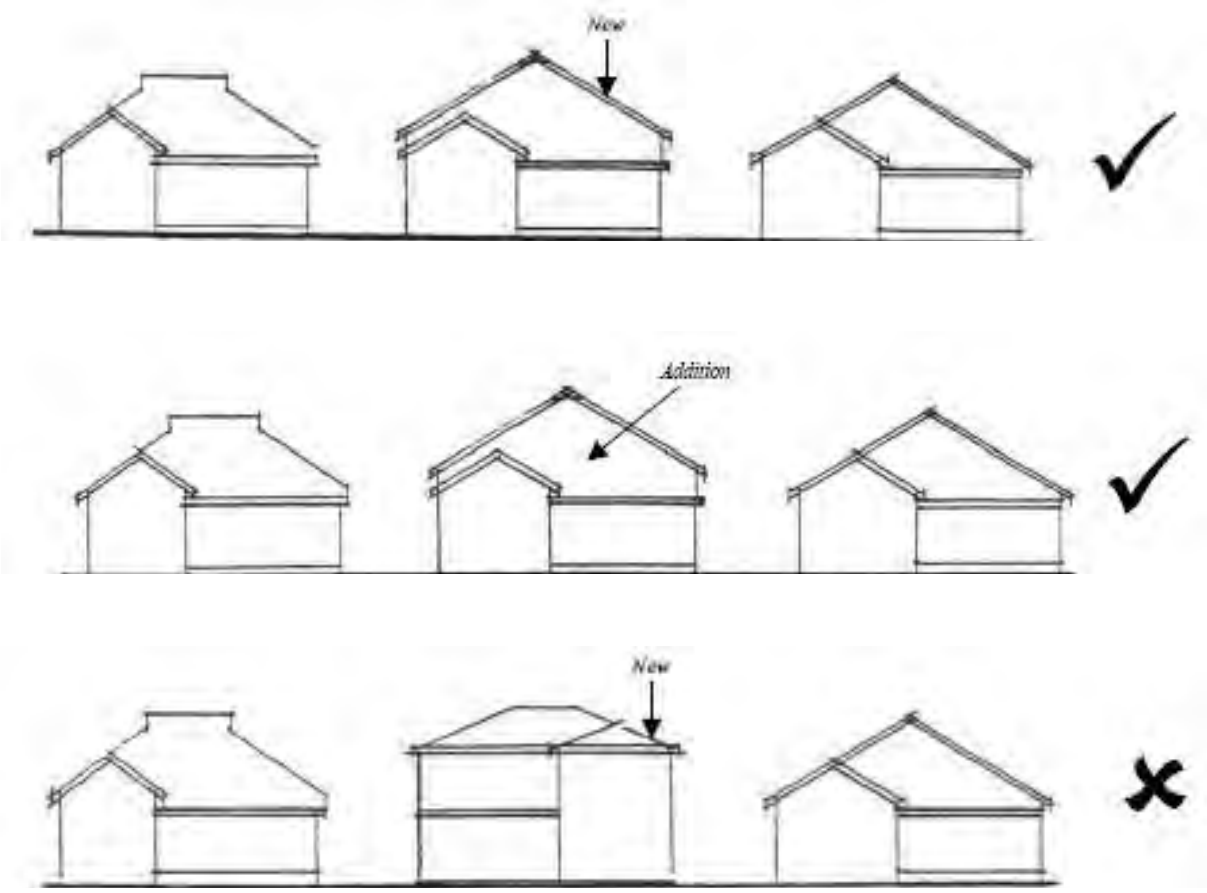
C31. For development involving churches or schools the removal of more recent structures is considered acceptable where it is demonstrated that they are not critical to the heritage significance of the property.

C32. New development should be located to the side or rear of the heritage item and the original building should visually dominate.

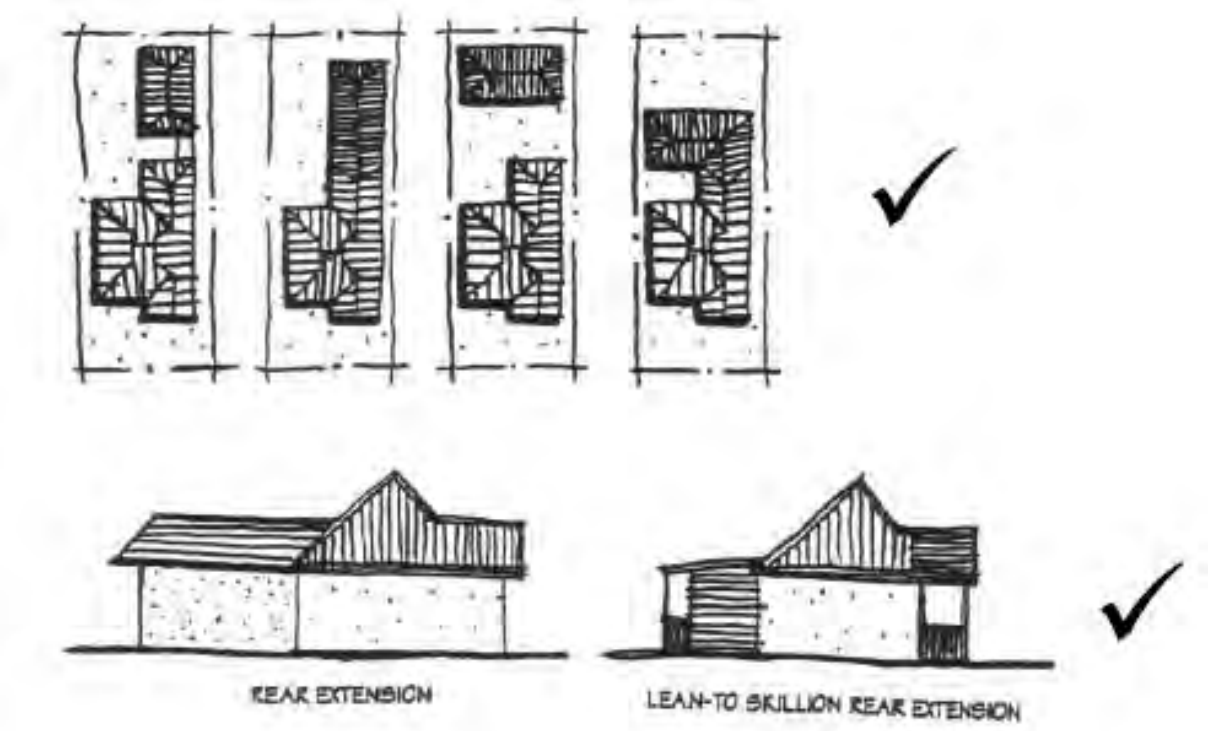
C33. Development should not impact upon the sight lines from public areas to the original building.

C34. Development should minimise any changes to the significant fabric of the building and, in particular, to the streetscape appearance of the heritage item.

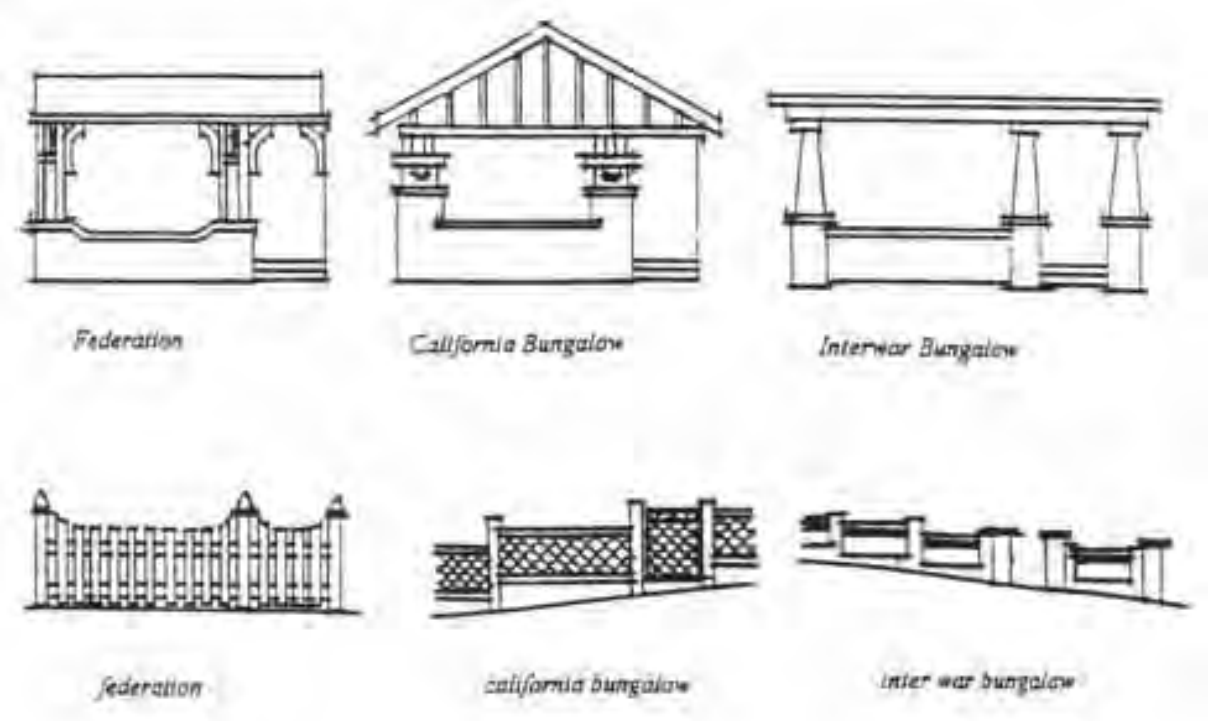
C35. Signage, lighting, materials and colours used should be unobtrusive and compatible with the overall style and design of the building.



Examples of compatible dwelling designs.



Examples of compatible dwelling designs



Examples of compatible dwelling designs

3. Specific Development Controls For Heritage Conservation Areas

The following controls aim to ensure that the special character of each of Holroyd's conservation areas is retained and conserved, whilst enabling appropriately designed alterations and extensions which complement the style of the building and the character of the conservation area.

Objectives

O1. To ensure that new development is sympathetic to the identified heritage values;

O2. To provide guidance for development in relation to heritage items and heritage conservation areas;

O3. To encourage an understanding of heritage significance and to promote the conservation of heritage within Holroyd;

O4. Buildings located within the Tottenham Street Heritage Conservation Area, the Fullagar Road Heritage Conservation Area and the Toohey's Palm Estate Group Heritage Conservation Area shall retain their original materials, features and detailing.

O5. Additions or extensions to buildings within a conservation area are designed to be consistent with original setbacks or involve the retention of front or side curtilages where these are a characteristic of the conservation area.

O6. Redevelopment within a conservation area only involves non-original structures or buildings, and is designed to be consistent with the height, scale, proportion, predominant setbacks and character of buildings within the conservation area.

Development Controls

C1. New dwellings on sites occupied by, 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 or the area.

General

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. 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.

C4. Buildings within conservation areas should, where possible, retain original gates and fences or should use a style and materials that are appropriate to the age of the building and to the character of the conservation area.

C5. When locating a new garage to a building within a conservation area, open sided carports are generally more acceptable and are less visually intrusive than solid structures. Where solid structures are proposed, these should generally be located away from the main house structure, or set back to the side or rear of the property

C6. Where any alterations or additions 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.

C7. Additions or extensions to buildings within a conservation area should be located away from the street frontage and are to be designed to complement the scale, form, style of the building and character of the conservation area.

Fullagar Road Conservation Area

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.

C8. 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).

C9. Where works are proposed to a building that is currently face brick, the building should remain unpainted or unrendered.

C10. 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.

C11. 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.

Tottenham Street Conservation Area

The buildings in Tottenham Street are significant as part of a group of small scale residential buildings in Tottenham Street, Granville. The group is largely intact externally and is significant for the variety of building styles and as a good representative example of early cottages dating from around the turn of the century. The buildings are significant for their form, scale and character which gives a good indication of the socio-economic makeup of the community at the time of construction. The group gives a good representative cross-section of modest scale residences at the turn of the century, and their location close to Parramatta and the railway provides evidence of the influence of these factors on the early development of Holroyd.

C12. Any proposed works on a building which has been identified as a heritage item within this conservation area should be designed to retain and conserve all original detailing, design features and materials characteristic of that building.

C13. Where original design features such as bull nosed verandahs have been removed or replaced, these should be restored to original condition to improve the visual appearance and integrity of this group.

C14. 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.

C15. Any alterations and extensions to buildings within this conservation area should not alter the form or fabric of the roof as seen from the street. 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.

C16. Where redevelopment of non-original structures or buildings is proposed within this conservation area, the new development should be designed to be consistent with the height, scale, proportion, predominant setbacks and character of buildings within this conservation area.

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.

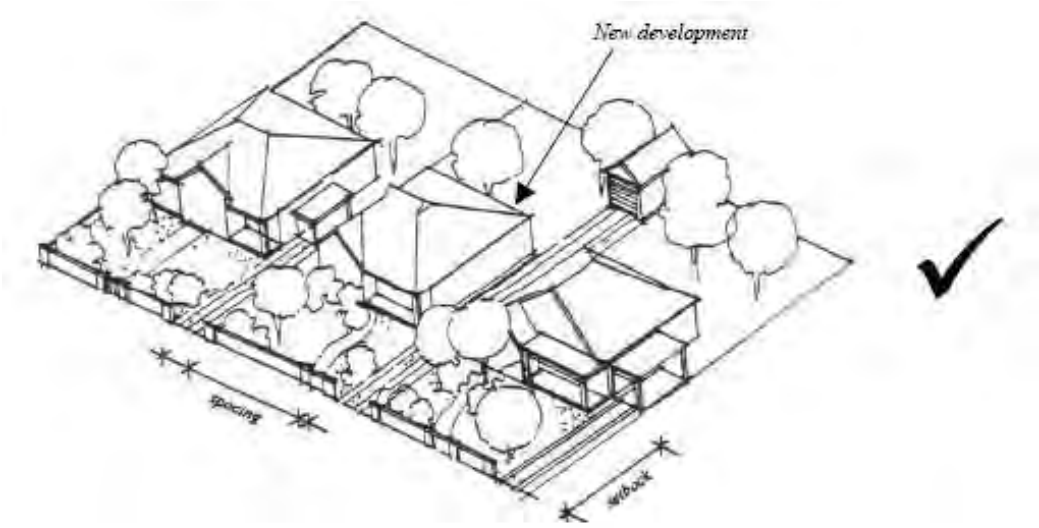
C17. Any proposed works on a building within this conservation area should be designed to retain and conserve all original detailing, design features and materials.

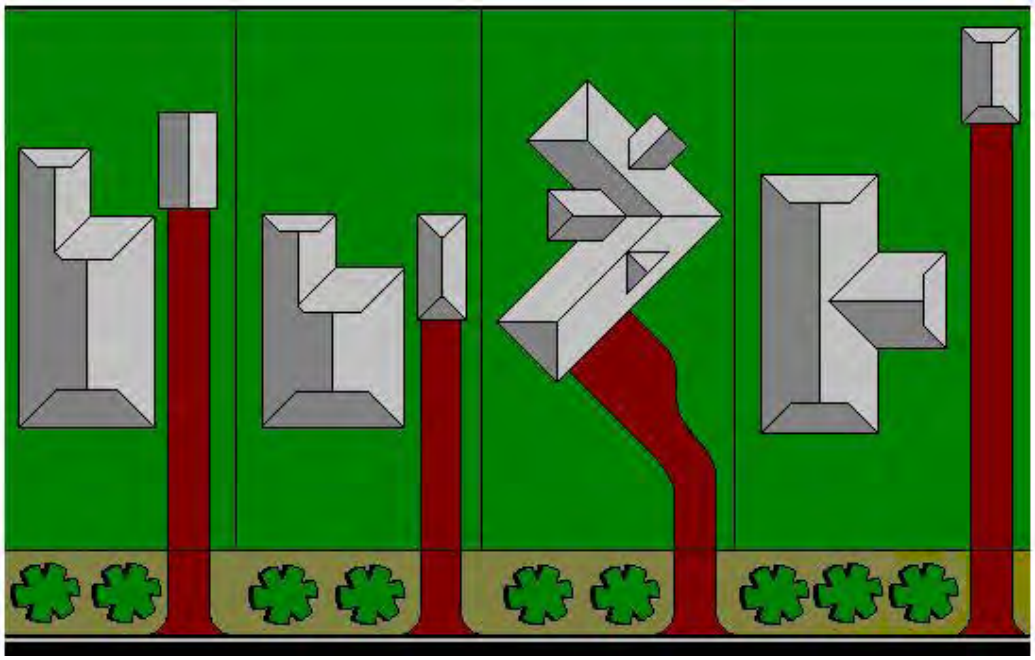
C18. Any proposed works on a building which has been identified as a heritage item within this conservation area should be designed to retain the original front and side curtilage of the building, which is characteristic of buildings within this Conservation Area.

C19. Where works are proposed to a building that is currently face brick, the building should remain unpainted or unrendered.

C20. 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.

C21. 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.





Examples of good and poor streetscape orientation and setback

4. Specific controls for development in the vicinity of a heritage item

The following controls aim to ensure that new development complements the existing streetscape character and the heritage significance of any heritage items or conservation areas within the vicinity of the development, and does not adversely affect the structure, curtilage, landscaping, solar access or views associated with these heritage items.

Objectives

O1. To ensure that new development is sympathetic to the identified heritage values;

O2. To provide guidance for development in relation to heritage items and heritage conservation areas;

O3. To encourage an understanding of heritage significance and to promote the conservation of heritage within Holroyd;

O4. To ensure that new development fits within its environmental and built context and is designed to make reference to any significant heritage item or feature.

O5. For new development to be designed to maintain the existing streetscape character, and is compatible with its particular heritage themes.

O6. To ensure that new development is carefully sited to avoid causing physical damage to any heritage item or building within a conservation area.

O7. To locate new development so that it does not overshadow or affect the curtilage, landscaping, setting or views associated with any heritage item or conservation area.

Development 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 or the area.

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 the predominant height, scale, roof form and pitch, proportion, setbacks, design details and features of adjoining development and of any adjacent heritage items or conservation areas.

C4. The height and scale of new development should be consistent with the predominant streetscape height and compatible with the height of adjoining development. Where a new building is proposed in a street that is predominantly single storey or where adjoining heritage items are single storey only, the proposal should also be single storey.

C5. New development should be compatible with heritage items in terms of its scale and massing-

overall bulk and arrangement of parts. New buildings should not dominate their surroundings, nor should they be substantially smaller.

C6. 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.

C7. New development should line up or continue any significant building elements of adjoining development, such as roof-lines, roof form and pitch, parapets, verandahs, awnings or string courses.

C8. Window and door openings, building lines and building massing of new development should also be designed in the context of its adjoining development.

C9. Where a particular heritage theme predominates within a street (e.g. predominantly Federation period cottages), the design of new development should be compatible with this heritage theme. For example, a large, bulky contemporary style building redevelopment with a predominance of long horizontal lines may not be a compatible design within a street of predominantly small scale Federation period cottages with narrow, vertical design features (e.g. windows, doors, verandah posts, chimneys).

Setbacks and Orientation

C10. 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.

C11. New buildings within an existing streetscape should not be oriented across sites contrary to the established pattern.

C12. Where a new development is proposed adjoining a significant heritage feature such as the Parramatta Regional Park, new development should continue the primary orientation to the park, and should provide an appropriate entry design and setback treatment along the park frontage.

Siting and location

C13. The siting of new development should not affect the structure of, or otherwise cause physical damage to, any heritage item.

C14. 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

C15. The design of the street elevation should be relatively uncomplicated, and consist of simple forms so that it does not visually compete with the heritage item.

C16. In residential zones where a higher density is permitted, new development adjoining/adjacent to a heritage item should avoid incorporating large unbroken wall areas.

C17. 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.

C18. Landscaping should be used to minimise the visual appearance of large wall areas in new development adjoining a heritage item.

C19. 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.

C20. 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.

Note: Darker colours and simple facade treatments can assist in minimising the visual impact of new development on adjoining heritage items.

5. Conservation Incentives

Objectives

O1. To provide incentives for the restoration and maintenance of Heritage listed items in Holroyd.

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.

Development Controls

Note:

- Council provides a free heritage advisory service for owners of properties listed as heritage items in the Local Environmental Plan 2013, and can provide general information on design outcomes, colour schemes, building materials and fences.
- 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.

C1. Conservation incentives for heritage items are listed within Holroyd Local Environmental Plan 2013.

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 Holroyd Development Control Plan 2013, that
- The proposed development will not adversely affect the heritage significance of the heritage item or its setting, that
- The proposed development will involve a complete and full restoration of the heritage item, if this is deemed necessary by the Council, and that
- 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.

Part I

Child Care Centre Controls

Holroyd Development Control Plan 2013

Child Care Centres

Contents

Child Care Centres

Introduction

Land covered by this Part

This Part applies to development for the purposes of Child Care Centres.

Relationship of Part I to Holroyd Development Control Plan 2013

Part I of Holroyd DCP 2013 shall be read in conjunction with the following Parts of Holroyd DCP 2013, which contain objectives and development controls that relate to development in this Part:

Part A- General Controls

Part B- Residential Controls

Part C- Business, Shop Top Housing and Mixed Use Development Controls

Part F- Advertising and Signage Controls

Part H- Heritage and Conservation Controls

Part R- Definitions

Aims of Part I – Guidelines for the Establishment of Child Care Centres

a) To provide development guidelines for the provision of child care centres and services in the Holroyd Local Government Area (LGA) to meet the needs of the community.

b) To ensure that sites containing child care centres and services are appropriate for that purpose and provide a functional and pleasant environment for their users.

c) To ensure that sites containing child care centres and services are compatible with the environment in which they are situated, particularly in terms of physical appearance and landscaping.

d) To ensure that potential impacts from child care centres on surrounding residential areas, such as those created by noise, traffic generation and on street parking, are minimised.

e) To ensure that child care centres are not located or designed so as to pose a health or safety risk to the children using the centre.

f) To ensure child care centres are operating in accordance with current licensing

Child Care Centres

General Objectives

O1. To encourage the provision of high quality child care which meets the needs of the community, including users of the facility and owners and users of surrounding land uses.

O2. To ensure best practice in the planning of child care centres.

O3. To ensure that child care centres are compatible with neighbouring land uses.

O4. To ensure the amenity of adjoining neighbours is retained and is not detrimentally affected by noise emissions from the site.

O5. To ensure child care centres are located with adequate, convenient and safe parking for visitors that do not impose on any residential neighbourhoods or commercial areas.

O6. To ensure that child care centres integrate into existing residential environments that are unobtrusive in terms of size, bulk, height and the amount of landscaped area provided.

O7. To provide child care centres that are located or designed so as not to pose a health risk to children using the centre.

O8. To retain and protect significant existing vegetation in Holroyd.

O9. To ensure the health, safety and wellbeing of children and staff in child care centres.

Note: In addition to the following development controls, applicants should ensure that the proposed development complies with the relevent legislation for the operation of child care centres.

Child Care Centres

1. Size, Density and Location

Objectives

O1. To ensure the height and scale of a child care centre relates to site conditions and complements the prevailing character of the streetscape.

O2. To ensure the development of the child care centre will not have any adverse impacts on the amenity of surrounding properties.

O3. To ensure that the appearance of the development is of a high visual quality, enhances the streetscape and is sympathetic to surrounding development.

O4. To ensure the location of the child care centre and adjoining land uses does not negatively impact on surrounding properties by way of creating traffic, parking and noise concerns.

O5. To ensure child care centres are located where it is safe for children.

O6. To ensure child care centres have minimal impact of traffic and amenity of nearby residents.

O7. To ensure the safety of children, staff and visitors is maintained at all times.

O8. To ensure the location of the child care centre will not result in the creation of traffic flow issues.

Development Controls

C1. A child care centre proposed in an R2 Low Density Residential zone is limited in size to accommodate not more than forty-five (45) children. Capacities of child care centres located in other zones will be assessed on the merits of each application.

C2. The design requirements for Child Care Centres located within R2 – Low Density Residential and R3 – Medium Density Residential, shall comply with the building envelope standards outlined in Part B of this DCP relating to one and two storey residential development.

Note: If a proposed child care centre has a common boundary with an existing child care centre, the applicant must demonstrate that the new centre is not an addition to the existing centre by way of illustrating that the child care centre can not be combined at a later stage. Having licenses in different names is not sufficient proof.

C3. If the proposed child care centre is to be located in a building consisting of more than one level, the child care centre component must be located on the ground floor of the buildings with office and storage space permitted on the upper level.

Note: Council encourages the use of single storey buildings for child care centres.

C4. The minimum site frontage for a child care centre is 20 metres.

C5. Child care centres must be located at least 300m from hazardous industries, LP gas sites, mobile telephone base stations and towers, and are safe from any other environmental health hazards, such as high lead levels, or proximity to cooling tower drift in high rise building areas.

C6. The siting of child care centres must adhere to locational guidelines under current

NSW Office of Environment and Heritage (OEH) instruments, such as SEPP 33 Hazardous and Offensive Developments, with particular regard to exclusion distances from hazardous industries.

C7. Child care centres should not be located having frontage to any road which, in the opinion of Council, is unsuitable for the establishment of a child care centre with regard to: -

a) Prevailing traffic conditions;
b) Pedestrian and traffic safety; and
c) The likely impact of development on the flow of traffic on the surrounding street system.

C8. Child care centres shall not be located having frontage to an arterial or sub-arterial road (see Appendix 1).

C9. Child care centres are generally considered to be unsuitable on roads identified in Appendix 2. Special consideration shall first be given to the prevailing traffic conditions for a child care centre proposed on these roads.

Note: The exclusion of any road from Appendixes 1 & 2 should not be construed as an indication, by itself, of compliance with this provision. Each application will be individually assessed on its merits with reference to the above controls.

C10. Sites with existing swimming pools are not considered suitable for child care centres. However, an application may be considered if the applicant intends to remove the existing swimming pool and restore the area to its original ground level.

C11. Child care centres shall not be located on an allotment within an entire residential cul-de-sac.

C12. Child care centres shall be detached from any residential dwellings and have separate entry and exit points.

Note:

- The maximum FSR is detailed within the Holroyd Local Environmental Plan 2013 as a written statement and associated maps.
- The maximum height (in metres) is detailed within the Holroyd Local Environmental Plan 2013 as a written statement and associated maps.

Note: Council encourages child care centres to be located within close proximity (200m-400m) to existing educational institutes and town and neighbourhood centres.

2. Vehicular Access and Parking

Objectives

O1. To ensure the traffic circulation system serving the child care centre is designed to allow the safe drop-off and collection of children and the safe movement and parking of staff, parents, visitors and service vehicles.

O2. To ensure that the design of the proposed development takes into account the safety of pedestrians, existing pedestrian and cyclist routes, nearby traffic generators, subdivision layout and street design.

O3. To ensure adequate space for safe entry and exit points to enable forward facing entry and exit from the site and adequate room for on-site parking.

O4. To provide parking in a convenient location allowing a safe environment for setting down and picking up of children.

O5. To ensure sufficient off street parking is provided for users of the child care centre.

O6. To ensure design of the car park and use of materials for parking areas does not negatively impact on the streetscape.

Development Controls

Access

C1. Separate entries and exits to the site shall be provided. The design of such driveways shall ensure that inbound and outbound vehicles are separated and that vehicles enter and leave the site in a forward direction.

C2. No pedestrian or vehicular access is to be provided from an arterial road, sub-arterial road or where the development would be contrary to the environmental capacity of the street or contrary to the traffic movement on the surrounding street system.

C3. All applications are to be supported by a Traffic and Parking Report prepared by a suitably qualified person addressing the above issues to Council's satisfaction.

Parking

Note: All parking for child care centres shall conform to controls set out in Part A of this DCP.

C4. Long stay staff parking must be distinguished from the short stay visitor parking by suitable signage and/or marking. Both must be provided in a convenient location to allow for safe dropping off and picking up of children.

C5. Consideration may be given to reducing on-site requirements for short stay parent and visitor parking only if convenient and safe on-street parking is otherwise available. This is providing that the use of such parking does not excessively impact upon the amenity of the adjacent area.

C6. All staff parking shall be provided on-site in any event.

C7. To eliminate the possibility of frontages and access ways containing expanses of plain cement, decorative pavement treatment shall be provided to all driveways and parking areas. That is, the use of decorative paving materials such as exposed aggregate or pattern stamped and

coloured concrete and paving bricks. Plain cement or coloured cement will not be accepted for driveways and parking areas for aesthetic and amenity purposes.

3. Acoustic and Visual Privacy

Objectives

O1. To minimise the impact of noise generated by child care centres on surrounding properties.

O2. To ensure the privacy of surrounding properties is maintained and protected from any potential overlooking.

O3. To protect the visual and acoustic privacy needs of children using the child care centres, staff and other users.

Development Controls

C1. An acoustic assessment must be completed by a suitably qualified person and is to address, but not limited to the following:

- Identification of sensitive noise receivers to be potentially impacted.
- Analysis of the existing acoustic environment at the receiver locations. Measurement techniques and assessment period should be fully justified and in accordance with relevant Australian Standards and NSW DECC Industrial Noise Policy.
- Identification of all noise that is likely to emanate from the child care centre and the subsequent prediction of resulted noise at the identified sensitive receiver locations from the operations of the premises. Where appropriate, the prediction procedures should be justified and include an evaluation of prevailing atmospheric conditions that may promote noise propagation.
- Details of any acoustic control measures that will be incorporated into the proposal;
- The prevention of a sense of enclosure; and
- The background noise testing component of the assessment is to be carried out over a minimum of five (5) days if the proposed child care centre is located near a railway line, major road or other source which can potentially create noise above normal background level.

C2. A Noise Management Plan shall accompany the development application. This should, as a minimum, provide details of child to staff ratios, noise control measures of children while in outdoor play areas and seasonal play times.

C3. Consideration is to be given to the following design mechanisms in respect to noise abatement for properties in the surrounding area:

a) The appropriate design and siting of the child care centre;

b) The appropriate layout and arrangement of outdoor space and activities;

c) The appropriate location of outdoor play areas away from main living area or bedroom windows of any surrounding dwellings in predominantly residential areas, and away from external noise sources;

d) The use of acoustic barriers and design, such as screen fencing or planting as noise buffers for external noise sources or transmission of noise from the child care centre to surrounding properties; and

e) The appropriate location of mechanical plants such as exhaust fans and air conditioning

units to ensure noise generation does not impact on surrounding properties.

C4. Noise abatement measures are to be undertaken to ensure that inside noise levels do not exceed 40dB(A) (Leq 24). Assessments should take background noise levels into account.

C5. Where the site is likely to be affected by heavy traffic or rail noise, the child care centre should be designed to locate playrooms, sleep rooms and playgrounds away from the noise source and reduce the impact of noise by barriers such as solid fencing and window glazing. Sites on main or arterial roads should be avoided.

C6. A landscape buffer with suitable screening plants and a minimum width of 1 metre shall be provided along the side and rear boundaries of the development to help minimise overlooking.

C7. Due to the potential generation of noise, if the proposed child care centre is to incorporate basement level car parking, details of mechanical ventilation are to be included in the application.

4. Indoor Spaces

Objectives

O1. To provide attractive and functional indoor spaces which provide positive experiences and development growth for children.

O2. To provide indoor spaces which are safe and functional, and enable adequate staff supervision of children at all times.

O3. To ensure that child care centres comply with the provisions of the Children (Education and Care Services) Supplementary Provisions Regulation 2012, and to encourage the use of best practice principles for child care centres.

O4. To ensure that facilities can comply with the requirements of a food business, where the provision of food is intended for sale.

O5. To ensure that child care centres provide a safe and secure environment for children at all times and comply with relevant legislation.

Development Controls

C1. In addition to the requirements under the relevant legislation, the design of indoor floor spaces within child care centres shall take into account the following factors:

a) Clear and unobstructed lines of site to all areas within the child care centre shall be provided at all times;

b) Where achievable, windows of indoor play areas are to be located with a northern orientation and should receive at least three hours of sunlight between the hours of 9am and 3pm on June 21;

c) For locations where a northern orientation for indoor play areas is not achievable, they should be located where they will receive a minimum of 3 hours of sunlight, where possible;

C2. In addition to the requirements under the relevant legislation, indoor space shall include the following facilities within the child care centre:

a) Where a separate kitchen is provided, the kitchen should have a door, half gate or other barrier to prevent unsupervised entry by children into the kitchen.

b) Garbage storage and recycling facilities.

C3. Children's toilets are to be located so they are directly accessible to children's indoor and outdoor play spaces.

C4. Food preparation areas are to be constructed and provided in accordance with the relevant sections of the Australia/New Zealand Food Standards Code, specifically AS4674-2004 Design, Construction and Fit Out of Food Premises, Food Standard Code 3.2.3 and conditions outlined in Children (Education and Care Services) Supplementary Provisions Regulation 2012 Part 3 – Facilities and Equipment Requirements.

C5. Applications must include a floor plan of the kitchen area.

C6. Power points in indoor play areas should be at a height which is unreachable by children or

covered with a child safe cover.

C7. Plans are to show the number of children each room is proposed to accommodate to ensure staffing levels are sufficient for proper supervision.

5. Outoor Spaces

Objectives

O1. To ensure children have easy access to outdoor space that allows them to move freely and engage in vigorous play.

O2. To provide well designed outdoor spaces which enhance the well being of the users of the child care centre and offer sensory stimulation, provided by different surfaces, exposure to fresh air, sunlight, wind and even rain.

O3. To ensure generous outdoor play areas that provide a variety of experiences for children, including learning, play, active and quiet time and other developmental experiences.

O4. To provide outdoor spaces which are safe, secure and functional, and enable adequate staff supervision of children at all times.

O5. To minimise noise transmission and other nuisances to the surrounding area.

Development Controls

C1. Minimum standards of usable outdoor space per child that is exclusively for the use of children is to be provided, in accordance with the latest Children's Services regulations. Plans must demonstrate that they meet this requirement.

Note: Outdoor balconies above ground floor levels do not constitute satisfactory outdoor space. For calculation purposes, items such as car parking areas, storage sheds and other fixed items that prevent the space from being used by children or obstruct the view of staff supervising the children are to be excluded. The Department of Education and Communities will not grant a licence to proposed centres if this requirement is not met. Applicants should refer to the most current children's services regulations for details regarding minimum areas for outdoor space.

C2. Outdoor spaces are to provide a variety of experiences through the provision of different spaces within the outdoor area. These different areas are to be:

a) Open areas for activities such as running;
b) Quiet areas and formal quiet areas; and
c) Active areas.

C3. Outdoor spaces are to be:

a) Located away from the main entrance of the child care centre, car parking areas or vehicle circulation areas;
b) Integrated with indoor space and provide direct and easy access between those two areas;
c) Of a design and layout to enable clear lines of sight to all areas of the outdoor space to allow direct staff supervision from other areas of the child care centre;
d) Located away from existing and potential noise and environmental health sources;
e) If the child care centre is located in a predominantly residential area, outdoor spaces are to be located away from the living/bedroom windows of surrounding dwellings;
f) Inaccessible from public areas outside of the child care centre, except in the case of an emergency evacuation or centre deliveries such as sand replacement;

g) Located away from areas where objects can be projected down onto play areas; and

h) Adequately fenced on all sides.

C4. Outdoor play spaces are to be adequately shaded in accordance with Shade for Child Care Services published by the NSW Cancer Council and NSW Health Department.

C5. Physical shading devices are to provide sun protection to children and be integrated into the design of the building and the outdoor area and should be fire retardant.

C6. In commercial zones, consideration must be given to isolating the children from the effects of noise, pollution and winds and providing access to natural light and air.

C7. Outdoor space should be exposed to the sky to provide direct sunlight, breezes and fresh air, and have access to shelter and shade. Planting, climbing equipment and visual features must provide an interesting and stimulating experience for the children.

Transitional Areas

a) A transitional area between the building and the play area supporting space for both indoor and outdoor activities is to be provided. It is space additionally required for the building and the playground and may only be included as either the outdoor or indoor space requirement, not both. It may comprise of a verandah;

b) The roof area of the transitional area must be a minimum of 4 meters in width to ensure sufficient activity zones with access space around them;

c) The transitional area must be designed in a manner that offers protection from unfavourable weather conditions, including strong winds and rainfall;

d) The transitional area must be designed in a manner that utilises natural temperature controlling measures, including cross ventilation.

6. Landscaping

Objectives

O1. To improve the overall visual amenity of streetscape.

O2. To protect and retain existing significant vegetation where possible.

O3. To protect the privacy of any adjoining residences.

O4. To enable consistency in form and character with the surrounding streetscape.

O5. Provide high quality landscaping that softens built form, provides shade and privacy, minimises runoff and is safe for children.

Development Controls

C1. A detailed landscape plan prepared by a suitably qualified landscape professional should be submitted with all development applications for child care centres and should demonstrate the following:

a) Separation of outdoor space into active quiet areas;

b) Proposed planting, with a variety of trees and plants to be used which create visual interest for children, and can provide shading where appropriate;

c) Locations of play equipment;

d) Separation of outdoor space according to age ranges, including the locations of lower fencing or other structures which divide the outdoor spaces; and

e) Outdoor spaces which include a variety of surfaces such as grass, soft porous paving and the like.

Note: Surfaces should comply with Australian Standard 4422 – Playground Surfacing.

C2. Landscaping and fencing should be designed to provide a noise barrier and privacy screen for adjoining residents.

C3. Minimum soil depths for outdoor space and planted areas above basement parking in residential areas should be a minimum of 600mm.

C4. The minimum depth of sandpits is 600mm with adequate drainage and shade (refer to www.kidsafensw.org for further construction guidelines).

C5. Outdoor play equipment is to comply with Australian Standards, including but not exclusive to, the following:

- AS 4685.1: 2004 Pt 1 General safety requirements and test methods;
- AS 4685.2: 2004 Pt 2 Particular safety requirements and test methods for swings;
- AS 4685.3: 2004 Pt 3 Particular safety requirements and test methods for slides;
- AS 4685.4: 2004 Pt 4 Particular safety requirements and test methods for runways;
- AS 4685.5: 2004 Pt 5 Particular safety requirements and test methods for runways;
- AS 4685.6: 2004 Pt 6 Particular safety requirements for rocking equipment;

C6. Existing natural features and significant vegetation of a site should be conserved where possible to help increase the amenity of the area.

C7. All existing and proposed vegetation located on the site and on sites directly adjoining are to be assessed in order to ensure they are free of toxins or safety hazards such as seeds, poisonous, spiky or potentially dangerous plants.

C8. Plant species shall be those suitable to the local area. Refer to Part A of this DCP for a detailed plant listing.

C9. Areas likely to be subject to high water demand are fitted with a water efficient irrigation system such as drip irrigation with moisture sensors.

C10. Irrigation should use rainwater or recycled water in preference to mains water.

7. Fencing

Objectives

O1. To ensure child care centres provide a safe and secure environment for children.

O2. To prevent access by children to dangerous areas.

O3. To define the boundaries and edges between public and private land.

O4. To define areas of different uses.

O5. To ensure fences complement the existing character of the streetscape.

O6. To ensure that front fencing does not obstruct the view between the street and front façade.

O7. To ensure that fencing is at a scale that does not lead to the disjoining and fragmentation of the streetscape.

Development Controls

C1. Outdoor space is required to be fenced on all sides with a height of at least 1.8m, be accessible from the street and have regard to:

a) The safety and security of children;

b) The prevention of children climbing over, under, or through fences and leaving the premises unsupervised;

c) The prevention of those from outside the centre to access the site through climbing over, under or through fencing;

d) The integration with building design and proposed materials and colour scheme;

e) The integration of existing and proposed landscaping with fencing; and

f) The prevention of a sense of enclosure.

C2. Acoustic fences should not be higher than 2m. If a fence higher than 2m is unavoidable it must be contained within the development site with a 1.8m traditional lapped and capped boundary fence and the remaining height to be of thick, transparent perspex to ensure any views are maintained.

C3. Taller fences must terminate to the rear of the development. Any fence 1.8m in height shall terminate 1m behind the front façade.

C4. A series of barriers in the form of child proof gates are to be provided at the entry to the premises. This may include a gate on the front boundary and gate into the reception area to provide a catchment area.

Note: Thought needs to be given to the provision of child proof fencing external to the perimeter of the building but accessible to the street so as to contain children on site outside the building, but within reach of emergency services should a fire or other emergency occur.

8. Fire Safety and Emergencies

Objectives

O1. To require child care centres to have required emergency evacuation plans for the safe evacuation of occupants.

O2. To ensure the safety of the child care centre occupants in the event of a fire or other emergency.

O3. To ensure that the safety of child care centre occupants and users is not compromised at any stage.

Development Controls

C1. An evacuation plan complying with AS3745-2002 Emergency Control Organisation and Procedures for Buildings, Structures and Workplaces shall be submitted as part of the Development Application. The emergency evacuation should consider:

a) The mobility of children and how this is to be accommodated during an evacuation;

b) The location of a safe congregation area away from the evacuated building, busy roads, other hazards and the evacuation points of other residents or tenants within the building or surrounding buildings;

c) Where the child care centre is part of a larger building or complex, that the emergency evacuation plan is complementary and consistent with other emergency evacuation plans in place; and

d) The supervision of children during the evacuation and at the safe congregation area, with regard to the capacity of the child care centre and the child to staff ratios.

C2. Careful attention is to be given to the design of the child care centre to ensure that no conflict arises between the need to retain children on site and the need for escape in the event of an emergency.

C3. All required egress doors need to be operable at all times from the inside (without the use of a key) by any person (including children).

C4. Attention is to be given to the provisions of the Building Code of Australia relevant to Class 9(b) buildings. Use of existing structures for the establishment of a new child care centre will require the upgrading of the building to current construction and for safety requirements.

9. Accessibility

Objectives

O1. To ensure new child care centres, and alterations and additions including any associated spaces such as outdoor space, parking areas and the like, are designed to be accessible for all people within the community.

O2. To ensure a safe environment is provided for pedestrians around child care centres.

O3. To ensure staff are aware of visitors to the child care centre.

Development Controls

C1. All new child care centres, building conversions and additions to existing premises shall comply with the minimum access requirements outlined in Part D3 of the Building Code of Australia and AS 1428.1 Design for Access and Mobility – General Requirements for Access – New Building Work. Details are to be included on plans to be submitted with the application for development consent.

C2. The building must provide a continuous path of travel from the street and or parking area into and within every room and outdoor area used by staff and children.

C3. Appropriate measures, such as pavement and landscaping treatment, are required to separate pedestrian and vehicular access and direct them accordingly.

C4. Hard paved surfaces are to be provided for all access paths.

Appendix 1

ARTERIAL ROADS

Church Street
Cumberland Highway
Great Western Highway
Greystanes Road (between Merrylands Road and The Great Western Highway)
Parramatta Road

SUB ARTERIAL ROADS

Burnett Street
Fairfield Road (between McCredie Road and Prospect Creek)
Fowler Road (between McCredie Road and Merrylands Road)
Hawkesbury Road
Hawksview Street
McCredie Road (between Sturt Street and Fowler Road)
Merrylands Road
Neil Street
Pitt Street
Portia Road
Sturt Street
Toongabbie Road (between the Great Western Highway and Portia Road)
Treves Street (between Neil Street and Merrylands Road)

Appendix 2

UNSUITABLE COLLECTOR AND& LOCAL ROADS

Albert Street

Albert Street West

Alexandra Avenue

Bayfield Road

Braeside Road

Bridge Road

Byron Road

Centenary Road

Chetwynd Road

Clarence Street (between Walpole Street and Burnett Street)

Coleman Street

Cooper Street

Crescent Street

Cumberland Road

Dennistoun Road

Dunmore Street

Dursley Road

Ettalong Road

Fairfield Road (between Woodpark Road and McCredie Road)

Gilba Road

Gipps Road

Girraween Road (between Gilba Road and The Great Western Highway)

Guildford Road (between Military Road and Military Road)

Hilltop Road

Lane Street (between Station Street and Veron Street)

Lockwood Street (between Merrylands Road and Walpole Street)

Loftus Road

Long Street

Macquarie Road (between Bayfield Road and Gipps Road)

Military Road

Old Prospect Road

Pendle Way (between Gilba Road and the Great Western Highway)

Child Care Centres

Pine Road

Sherwood Road

Station Street

Targo Road (between Toongabbie Road and Gilba Road)

Toongabbie Road (between Portia Road and Targo Road)

Veron Street

Walpole Street

Woodpark Road

Part J

Site Specific Controls

Holroyd Development Control Plan 2013

Holroyd City

Site Specific Controls

Contents

Site Specific Controls

Land covered by this Part

This Part applies to development on land as detailed within this Part.

Relationship of Part J to Holroyd Development Control Plan 2013

Part J of Holroyd DCP 2013 shall be read in conjunction with the following Parts of Holroyd DCP 2013, which contain Objectives and Development Controls that relate to development in this Part:

Part A - General Controls

Part B - Residential Controls

Part C - Commercial, Shop Top Housing and Mixed Use Development Controls

Part E - Public Participation

Part F - Advertising and Signage Controls

Part G - Places of Public Worship Controls

Part H - Heritage and Conservation Controls

Part I - Child Care Centre Controls

Part R - Definitions

1. Hereford Place Wentworthville

The Hereford Place precinct comprises the land described in Table #.1 below, known as

20-44 Jersey Road and 23-45 Hampden Road, South Wentworthville and as indicated on Map 1. Medium density residential development is envisaged for this precinct.

Medium density residential development requires adequate local road access. However, half of the properties within this precinct have vehicular access only from the Cumberland Highway (also known as Jersey Road). This is unsatisfactory given that the Highway is primarily a metropolitan arterial road. Given this, the provision of alternative vehicular access to these properties is required to facilitate satisfactory development and minimise traffic conflicts on the Highway.

To provide this alternative vehicular access, it is proposed to extend Hereford Place north from Jersey Lane. To achieve this, land is required from properties currently fronting both the Cumberland Highway and Hampden Road. To minimise traffic conflicts and congestion on Hampden Road, and to prevent private driveways from being used by through traffic, access from Hampden Road will not be permitted for redeveloped properties.

Objectives

O1. To facilitate the reasonable development of the Hereford Place precinct by permitting the extension of Hereford Place, Wentworthville.

O2. To minimise vehicular access to properties from the Cumberland Highway.

O3. To ensure that alternative vehicular access is provided to properties with frontage to the Cumberland Highway, South Wentworthville.

O4. To reduce vehicular traffic and conflicts on Hampden Road, South Wentworthville, by providing alternative vehicular access from an extended Hereford Place.

Development Controls

C1. This section of the DCP applies to all development within the Hereford Place precinct, as indicated in Table 1 and show on Map 1.

C2. Development for the purposes of additions and alterations to existing detached dwelling houses is excluded from the provisions of this section.

C3. All development shall provide for future permanent vehicular access from the Hereford Place extension.

C4. Land shall be dedicated for the Hereford Place extension in accordance with Map #.1.

C5. An 8m wide vehicular carriageway shall be constructed along the proposed extension of Hereford Place, with a 4.0m footpath verge with a roll-top kerb along either side.

C6. Road layout and geometry shall be in accordance with the provisions of Part A of this DCP and with other approved standards, either the Guide to Traffic Engineering Practice published by NAASRA, or the Roads and Maritime Services guidelines.

C7. For all development except the erection of a dwelling house, all roadworks, including drainage, kerb and gutter and footpaths, shall be constructed at the applicant's expense and the required land dedicated to Council prior to release of any occupation certificate. Alternatively, Council may accept lodgement of a bond, through a bank guarantee, for the agreed value of the works plus interest for 10 years, in lieu of construction of the works.

C8. For the erection of a new detached dwelling house, all roadworks, including drainage, kerb and gutter and footpaths, shall be constructed at the applicant's expense and the required land dedicated to Council prior to release of any construction certificate.

C9. A restriction to use under Section 88B shall be included upon the title, with Council listed as a party, to require no access from either the Cumberland Highway or Hampden Road, upon extension of Hereford Place to the subject property.

C10. Temporary access shall be permitted from the Cumberland Highway or Hampden Road until such time as all land dedication and road construction for the Hereford Place extension is completed between Jersey Lane and the subject property.

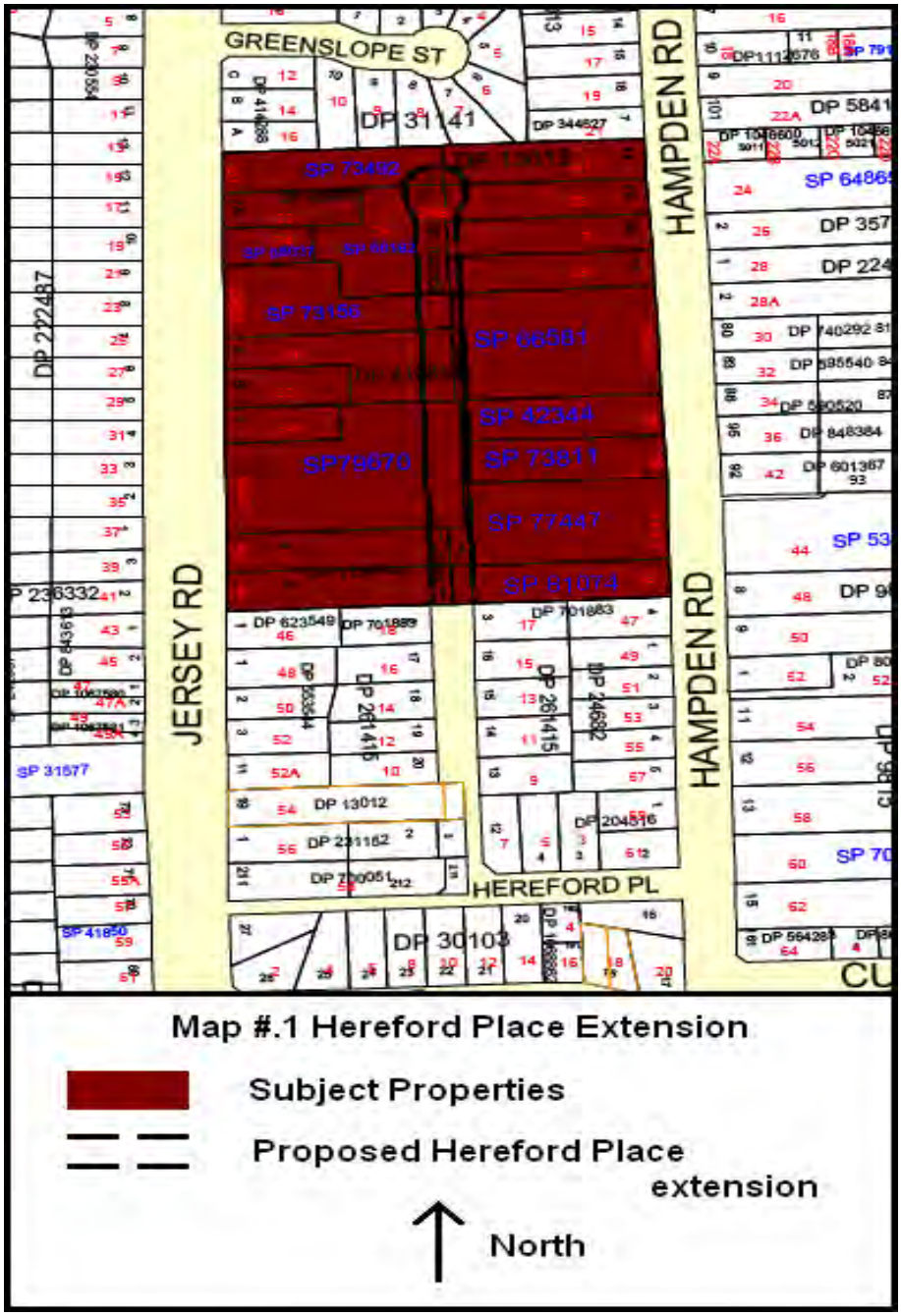
C11. Approval of temporary access from the Cumberland Highway or Hampden Road shall be subject to the agreement of the Roads and Maritime Services and any affected landholders.

C12. At such time as all land dedication and road construction for the Hereford Place extension is completed between Jersey Lane and the subject property, the following works shall be carried out at the expense of the landowner(s):

- all necessary works to permit vehicular access from Hereford Place, including removal of fences and construction of a suitable vehicular driveway from the property boundary to the kerb-line;
- all necessary works required to deny access from the Cumberland Highway or Hampden Road, including erection of fencing at the property line and removal of any vehicular driveway from the property boundary to the kerb-line.

Table 1: Land subject to Section 1 of this Part

Property Address	Lot & DP No. or SP No.
20 Jersey Road (Cumberland Hwy) South Wentworthville	SP 73492
22 Jersey Road (Cumberland Hwy) South Wentworthville	Lot 2A DP 406503
24 Jersey Road (Cumberland Hwy) South Wentworthville	SP 68037
24A Jersey Road (Cumberland Hwy) South Wentworthville	SP 68192
26-28 Jersey Road (Cumberland Hwy) South Wentworthville	SP 73156
30 Jersey Road (Cumberland Hwy) South Wentworthville	Lot A DP 412854
32 Jersey Road (Cumberland Hwy) South Wentworthville	Lot B DP 412854
34 Jersey Road (Cumberland Hwy) South Wentworthville	Lot A DP 414666
36-40 Jersey Road (Cumberland Hwy) South Wentworthville	SP 79670
42 Jersey Road (Cumberland Hwy) South Wentworthville	Lot 4 DP 1138704
44 Jersey Road (Cumberland Hwy) South Wentworthville	Lot 3 DP 1138704
23 Hampden Road, South Wentworthville	Lot 14 DP 13012
25 Hampden Road, South Wentworthville	Lot 13 DP 13012
27 Hampden Road, South Wentworthville	Lot 12 DP 13012
29 Hampden Road, South Wentworthville	Lot 11 DP 13012
31-35 Hampden Road, South Wentworthville	SP 66581
37 Hampden Road, South Wentworthville	SP 42344
39 Hampden Road, South Wentworthville	SP 73811
41-43 Hampden Road, South Wentworthville	SP 77447
45 Hampden Road, South Wentworthville	SP 81074



Map 1: Hereford Place

2. Crosby Street, Greystanes

As of 2010, Crosby Street, Greystanes, has been divided into two, unconnected sections. This section of the DCP is intended to guide future subdivision within the precinct to ensure that the two sections are connected, that development addresses the completed Crosby Street and that additional vehicular access from the parallel Great Western Highway is minimised.

Objectives

O1. To facilitate the reasonable development of the Crosby Street precinct by permitting the completion of Crosby Street, Greystanes.

O2. To minimise the number of properties with vehicular access from the Great Western Highway.

O3. To ensure that further development results in the completion of Crosby Street.

O4. To ensure that development addresses both sides of Crosby Street.

Development Controls

C1. This section of the DCP applies to all development within the Crosby Street precinct, as indicated in Table 2 and show on Map 2.

C2. Development for the purposes of the erection of a new detached dwelling house and additions and alterations to an existing, detached dwelling house is excluded from the provisions of this section.

C3. Subdivision of land in this precinct shall not result in:

- lots having a maximum dimension of more than 37.0m; or
- hatched-shaped allotments having vehicular access from the Great Western Highway.

C4. Land shall be dedicated for the Crosby Street extension in accordance with Map 2 for a 15.0m wide road reservation.

C5. A 7.5m wide vehicular carriageway shall be constructed along the proposed extension of Crosby Street, with a 3.75m footpath verge with a roll-top kerb along either side to match adjoining.

C6. Road layout and geometry shall be in accordance with the provisions of Part A of this DCP and with other approved standards, either the Guide to Traffic Engineering Practice published by NAASRA, or the Roads and Maritime Services guidelines.

C7. All roadworks, including drainage, kerb and gutter and footpaths, shall be constructed at the applicant's expense and the required land dedicated to Council prior to release of any Subdivision or Occupation Certificate. Alternatively, Council may accept lodgement of a bond, through a bank guarantee, for the agreed value of the works plus interest for 10 years, in lieu of construction of the works.

C8. Where hatched shaped allotments are created with frontage to both the Great Western Highway and the Crosby Street extension, a restriction to use under Section 88B shall be included upon the title, with Council listed as a party, to require no access from the Great Western Highway, upon extension of Crosby Street to the subject property.

C9. Temporary access shall be permitted from the Great Western Highway until such time as all land dedication and road construction for the Crosby Street extension is completed to the

subject property.

C10. Approval of temporary access from the Great Western Highway shall be subject to the agreement of the Roads and Maritime Services and any affected landholders.

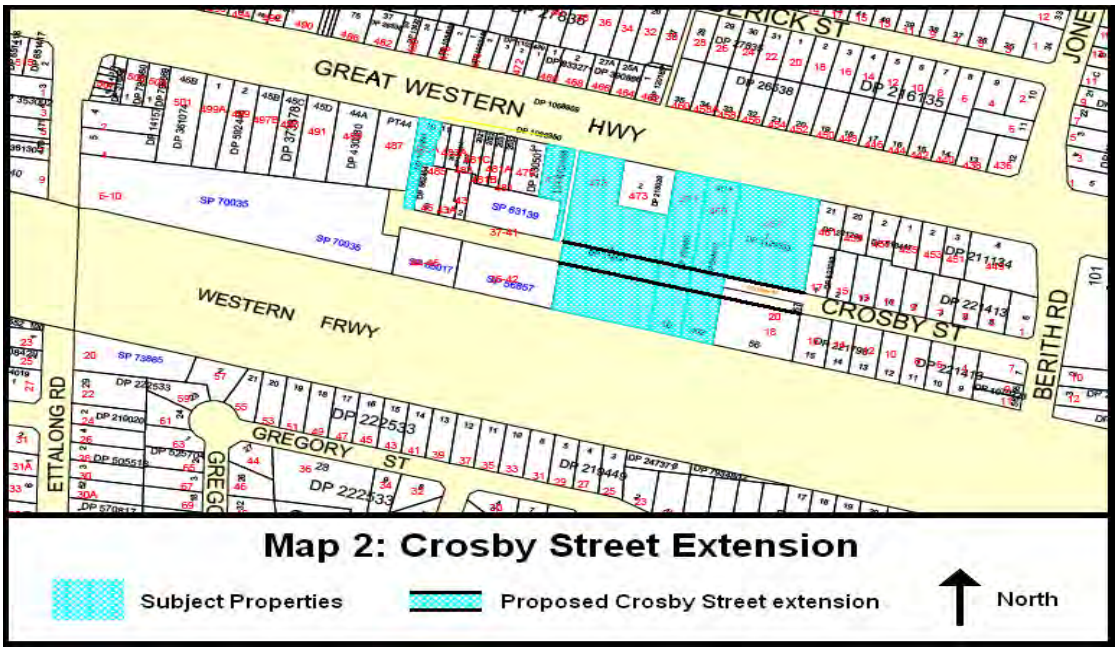
C11. Where temporary access from the Great Western Highway has been permitted, the following works shall be carried out at the expense of the landowner(s) at such time as the Crosby Street extension is completed to the subject property:

- all necessary works to permit vehicular access from Crosby Street, including removal of fences and construction of a suitable vehicular driveway from the property boundary to the kerb-line;
- all necessary works required to deny access from the Great Western Highway, including erection of fencing at the property line and removal of any vehicular driveway from the property boundary to the kerb-line.

C12. Development shall not extinguish the existing right of carriageways linking Crosby Street and Great Western Highway located on 477 and 485A Great Western Highway.

Table 2: Land subject to Section 1. of this Part

Property Address	Lot No.	DP
22 Crosby Street, Pendle Hill	402	564607
467 Great Western Highway, Pendle Hill	1	1129553
469 Great Western Highway, Pendle Hill	401	564607
471 Great Western Highway, Pendle Hill	10	793480
475 Great Western Highway, Pendle Hill	2	217021
477 Great Western Highway, Pendle Hill	7	862464
485A Great Western Highway, Pendle Hill	10	1050994



Map 2: Crosby Street

3. Hillier Street, Merrylands

Hillier Street, Merrylands (Hilltop) is an incomplete cul-de-sac, where subdivision and development has not yet permitted the construction of a turning bulb. This section of the DCP is intended to guide future development within the precinct to ensure that a turning bulb may be constructed without unnecessarily preventing development of properties zoned R3 Medium Density Residential.

Objectives

O1. To facilitate the reasonable development of the Hillier Street precinct by permitting the completion of Hillier Street, Merrylands.

O2. To ensure that further development results in the completion of Hillier Street.

O3. To minimise the number of properties required to dedicate land to Council.

O4. To ensure that 82 Clarence Street retains the opportunity to subdivide broadly in accordance with Council's previous development control plan.

Development Controls

C1. This section of the DCP applies to all development within the Crosby Street precinct, as indicated in Table1 and show on Map #1.

C2. Development for the purposes of the erection of a new detached dwelling house and additions and alterations to an existing, detached dwelling house is excluded from the provisions of this section.

C3. Land shall be dedicated to Council to allow creation of the cul-de-sac head in accordance with the layout shown on Map #1.

C4. Land dedication is to occur prior to the redevelopment of 69 and 71 Burnett Street for medium density housing.

C5. Medium density residential development of 69 and 71 Burnett Street is subject to:

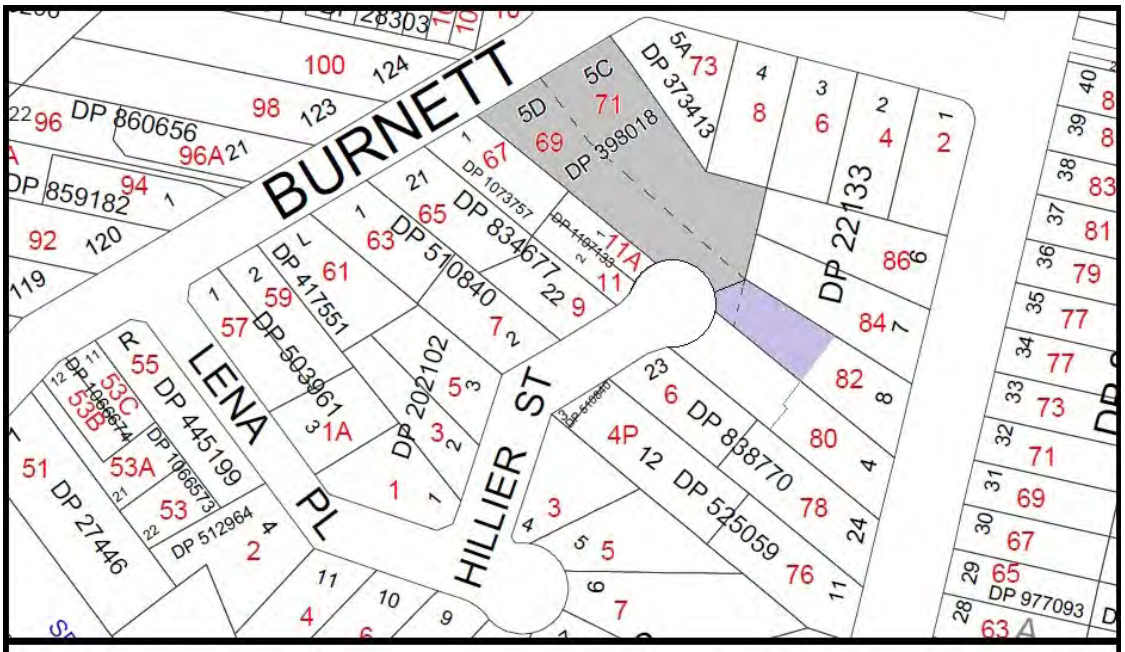
- amalgamation of these properties;
- a boundary adjustment between 69 Burnett Street and 82 Clarence Street, in accordance with Map #1, to ensure that the later has a frontage to the Hillier Street extension; and
- vehicular access to the amalgamated site is only provided from the Hillier Street extension.

C6. An appropriate cul-de-sac turning bulb is to be constructed within the area shown on Map #1.

C7. Road layout and geometry shall be in accordance with the provisions of Part A of this DCP and with other approved standards, either the Guide to Traffic Engineering Practice published by NAASRA, or the Roads and Maritime Services guidelines.

C8. All roadworks, including drainage, kerb and gutter and footpaths, shall be constructed at the applicant's expense and the required land dedicated to Council prior to release of any Subdivision or Occupation Certificate. Alternatively, Council may accept lodgement of a bond, through a bank guarantee, for the agreed value of the works plus interest for 10 years, in lieu of construction of the works.

Table 1. Land subject to Hillier Street Extension		
Property Address	**Lot No.**	**DP**
71 Burnett Street	5C	398018
69 Burnett Street	5D	398018
82 Clarence Street	8	22133
80 Clarence Street	4	23384



Map#.1 Hillier Street Extension

4. Proposed development and subdivisions of Bradman Street, Greystanes

Land to which this section applies

This section applies to land situated in the City of Holroyd, being Lot 5 DP 20650, Lot 6B DP 413844 and Lots 16 and 17 DP 238362, as shown in the diagram below.

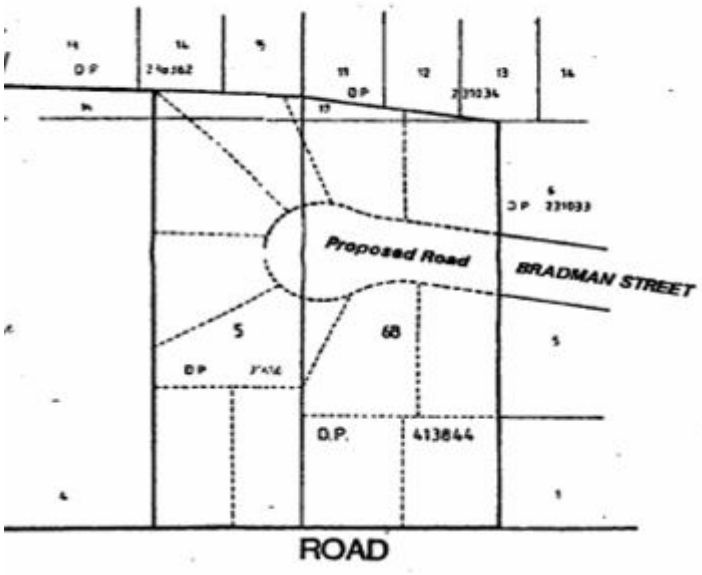
Aim

This plan aims to provide a cul-de-sac at the eastern end of Bradman Street, Greystanes.

Objectives

O1. To facilitate the conventional subdivision of Lot 5, DP 20650, Lot 6B DP 413844, Part Lot 16 and Lot 17, DP 238362 into 12 lots; and

O2. To prevent the linking of the existing sections of Bradman Street.



Map 4: Bradman Street Subdivision

5. Proposed development and subdivision of Gary Street

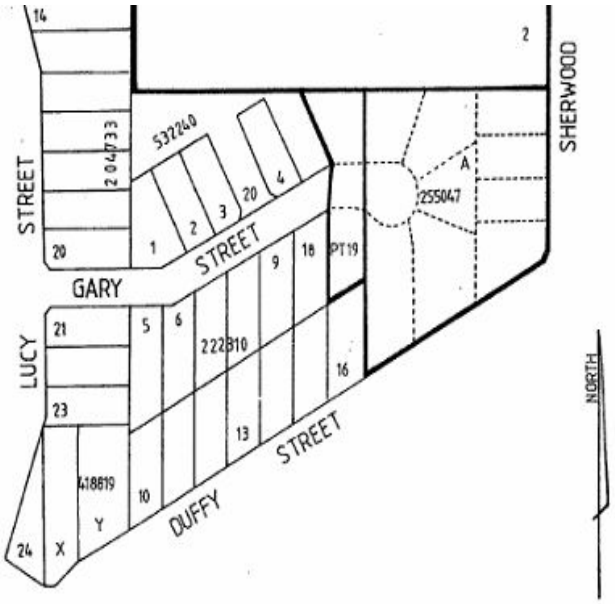
This section provides a guideline for the creation of a cul-de-sac at the eastern end of Gary Street, Merrylands.

Objective

O1. To ensure the creation of a cul-de-sac occurs at the time redevelopment occurs on the subject land.

Development Control

C1. Redevelopment of the properties identified in bold outline below requires the dedication of land for the purpose of creating a cul-de-sac in accordance with the plan.



Map 5: Gary Street Subdivision

6. Guidelines for the development of Sherwood Scrubs and adjoining land

This section applies to Lots 1 DP 1002887 and Lot 12 DP 1075418 ("The Site") on Kenyons Road, Merrylands.

Objectives

O1. To ensure that the siting of any future development are appropriate to the locality and of significant vegetation and natural or built heritage are preserved;

O2. To ensure that future development meets sound environmental practices and standards; and

O3. To encourage adaptive re-use and restoration of heritage buildings within the site.

Controls

C1. Any dwelling or other building erected within Lot 1 DP1002887 shall be wholly contained within a designated "Residential Precinct" as identified on Appendix A.

C2. Unless otherwise directed by Council, all existing trees greater than 3.5m in height external to a designated "development precinct" are to be protected and preserved.

C3. As far as possible, disturbance of the ground surface within the drip line of all trees over 3.5 m in height is to be avoided. All dwellings, structures and access roads are to be located to avoid disturbance of the following individual specimens:

Tree Number*	Description
312	Broad-leaved Ironbark
192	Mature Grey Box
193	Mature Grey Box
249	Mature Grey Box

(* Tree Numbers as identified on Appendix A).

C4. The design of the second storey should be integrated into the overall dwelling design and the reduced building footprint should assist in the retention of trees.

C5. Preservation of existing trees within designated "Residential Precincts" is to be maximised by the appropriate siting of dwellings, buildings and associated private open space areas. Specific trees likely to be affected by the siting of dwellings or structures are to be clearly identified on any plans for erection of such, and may only be removed with the express consent of Council.

C6. Development within Lot 1 DP1002887 shall make provision for establishment and maintenance of a "Native Vegetation Precinct". The location and extent of this precinct is to be as shown on Appendix A.

6.1. Specific Requirements applying to Lot 12 DP 1075418

Objectives

O1. To ensure the heritage significance of this site is retained.

Controls

C1. The provisions of Holroyd Local Environmental Plan 2013 with respect to adaptive re-use of heritage items apply to this site.

C2. Any application to Council for adaptive re-use and/or residential development within this lot shall be accompanied by a Conservation Plan prepared by a suitably qualified architect.

C3. The Conservation Plan will:

a) Describe the significance of buildings, structures and their setting as part of the environmental heritage of the City of Holroyd;

b) Consider appropriate steps for conservation of identified elements to be undertaken in conjunction with the proposed development; and

c) Describe appropriate steps to mitigate any adverse impact on the heritage significance of identified elements arising as a result of the proposed development.

7. Greystanes Creek

In early 1993, a portion of Greystanes Creek between Oklahoma Avenue / Memphis Crescent and Octavia Road, Toongabbie was realigned as part of flood mitigation works, and a program of regeneration to re-establish the native vegetation was commenced under the supervision of Holroyd City Council.

A Plan of Management (POM) for Greystanes Creek Reserve has also been prepared, which outlines future management strategies and works which will enhance the Reserve's value for recreation, wildlife habitat, nature conservation, water quality improvement, drainage, and flood mitigation. Private property adjacent to the Greystanes Creek Reserve will play a vital role in supporting these works, and this section of the DCP aims to ensure that new development is compatible with the aims of the POM.

Land to which this Part applies

This section applies to land situated in the City of Holroyd outlined in heavy black as shown on the plan map marked Map 6. A list of the properties subject to this plan is contained in Appendix B.

All sections of the Plan shall apply when affected properties are developed for multiunit dwellings or are subdivided. For other forms of development the "Setback" and "Drainage" sections shall apply.

Aims

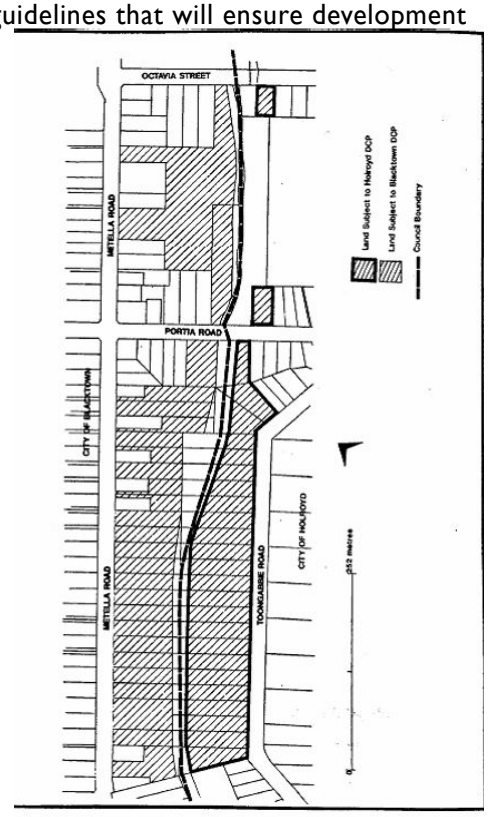
The purpose of this section of the DCP is to provide guidelines that will ensure development on land adjacent to Greystanes Creek Reserve is compatible with the Greystanes Creek Reserve Plan of Management by:

a) Extending the potential for a wildlife corridor by re-establishing the native bushland vegetation of the creek environment on land adjacent to the Reserve;

b) Enhancing the visual appeal, landscape characteristic and scenic quality of the Reserve;

c) Providing a visual buffer between the Reserve and development on land adjacent to the Reserve; and

d) Limiting sediment and nutrient run-off through the establishment of a vegetated buffer between new development and Greystanes Creek Reserve.



Map 6: Greystanes Creek

6.2. Setback

Objectives

O1. To ensure the potential for a wildlife corridor onto land adjacent to the Reserve.

O2. To ensure a visual buffer is provided between the Reserve and development on adjacent land.

Development Controls

C1. All buildings and structures shall be set back 10m from the boundary adjacent to the Greystanes Creek Reserve. Buildings and hard surfaces shall not be permitted within this 10m zone. This zone will constitute part of the overall landscaped area of the development.

C2. The 10m setback has been derived from the expected size of the tree canopy for those tree species indigenous to the area. This will permit the planting of trees close to the property boundary adjacent to Greystanes Creek.

C3. Reserve with the reduced likelihood of tree roots interfering with buildings or utilities when the trees mature. The tree canopy will also not extend over the roof of any buildings, which could be a matter of concern.

C4. Consideration will be given to setbacks of less than 10m on those blocks that have a side boundary with the reserve.

6.3. Fences

Objectives

O1. To ensure there is a minimal physical barrier to the extension of the wildlife corridor from the Reserve onto adjacent land.

O2. To ensure there is a minimal visual barrier between the Reserve and development on adjacent land.

Development Controls

C1. Fencing of property along boundaries with the Greystanes Creek Reserve shall have a maximum height of 1.8m and be of an open pool type construction.

C2. The fencing is to be of a dull metallic finish and of a colour that blends with the natural bushland environs. This type of fencing will extend the potential for a wildlife corridor by removing the physical barrier between plantings on the Reserve and adjacent land. The open fencing will enhance the scenic quality of the Reserve through the visual integration of the Reserve and adjacent land and increase safety by providing improved visibility.

6.4. Landscaping and Site Design

Objective

O1. To extend the potential for a wildlife corridor by re-establishing the native bushland environment on land adjacent to the Reserve.

O2. To enhance the visual appeal, landscape characteristic and scenic quality of the Reserve.

O3. To provide for shade and acoustic and visual privacy on land adjacent to the Reserve.

Development Controls

Retention of Native Vegetation

C1. There shall be no removal of local endemic trees or understorey vegetation, other than noxious weeds, within the proposed 10m buffer.

C2. All plans for development must ensure that local endemic plant species are retained and protected.

C3. Vegetation to be retained is to be protected from damage during construction works, such as the compaction of soil and damage to root systems.

C4. Council's Tree Management Order forbids the removal or lopping of any tree without Council consent.

Landscape Works

C5. Within the 10m buffer zone landscape works shall be undertaken in accordance with this plan so as to re-establish local bushland vegetation.

C6. The landscape works shall consist of a garden bed located adjacent to the boundary fence (Figure 2).

C7. The garden bed shall have a minimum width of 2.5m, be planted only with those endemic plant species listed in the Species List and include trees, shrubs and groundcover.

C8. The planting shall be of sufficient density to replicate a natural bushland ecosystem. The aim is to provide habitat for native wildlife, such as birds, invertebrates and insects.

The following density of plantings are given as a guideline:

Planting Densities
Trees: 1 per 4-5 m^2
Shrubs: 2 per 1m^2
Ground cover: 4-8 per m^2

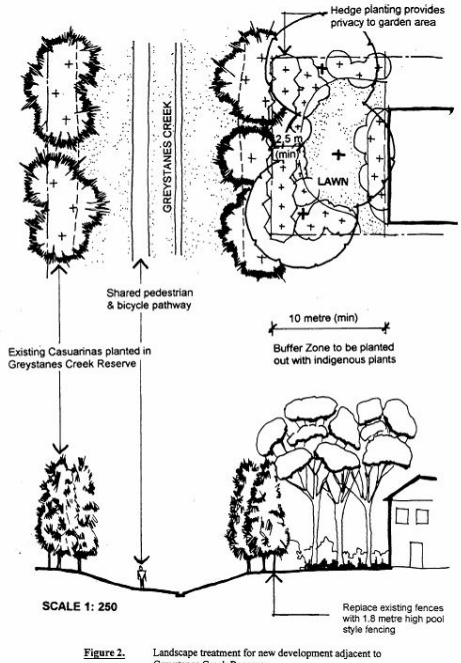


Figure 2. Landscape treatment for new development adjacent to Greystanes Creek Reserve.

Landscape treatments

Vegetation

C9. Council shall require that all vegetation planted in the landscaped area are plants commonly found in the area, as per Appendix C. A list of specialist nurseries is available from Council.

C10. Developers will be required to submit landscape plans with the Development Application.

C11. The details of the proposed landscaping are to be prepared by a suitably qualified person acceptable to Council.

C12. Council requires that a landscape bond be lodged on the basis of the value of the proposed development. The bond is to be retained for a minimum period of 12 months after the completion of development to ensure that landscaping works have been undertaken, are successful, and have been satisfactorily maintained.

6.5. Drainage

Objectives

O1. To ensure the amount of urban run-off pollutants to Greystanes Creek is as minimal as possible.

O2. To ensure adequate control erosion measures are taken.

Controls

C1. Appropriate erosion and sedimentation controls shall be undertaken in accordance with Council's Erosion and Sedimentation Control Policy to the satisfaction of Council's Building Surveyor.

C2. Measures to minimise nutrients and sediment entering Greystanes Creek shall be undertaken through the establishment of a vegetated buffer between the development and Greystanes Creek.

6.6. Fire

Objective

O1. To ensure the potential for bushfire risk on the Reserve and adjacent land is as minimal as possible.

Controls

C1. It is recommended that fuel reduction measures are undertaken on land adjacent to the Reserve.

C2. Measures include the provision of leaf guards to gutters. Within the Greystanes Creek Reserve itself, the creek and drainage channels form natural fire breaks, which, combined with fragmented and isolated nature of the vegetation, means that major fire events are unlikely to occur.

8. Forest Gum Estate

The Forest Gum Estate, Greystanes is intended to be developed as a low density residential area.

As a response to potential over development, it is intended to impose additional development controls which would apply to this site. Rather than limiting the range of building forms by providing additional FSR controls, it is considered appropriate to contain development within an appropriate building envelope. In addition, controls on the minimum amount of private open space will ensure that sufficient private open space is provided for each dwelling.

As the Forest Gum Estate is a comparatively large development, it is appropriate to designate significant trees subject to Council's Tree Management Order and provide soil erosion and sedimentation controls within the Development Control Plan.

This section of the DCP applies to land outlined in heavy black as shown on the plan map below.

Objectives

O1. To ensure the low density development is consistent with that allowed under the R2 zone of Holroyd LEP 2013.

O2. To ensure a building envelope is provided to contain the bulk and scale of development.

O3. To ensure significant trees are identified and protected.

O4. To ensure controls are provided relating to soil erosion and sedimentation during construction and building works.

Note: The provisions of Part B of this DCP relating to One and Two Storey Residential Development" and "Dual Occupancy" specifically apply to the subject land except where the provisions of this section apply.

Development Controls

Private Open Space

C1. A minimum area of 80 square metres excluding side and rear setbacks shall be provided as usable private open space for each allotment.

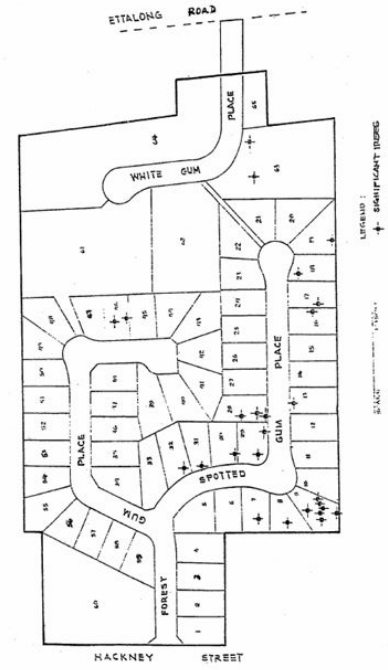
Tree Management

C2. Those trees identified as being significant on the map are subject to the provisions of Holroyd City Council's Tree Management Order.

C3. In respect of Lot 9 DP 845448 shown on the map Council may consider the removal of trees provided four significant trees are retained and a schedule of replacement trees is provided to the satisfaction of Council.

Soil Erosion and Sedimentation

C4. Measures to prevent soil erosion and sedimentation as detailed in Part A of this DCP.



Map 7: Forest Gum Estate

Appendix A - Sherwood Scrubs

Appendix B- Greystanes Creek

Land within the Greystanes Creek Precinct

DP 837421 Lot 41	139 Toongabbie Road, Toongabbie
DP 837421 Lot 40	137 Toongabbie Road, Toongabbie
DP 837421 Lot 39	135 Toongabbie Road, Toongabbie
DP 837421 Lot 38	133 Toongabbie Road, Toongabbie
DP 837421 Lot 37	131 Toongabbie Road, Toongabbie
DP 837421 Lot 36	129 Toongabbie Road, Toongabbie
DP 837421 Lot 35	127 Toongabbie Road, Toongabbie
DP 837421 Lot 34	125 Toongabbie Road, Toongabbie
DP 837421 Lot 33	123 Toongabbie Road, Toongabbie
DP 837421 Lot 32	121 Toongabbie Road, Toongabbie
DP 837421 Lot 31	119 Toongabbie Road, Toongabbie
DP 837421 Lot 30	117 Toongabbie Road, Toongabbie
DP 837421 Lot 29	115 Toongabbie Road, Toongabbie
DP 837421 Lot 28	113 Toongabbie Road, Toongabbie
DP 837421 Lot 27	111 Toongabbie Road, Toongabbie
DP 837421 Lot 26	109 Toongabbie Road, Toongabbie
DP 837421 Lot 25	107 Toongabbie Road, Toongabbie
DP 837421 Lot 24	105 Toongabbie Road, Toongabbie
DP 837421 Lot 16	103 Toongabbie Road, Toongabbie
DP 837421 Lot 18	101 Toongabbie Road, Toongabbie
DP 837421 Lot 23	99 Toongabbie Road, Toongabbie
DP 837421 Lot 22	97 Toongabbie Road, Toongabbie
DP 837421 Lot 21	95 Toongabbie Road, Toongabbie
DP 617512 Lot 1	26 Portia Road, Toongabbie
DP 11508 Lot 206	29 Portia Road, Toongabbie
DP 11508 Lot 181	18 Portia Road, Toongabbie

Appendix C- Species List

Trees

Angophora floribunda (Rough barked Apple)

Casuarina glauca (Swamp oak)

Eucalyptus amplifolia (Cabbage Gum)

Eucalyptus molucanna (Grey Box)

Eucalyptus tereticornis (Forest Red Gum)

Melaleuca linanrifolia (Snow-in Summer)

Melaleuca stypheloides (Prickly Leaf Paper Bark)

Melaleuca decora

Shrubs

Acacia decurrens (Black Wattle)

Acacia falcate

Acacia floribunda (Sally Wattle)

Acacia implexa

Acacia parramattensis (Sydney Green Wattle)

Bursana spinosa (Blackthorne)

Daveista ulcifolia

Desmodium brachypodum

Dillwynia sieberi

Indigofera australis (Native Indigo)

Kunzea amigua (Tick Bush)

Leptospermum flavescens

Melaleuca nodosa

Omalanthus populiflious

Grasses and Groundcover

Atriplex semibaccata (Saltbush)

Atriplex australascia (Saltbush)

Brunoniella australis

Carex appressa (Sedge)

Centella asiatica (Centella)

Chloris truncata

Chloris ventricosa

Commelina cyanea (Creeping Christian)

Danthonia linkii var. linkii (Wallaby Grass)

Dianella longifolia (Blue Flax Lily)

Dianella revolute

Dicanthum sericeum

Dichelachne crinita

Dichondra repens (Kidney Weed)

Echinopogon caespitosus

Echinopogon ovatus

Einadia hastata (Saltbush)

Einadia polygonoides (Saltbush)

Glycine tabacina

Glycine clandestina

Juncus usitatus (Common Rush)

Oplismenus aemulus

Themeda Australia (Kangaroo Grass)

Part K

Holroyd Gardens

Holroyd Development Control Plan 2013

Holroyd Gardens

Contents

Holroyd Gardens

Introduction

This Part of Holroyd Development Control Plan 2013 provides a framework that will guide future development in Holroyd Gardens.

The controls and guidelines demonstrate Holroyd City Council's commitment to ensuring redevelopment of the former Goodlet and Smith Brickworks site takes place in a sensitive, sustainable and exemplary manner. Both Council and the joint venture development partner, Delfin Property Group, are committed to ensuring development of the site is of the highest quality.

Land to which this Part applies

This Part of DCP 2013 applies to land known as "Holroyd Gardens", located adjacent to Walpole Street, the Main Southern Railway and Walpole Street Park, Holroyd. The site is defined by the locality plan (Figure 1.1 & Figure 1.2)

Boundaries for this DCP may be extended in future by the inclusion of additional lands. Where this is the case, the DCP will be amended accordingly.

Relationship to other parts of Holroyd Development Control Plan 2013.

Part K of Holroyd DCP 2013 shall be read in conjunction with the following Parts of Holroyd DCP 2013, which contain Objectives and Development Controls that relate to development in this Part:

Part A - General Controls

Part B - Residential Controls

Part C - Business, Shop Top Housing and Mixed Use Development Controls

Part E - Public Participation

Part F - Advertising and Signage Controls

Part H - Heritage and Conservation Controls

Part I - Child Care Centre Controls

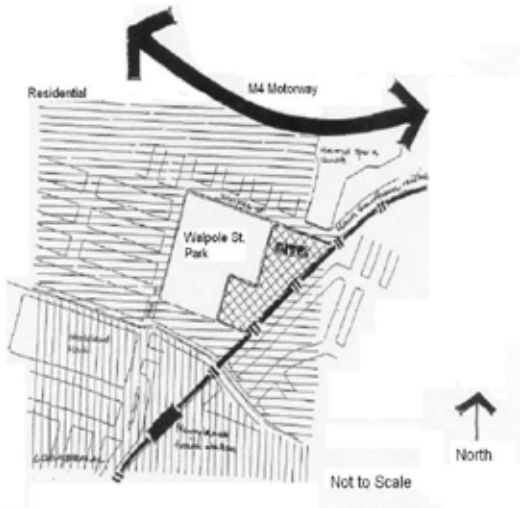


Figure 1.1

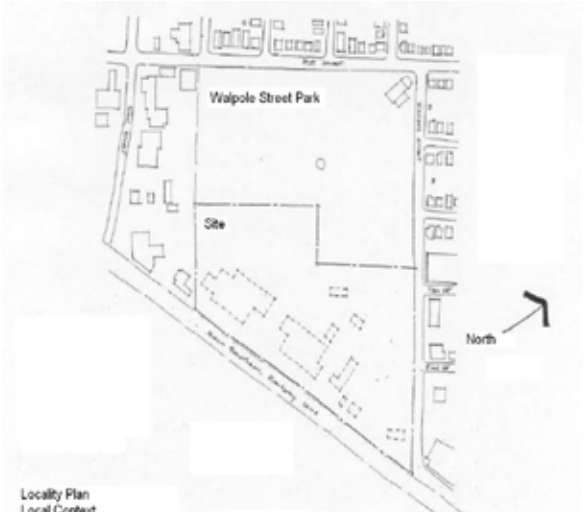


Figure 1.2

Holroyd Gardens

1. Objectives and Approach

1.1. Objectives

O1. Redevelopment of the former Goodlet an Smith Brickworks site should:

- Be responsive to the needs of the community,
- Achieve high levels of design and appearance,
- Be responsive to the heritage significance of the site, and
- Be well integrated with its surrounding urban context.

O2. Ensure that the urban structure, layout and form of the development responds positively to its urban context, Specifically:

- Incorporation and extension of Walpole Street Park into and through the site;
- Establishing open space links, including pedestrian and bicycle linkages, which connect the site with Walpole Street Park, Merrylands Town Centre and areas further afield.
- Ensure an appropriate and supportive frontage to Walpole Street and Walpole Street Park

O3. Ensure a supportive relationship with the heritage significance of the site. Specifically:

- Conserve and refurbish significant heritage buildings within an established heritage precinct;
- Introduce activities within the heritage precinct in order to ensure that the area becomes a "seamless" component of the greater site;
- Implement specific controls for areas in close proximity to heritage items that ensure new buildings are complementary and not mimicking in terms of form and appearance.

O4. Ensure that buildings on the site provide a supportive relationship with the public domain and appropriately respond to the needs of pedestrians.

O5. Enable a wide choice of housing types, including adaptable housing, in order to effectively respond the changing need of the community and residential market.

O6. Provide a high level of amenity for future residents and users of the site through the provision of a coordinated palette of urban elements including furniture, lighting, paving and vegetation.

1.2. Vision

Holroyd Gardens is intentionally considered as a garden neighbourhood, with ample open space throughout and the distinctive heritage precinct being actively used as interpretation, open space and community facilities at the heart of the neighbourhood.

A wide linear parkway traverses the length of the neighbourhood and has adjacent to its mid point a large artificial wetland. The site is also directly connected to Walpole Street Park, which extends through to the Heritage Precinct. This combined park system enables all residents to have easy access to a variety of pleasant recreation opportunities.

The main road system and pathway system through the centre of the neighbourhood is intended to give all residents easy access to the Walpole Street Park and the Merrylands Town Centre. The road system and levels of attention to streetscape gives the neighbourhood a distinctive character.

With the exception of the Heritage Precinct, the site will be developed for residential and activities ancillary to such residential development, such as open space and home offices.

Based on the current indicative Master Plan, this DCP envisages that the site will have a maximum density of 260-280 dwellings, comprised of a mix of detached, semi-detached and medium density multi- unit housing. Council may at its discretion consider and approve a variation to the Master Plan where compelling economic, environmental or social grounds are present, and where the overarching objectives and principles of this DCP can be achieved.

1.3. Access and Linkages

Collector Road

A collector road serves to provide a link road through the project. The collector road will have a strong landscape amenity with a regular row of advanced trees and wide verges with wide foot paths/cycleways. The collector road commences at Walpole Street near the Fox Street intersection.

Park Edge Terraces

Park Edge Terraces are positioned along the flanks of the Linear Park and elsewhere. These Terraces have two advantages: They allow access to houses overlooking the reserve; and, they also allow access to the Walpole Street Reserve, allowing the eastern side of the park to be accessible to potential users.

Cycleways and Pedestrian Paths

Cycleways and pedestrian paths are aligned with the open space system as well as streets. These cycleways and pathways link towards:

- Merrylands Town Centre,
- A'Becketts Creek
- Merrylands railway station
- The Heritage Precinct.

1.4. Open Spaces

Public Open Spaces

The open space system within Holroyd Gardens is extensive and provides variety of spaces appropriate for a wide range of activities. These include:

- Linking visually and physically the heritage precinct buildings with the Walpole Street Reserve.
- The formation of a linear parkway that provides visual amenity, recreation areas and pedestrian/cycle linkages.
- The retention and the re-use of several of the former brickworks buildings as a centre piece for community use
- A central open area adjacent to the Heritage Precinct, opens up to the linear parkway and lake, and provides direct visual links with Walpole Street Park.
- Creation of a variety of landscaped spaces throughout the neighbourhood.

Semi Public/Semi Private Open Spaces - Front Gardens

The amenity of the front gardens is important for extending the general quality of Holroyd Gardens landscape system.

The front yard areas of housing are considered as an opportunity to extend the quality of the street landscape into the front areas of the housing. Colourful front area planting is encouraged.

1.5. Built Form

Density and Building Height

O1. Housing is placed so that there is a clear transition in building height and bulk from Walpole Street, towards the railway line and from the Heritage Precinct outwards. This enables the gradual change in density from key elements of the open space system, as well as the vehicular and pedestrian approaches to the housing areas.

O2. Housing is positioned so that all houses provide direct surveillance of the proposed street and open space systems, with the majority of housing positioned so that it has frontage to reserves and open space. This strategy encourages a high level of community supervision of the open space areas, as well as maximising the benefit of the open space system to the enjoyment of the residents.

O3. Housing is grouped in order to provide areas with opportunity for distinct residential character. There are areas of terrace housing for instance forming two "crescents" facing open spaces. Multi- unit housing is placed alongside the Linear Parkway as well as the Collector Road. The longer building forms of the multi- unit dwellings assist in providing a noise buffer alongside the railway corridor.

O4. Residential buildings are to complement heritage buildings within and adjacent to the heritage precinct. It is intended that the addition of any new residential buildings will encourage a higher degree of supervision and better use of the heritage precinct. New buildings adjacent to heritage buildings are to complement (though not mimic) the heritage buildings by virtue of their height, scale, bulk, materials and appearance.

1.6. Streetscape

A high level of attention to streetscape is a key principle to the visual success of the Holroyd Gardens. This applies to the areas immediately fronting the street, as well as those spaces that are visible from the street.

O1. The streetscape should be characterised by buildings with individual variety that give interest, while still forming a cohesive sense of neighbourhood.

O2. To ensure that each of the individual houses or groups of houses reinforce and add to the tree lined street environment with a high level of private area planting.

O3. To ensure consistent frontages, ridge heights and eave heights..

O4. To require a variety of materials within an agreed palette of building materials to be used.

1.7. Building Envelope

O1. To ensure housing is considered in terms of its relationship to adjoining buildings to encourage the reinforcement of street enclosure and street character.

O2. To encourage Verandahs and projecting awnings, "Dutch Gable" roof forms and similar techniques that "break up" the roof shape.

O3. To ensure long flat faced walls are avoided. Walls should incorporate bay windows, porches, small verandahs, French windows to give relief and articulation to exterior walling, and provide internal amenity.

1.8. Adaptable Housing

O1. To ensure housing addresses, where practicable, the needs of the disabled and the elderly.

1.9. Energy efficiency

O1. To ensure housing demonstrates attention to energy efficient design by:

- Maximising north orientation;
- The use of wall and ceiling insulation ;
- Building forms that allow cross ventilation and zoned heating and cooling;
- The use and sensible placement of thermal mass; and
- Appropriate landscape placement.

1.10. Waste management

O1. To ensure the provision of adequate dedicated spaces for the storage of waste and recycling away from street. Adequate storage is required for all dwellings.

1.11. Off Street Parking

O1. To ensure parking complies with Council's provisions and is to be designed so as to reduce visual impact on the streetscape.

O2. To ensure driveways are designed to minimise the area of hard paving to a practicable minimum.

2. Open Space

2.1. Objectives

O1. The open space system is generally as defined in Figure 3.1.

O2. Open space on the site will be interpreted as a continuous system, comprised of places (the heritage precinct, landscaped spaces etc) and linkages (linear park corridor, streets etc)

O3. All parks are to be highly accessible, as well as framed and defined by the street system.

O4. The site is to provide for linkages to the wider open space system, such as the regional bicycle corridor and Walpole Street Park.

O5. Streets are important elements of the open space system. They should provide direct links between key open space destinations.

Pedestrian Linkages

O6. The pedestrian system is generally as defined in figure 3.1.

O7. A Linear Park Corridor, generally corresponding to the alignment of A'Becketts Creek, will allow for a future pedestrian and bicycle linkage between the site, Merrylands and areas to the north. It will also incorporate a segment of the regional bicycle system.

O8. A strong pedestrian linkage will be developed between the Heritage precinct, artificial wetland, and will eventually continue on to the rotunda and Children's Museum in Walpole Street Park. This pathway will provide a strong physical and visual link between Walpole Street Park attractions, the heritage precinct and the site generally.

O9. Secondary pedestrian linkages will be provided adjacent to Walpole Street park, adjacent to Walpole Street and south west through Walpole Street Park, linking Merrylands to the site.

Landscape

O10. A coordinated landscape master plan for the entire site will be developed and implemented.

O11. Plant species chosen for the site should be appropriate in terms of meeting the functional requirements of the environment in which they are to be utilised.

O12. The Heritage Precinct and link with Walpole Street Park will be enhanced through the use of (complementary) feature planting.

O13. Each Precinct and/or each major street type will contain subtle differences in landscape approach in order to accentuate legibility.

Figure 3.1

2.2. Elements of the Open Space System

The Heritage Precinct

The Heritage Precinct is located generally adjacent to the Main Southern Railway line, in a central location between Walpole Street and the southern boundary of the site. The location and extent of the Heritage Precinct is defined in Figure 3.2.

The Heritage Precinct should be the focus of development on the site. Refer to the Heritage Strategy Report for details.

Figure 3.2

Linear Park Corridor

The location of the linear park corridor is described on Figure 3.3.

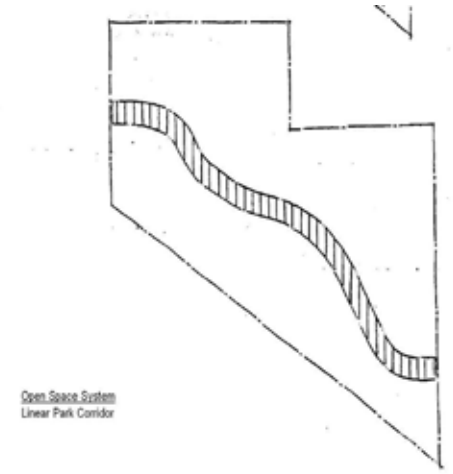


Figure 3.3

Objectives

O1. To encourage the relocation of the weir currently located within the existing A'Becketts Creek alignment to a position within the Linear Park Corridor is encouraged. This will be confirmed following detailed hydraulic investigation ensuring the ability to maintain adequate flood capacity

Development Controls

C1. The Linear Park corridor will be approximately 19 metres in width.

C2. The Linear Park corridor is to be accessible from both sides and is to incorporate a pedestrian and bicycle path of at least 2.5 metres width

C3. The Linear Park Corridor is to accommodate a component of the overland flow generated by development on the site and is to incorporate substantial planting and other landscape treatments to accentuate its appearance as a "creek-like" corridor.

2.3. Extension to Walpole Street Park

Objectives

O1. To provide a pedestrian connection to the principal east-west linkage between the Park and Heritage Precinct.

O2. To maximise casual surveillance from adjacent residences.

O3. To ensure the park extension is well lit.

O4. To ensure Walpole Street Park is to be highly accessible.

Development Controls

C1. Walpole Street Park is to be extended to a new boundary alignment immediately adjacent to residential development on the site (see Figure 3.4)

C2. The extension area of Walpole Street Park is to incorporate an informal pedestrian path linking Walpole Street to the southern extent of the site.

C3. Planting in the Walpole Street Park extension area is to be ground covers or clean trunked tree species only.

2.4. Landscaped Spaces

Objectives

O1. To ensure high quality landscapes spaces are provided at various locations throughout the site.

Development Controls

C1. The design of landscape spaces should complement and contribute to the urban setting and add value and amenity to adjacent areas. In addition, they should be designed to:

- Be environmentally sustainable, particularly in their use and demand for water;
- Clearly convey a message that they are available and meant to be used;
- Allow a range of potential activities;
- Be engaging from the outside and within; and
- Foster a safe and secure public domain.

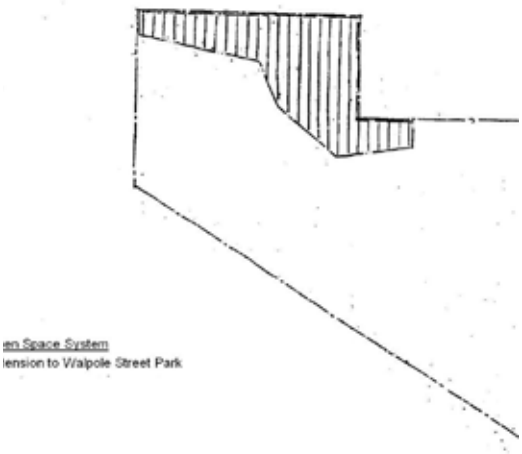


Figure 3.4

2.5. Pedestrian and Cyclist Facilities

The off-street pedestrian system is comprised of formed paths of either 2.5 metres width for major linkages and pedestrian/bicycle linkages, or 1.5 metres width for secondary (pedestrian only) linkages. These are detailed in Figure 3.1.

Objective

O1. To ensure all pedestrian and cyclist paths allow high levels of casual surveillance through their location, lighting and form of adjacent planting.

Development Controls

C1. All footpaths adjacent to streets are to be a minimum of 1.5 metres width.

C2. Footpaths are to be provided adjacent to streets according to the following schedule:

Collector Road	at least one side
Access Street	at least one side
Access Street serving a maximum of Eight dwellings	none required
Park Edge Terrace	at least one side
Shared Accessway	none required

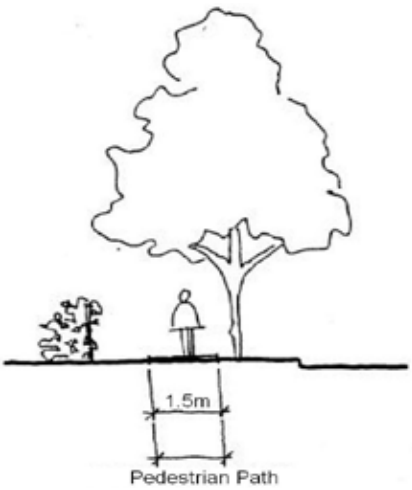


Figure 3.5

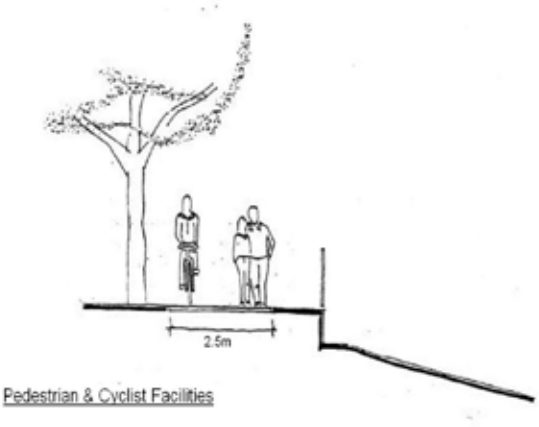


Figure 3.6

2.6. The Drainage System

Objectives

O1. To ensure the provision of a combination of underground culverts, the linear park corridor, existing overland flow corridors and the sub-street drainage system will accommodate the ARI 1 in 100 flow.

Development Controls

C1. An artificial wetland is to be provided adjacent to the Collector Road and Heritage Precinct. The wetland will be a permanent water body, designed to be an important visual amenity for Holroyd Gardens and to treat stormwater pollutants through the use of macrophytes and other such species. The wetland will accommodate a freeboard in order to accommodate on site detention from the western portions of the site.

C2. An on site detention system is to be designed and constructed to the satisfaction of Council.

3. Streets

3.1. Key Principles

a) Street System

Objectives

O1. To ensure the street system will be the main north south link between Walpole Street and potential future development to the south. It will circulate around the heritage precinct (east) and will be linked by lower order roads at regular intervals along its length.

O2. To allow the Walpole Street Park Extension to be utilised for construction of streets, in order to maximise the developable area.

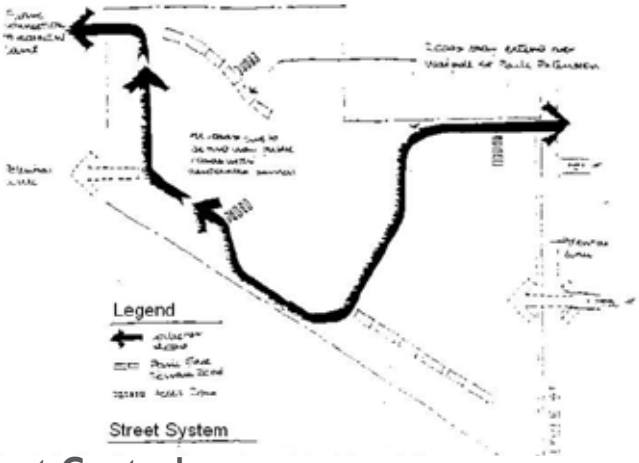


Figure 3.7

Development Control

C1. To require streets to frame and define key public spaces.

C2. To ensure the provision for the requirements of emergency and service vehicles are made.

a) Street Character

Objectives

O3. To ensure streets are designed such that they are appropriate for all potential users. The design of the street environment should support the establishment of distinct zones of activity, including public space (traffic, parking and pedestrian zones), semi-public space (front yards and porches) and private space (within the building).

Development Controls

C1. Buildings shall be sited so that they provide strong definition of the public realm. The ratio of building height (at any point) to the horizontal distance between buildings (at a corresponding point), across a street, should generally fall between 1:1.25 and 1:3.7, except in areas adjacent to heritage items. A ratio of up to 1:3.7 will be allowed in cases where smaller buildings are to be located opposite apartment buildings.

C2. In situations where no other building has been proposed for across the street, the horizontal

distance between buildings is assumed to be the distance between the proposed building and the maximum building setback (as defined in Clause 4.2) behind the opposite verge/property boundary.

C3. Streets are to be designed such that there is a clear distinction and progression from private space to semi public, to public space.

C4. Buildings shall be sited and designed to maximise casual surveillance of the public realm.

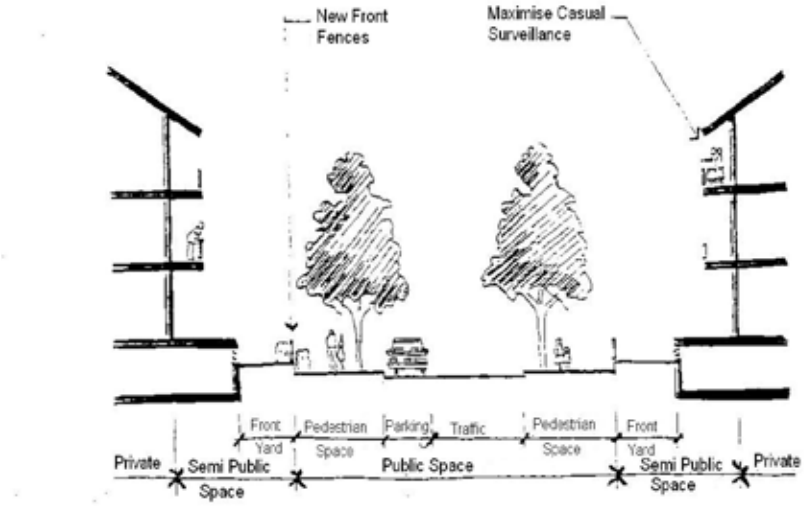


Figure 3.8

Street Character

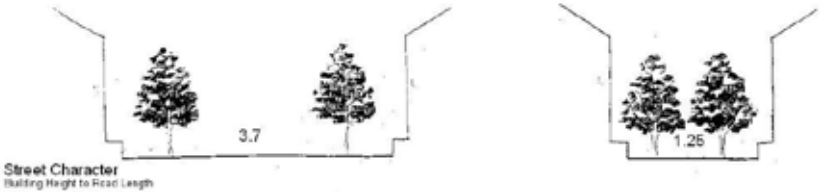


Figure 3.9

a) Principal Entrance

The principal entrance to the site will be from Walpole Street, adjacent to the Walpole Street Park boundary.

Objectives

O4. To allow for a possible second entrance to the site to align with Peel Street.

O5. To ensure the main entrance is to be designed to provide and coordinate with speed and traffic control on Walpole Street.

O6. To ensure the main entrance will be designed to reflect its role as a gateway to the site.

3.2. Street Types and Dimensions

a) Collector Road

Objectives

O1. To provide a principle access for the entire site by connecting with Walpole Street adjacent to Walpole Street Park and circulating east around the heritage precinct.

O2. To make provisions for future connections with residential development to the south of the site.

O3. To allow all potential housing types to have frontage to the Collector Road.

Development Controls

C1. Typical street sections for the collector road are illustrated in Figure 4.4:

Carriageway: 8 metres wide kerb to kerb over its entire length (any variation to be demonstrated to the satisfaction of Council's Engineer).

Verge area: 3.0-3.75 metres (both sides)

Building setback: 4.5 metres maximum to the principal facade

The verge area may be reduced to 1.5 metres on one side where the collector road has development frontage to only one side.

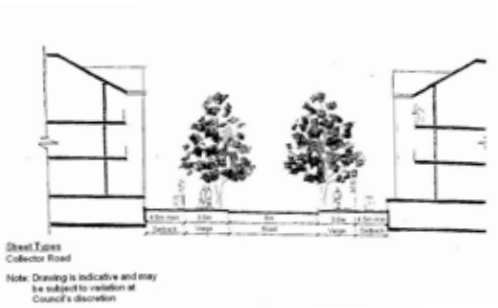


Figure 4.1

C2. Council may consider variations to the above dimensions only where overarching principles for Street System, Street Character and Street Landscape (Section 4.1) are achieved.

a) Park Edge Terrace

The Park Edge Terrace is a street type which has dwellings located on one side and park frontage on the other.

Objectives

O4. To increase the level of casual surveillance, thereby enhancing activity, safety and security for park users through the positioning of a road between buildings and the park.

O5. To allow all potential housing types to have frontage to the Park Edge Terrace.

Development Controls

C1. A typical street section for the Park Edge Terrace is illustrated in Figure 4.5:

Carriageway:	6.5 – 7.0 metres maximum
Verge area:	3.0-3.75 metres to development side
	1.5 metres to the park side
Building setback:	4.5 metres maximum to the principal facade

C2. Council may consider variations to the above dimensions only where overarching principles for Street System, Street Character and Street Landscape (Section 4.1) are achieved.

a) Access Streets

Objectives

O6. To provide access streets that connects with the collector road and may be either through routes or cul-de-sacs.

Development Controls

C1. Typical street sections for Access Streets are illustrated in Figure 4.6:

Carriageway:	6.5-7.0 metres
Verge Area: (both sides)	3.0-3.75 metres
Building Setback:	4.5 metres maximum to the principal facade

C2. The verge area may be reduced to 1.5 metres on one side where the access street has development frontage to only one side, or where the access street is a cul-de-sac and serves no more than 8 dwellings.

C3. Council may consider variations to the above dimensions only where overarching principles for Street System, Street Character and Street Landscape (Section 4.1) are achieved.

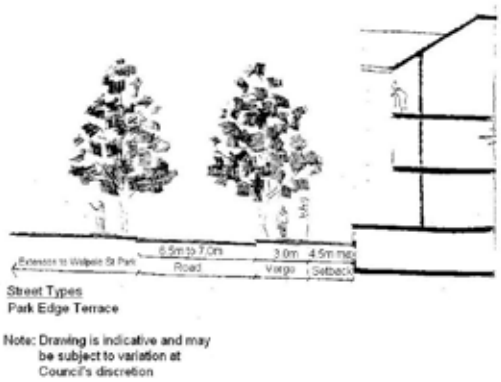


Figure 4.2

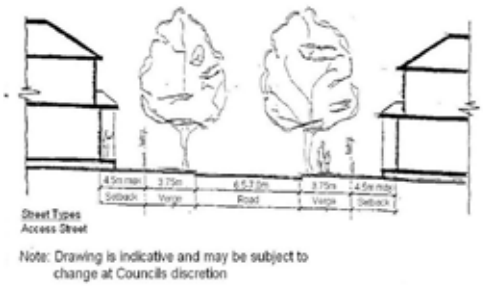


Figure 4.3

a) Shared Accessway

Objectives

O7. To allow for shared accessways which may be provided at various locations within Holroyd Gardens and will serve only a limited number of dwellings.

O8. To ensure the shared accessway will be designed in a manner which provides equal priority for both pedestrians and vehicles.

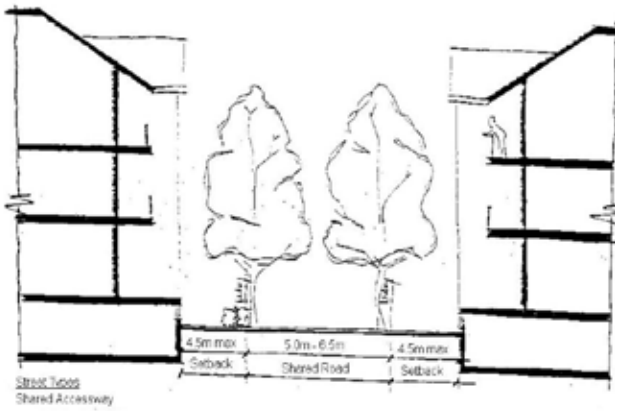
Development Controls

C1. A typical street section for the Shared Accessway is illustrated in Figure 4.4. Final dimensions and street design is subject to RMS concurrence:

Carriageway:	5.0-6.5 metres maximum
Verge Area:	none required
Building Setback:	4.5 metres maximum to the principal facade

C2. Turning areas shall be provided for garbage services and delivery trucks in the form of 8 metre radius turning bulbs or equivalent turning areas within the road reserve at the end points of roads or at a location where garbage trucks can service residences.

C3. Allowance shall be made for visitors to the Heritage Precinct to turn and exit the site in that vicinity.



Note: Drawing is indicative and may be subject to change at Councils discretion

Figure 4.4

3.3. Road intersections

Objectives

O1. To ensure all road intersections encourage safe vehicle movement.

O2. To make provisions for efficient and safe pedestrian movement.

Development Controls

C1. To require minimum curb radius profiles to encourage slower vehicle turns.

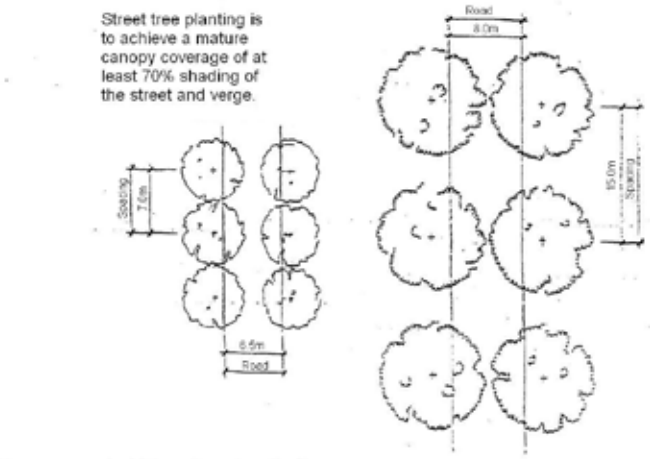
C2. Pram ramps are to be provided for all pedestrian crossing movements.

On Street Parking

Development Controls

C3. On Street parking will be available on all streets according to the following schedule:

Collector Road	at least one side
Access Street	at least one side
Access Street serving a maximum of Eight dwellings	One side only
Park Edge Terrace	at least one side
Shared Accessway	One side only



Recommended Tree Spacing Options

Figure 4.5

3.4. Street Landscape

a) Street Tree Planting

Objectives

O1. To utilise thematic street tree planning to complement the functional role of streets.

O2. To ensure that separate species be utilised on separate street types

O3. To encourage deciduous street tree plating on all streets.

Development Controls

C1. Street trees will be planted at a maximum spacing of 15 metres, measured from centre of trunk to centre of trunk.

C2. At least one street tree shall be planted for each allotment.

C3. Street Tree species should be selected such that they achieve the following:

- Super-advanced at planting (at least 200 litre)
- Possess suitable anti vandal treatment
- Clean trunked to a height of at least 2 metres.
- A mature height which is complementary to the scale of the street and the height of predominant buildings which have frontage to that street.
- A mature canopy diameter of at least 7 metres and which allows for 70% of the street and verge area.

a) Street Furniture

Objectives

O4. To ensure there is to be a coordinated palette of street furniture utilised on the site.

O5. To ensure the items will be selected to relate strongly to the heritage significance of the site.

Development Controls

C1. Items Detail of the palette of street furniture selected shall be submitted within a Landscape Master Plan for the site, which will address all elements of the public domain in a coordinated and holistic manner.

a) Lighting

Objectives

O6. To provide lighting to improve the level of safety within all streets.

O7. To ensure light pole and luminaires shall be of a style, colour and form compatible with the heritage context of the site and the style, colour and form of other urban elements.

O8. A strategy for lighting public spaces will be developed in conjunction with Council and will address the full range of issues including light type, appearance and spacing, as well as

achievement of the relevant standards for acceptable ambient lux levels in public streets and spaces.

Street Landscape
Lighting

Figure 4.6

Development Controls

C1. Light poles shall be compatible with the pedestrian scale by virtue of their height and relationship to street dimensions.

C2. Light poles shall be evenly spaced and contribute to establishing a regular pattern and rhythm in the street. Spacing of light poles is to be coordinated with the spacing of street trees.

a) Services

Development Controls

C3. All services are to be located below ground, both within streets and between streets and individual dwellings.

C4. All principal services are to be provided in accordance with the requirements of the responsible authority.

4. Built Form

Objectives

O1. Buildings should address and define the public domain, including streets and open space.

O2. Buildings may be located up to the surveyed boundary of the Walpole Street Park Extension.

O3. Development should form an organised and visually supportive and pleasing appearance to Walpole Street Park and Walpole Street. A high level of casual surveillance is to be afforded by the design of buildings. Service spaces and private open space areas are to be appropriately screened from public view.

O4. Setbacks along each street should not be randomly composed. There should be a general consistency of building alignment and the street frontage.

O5. Development of the site will be staged, commencing in the area adjacent to Walpole Street.

O6. Development of the site shall comprise a mix and variety of housing types throughout.

4.1. Building Envelope and form

With the exception of the Heritage Precinct, the site will be developed for residential and activities ancillary to such residential development, such as open space and home offices.

Based on the current indicative Master Plan, this DCP envisages that the site will have a maximum density of 260-280 dwellings, comprised of a mix of detached, semi-detached and medium density multi- unit housing. Council may at its discretion consider and approve a variation to the Master Plan where compelling economic, environmental or social grounds are present, and where the overarching objectives and principles of this DCP can be achieved.

a) Setbacks

Development Controls

C1. Buildings must be set back from the property boundary by a distance which supports the achievement of the preferred building height to street width principle. (refer to section 4.1).

C2. Building setbacks are described on the street sections appearing in Section 3. Specifically these correspond to a maximum of 4.5 metres to the principal facade.

Building Height

C3. The building height on any street must fall within the range defined by achievement of the preferred building height to street width principle (refer to Section 4.1).

C4. Building height must conform with the Master Plan approved by Council. A revised Master Plan may be accepted and approved by Council from time to time.

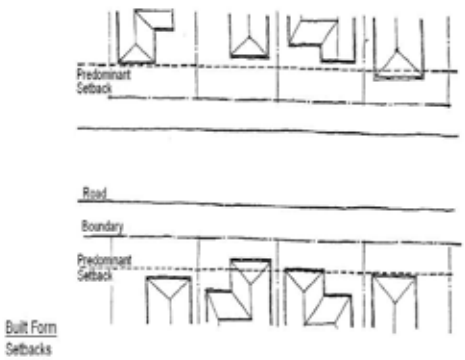


Figure 5.2

a) Roof Form

Objectives

O1. To ensure there is a defined palette of roof colours and materials to be utilised throughout the DCP area.

O2. Habitable use of roof space is encouraged in all residential development. Roof space is not counted as an additional storey for the purposes of this DCP.

Development Controls

C1. Roofs shall be pitched at a slope which allows their habitable use and which is compatible with the pitch of roofs present on the heritage structures within the Heritage Precinct.

C2. Roof form features such as hips, gables, chimneys etc. are encouraged in order to give greater visual interest and break up the bulk and mass of the roofscape

C3. Eaves overhang should be considered in order to provide weather protection to walls.

C4. Roofs should be of a colour and material which is compatible with important heritage buildings in the locality, and the surrounding urban context. Coloured corrugated steel and Marseilles tiles are encouraged due to their historic association with the site.

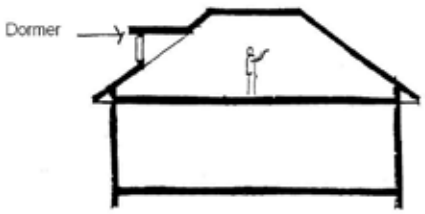
4.2. Massing and Fenestration

Objectives

O1. The massing of buildings on the site should serve to fragment larger building forms into more human scaled components, in both vertical and horizontal planes.

O2. Building facades are to be articulated and fragmented. They are to utilise building form, the play of light and shade, solid and void, and a variety of materials and elements in order to achieve visual interest and supportive relationship with the scale of pedestrians experiencing the urban environment both inside and outside the site.

O3. Building facades are to exhibit a clear expression of "base", "middle" and "top" components.



Habitable use of roof space is encouraged

Figure 5.3

Development Controls

C1. The horizontal bulk of buildings shall be downplayed through the use of strong vertical elements, particularly in cases where long walls will address the street.

C2. There shall be regular spacing of solid elements and openings within the street facade of buildings.

C3. Windows shall be vertical in proportion in order to reduce the apparent bulk of buildings.

4.3. Orientation and Solar Access

Objectives

O1. While having regard to the orientation of the site, buildings are to be sited and designed in a manner which minimises their impact in terms of overshadowing.

O2. Buildings are to be sited and designed such that a maximum of solar access is gained to internal living spaces and outdoor private open spaces.

Development Controls

C1. North facing windows to main living spaces should receive a minimum of 4 hours direct sunlight during mid-winter while east and west facing windows should receive a minimum 2 hours direct sunlight during mid-winter. South facing windows in connection with main living areas should be minimised.

C2. No building should unreasonably overshadow a public space or neighbouring private space between the hours of 10:00 am and 2:00 pm during mid-winter.

4.4. Building Appearance

Objectives

O1. The appearance of housing across the site should be coordinated such that there is a reasonable level of individual variety, within the context of achieving a compatible relationship between all buildings. There should be a mix of building forms.

O2. Porches and verandahs are encouraged in order to provide shelter, identity, enhance casual surveillance of the street and provide the opportunity for increased community interaction.

O3. Front yards are an important aspect for the setting and public appearance of buildings. Front yards should be seen as an opportunity to extend the quality of public landscape into semi-public areas.

O4. Front yards should be designed and planted to support the architecture of the building as well as the overall landscape concept for the site.

Development Controls

C1. All new buildings must consider and respond supportively to buildings located in adjacent positions, as well as across the street. Consistency between ridge, eave and opening heights are important in this respect.

C2. Building materials and colours selected and utilised on the site are to be coordinated throughout the site and are to be compatible with the heritage structures currently, or formerly, located on the site, and adjoining buildings. Generally, buildings of masonry and/or render construction with light colours of a neutral tone are preferred.

C3. All housing shall have a clear and visible address point that is directly approached from the street. The front entrance pathway should not be shared with other buildings.

C4. Entry spaces shall be designed in a manner that restricts direct views into the living spaces of

dwellings.

C5. Landscaping within front yards should enable high levels of casual surveillance of the street to be maintained.

C6. Landscape details shall be submitted with each development application.

4.5. Specific Precinct Controls

Heritage Precinct Transition Area

Building controls for the heritage precinct transition area apply to the area defined on Figure 5.6. Specifically, this area encompasses all land within 25.0 metres inside of the Heritage Precinct's northern, eastern and southern boundaries.

Objectives

O1. Provide an appropriate visual setting for heritage items;

O2. Ensure that new development respects the established patterns in the former Goodlet and Smith Brickworks;

O3. Ensure a harmonious and compatible relationship between the scale of heritage buildings and new development;

O4. Ensure that new development respects the architectural style and character of the heritage precinct.

Development Controls

Setting

C1. Care should be taken in the placement of new buildings such that vistas of important heritage buildings are maintained along streets.

C2. No part of any new development within the heritage precinct should project below the eaves overhang of a heritage item.

C3. No new building should be located closer than 3.0 metres from a heritage item or its overhang, whichever is the greater.

C4. New buildings within the heritage precinct should be designed in a manner compatible with the appearance of existing heritage items, without mimicking those heritage items.

Scale

C5. New buildings located within the heritage precinct should be compatible with existing heritage buildings. They should not visually dominate or compete with the scale of heritage items.

C6. New development within the heritage precinct should not have more than 2 storeys of habitable space (exclusive of roofspace). Roof pitch and form should reflect that of adjoining heritage items

C7. No portion of a new building located within the heritage precinct should extend above the ridge height of the Patent Kiln.

Figure 5.5 Each building should have a clearly defined entry. This example utilises both building form and its relationship with the street to clearly define the main entrance.

Figure 5.6

C8. Simple roof forms, which do not compete with heritage buildings, are appropriate.

Materials

C9. While not mimicking existing heritage buildings, new buildings located within the heritage precinct should adopt and utilise external materials and finishes complementary to the heritage fabric. These should be neutral tones

C10. Front fences should be either low brick walls or incorporate a plinth, composed of simple rendered and painted brick. Exposed recycled brick is also appropriate.

C11. Balconies and verandahs should incorporate only simple railings and balustrades, sympathetic with fencing.

C12. Elaborate fretwork is to be avoided.

C13. Gutters and flashings are to be of a traditional form. Fascia gutters are to be avoided.

C14. New development proposed for the heritage precinct should be reviewed by Council's heritage advisor.

4.6. Development Adjacent to the Heritage Precinct

Building controls for areas adjacent to the heritage precinct apply to the area defined on Figure 5.7. Specifically, this area encompasses all land outside 25.0 metres of the Heritage Precinct's northern, eastern and southern boundaries.

Objectives

O1. Provide an appropriate visual setting for heritage items;

O2. Ensure that new development respects the established patterns in the former Goodlet and Smith Brickworks;

O3. Ensure a harmonious and compatible relationship between the scale of heritage buildings and new development;

O4. Ensure that new development respects the architectural style and character of the heritage precinct.

Development Controls

Setting

C1. New development should be designed and sited in a manner which does not detrimentally effect the heritage significance of either the entire precinct, or individual elements within the precinct.

C2. New development should be designed in a manner sympathetic to the appearance of existing heritage items.

Scale

C3. The scale, bulk and height of new buildings located adjacent to the heritage precinct should be visually compatible with, and should not dominate, existing heritage items located within the precinct.

C4. Any proposed building (or part of a building) located within 20 metres of an identified heritage item should not have more than 2 storeys of habitable space (exclusive of roofspace).

C5. Roof forms which are sympathetic to those within the heritage precinct are encouraged.

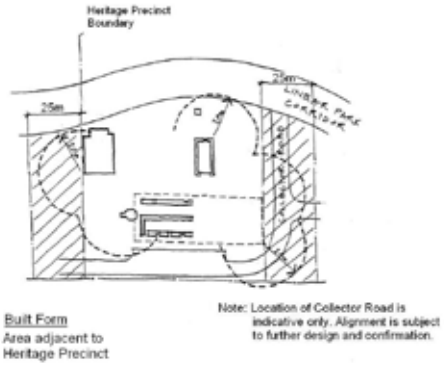


Figure 5.7

Materials

C6. While not mimicking existing heritage buildings, new buildings located adjacent to the heritage precinct should adopt and utilise external materials and finishes complementary to the heritage fabric. These should be light colours and neutral tones

C7. Front fences should be either low brick walls or incorporate a plinth, composed of simple rendered and painted brick.

C8. Balconies and verandahs should incorporate only simple railings and balustrades, sympathetic with fencing.

C9. Elaborate fretwork is to be avoided.

C10. Gutters and flashings are to be of a traditional form. Fascia gutters are to be avoided.

4.7. Development Adjacent to Walpole Street

Objectives

O1. To ensure buildings experiencing dual frontage to both Walpole Street and streets internal to the site, present a suitable facade to Walpole Street and foster a suitable relationship to the public domain external to the site:

O2. To provide high levels of casual surveillance to Walpole Street.

O3. To ensure there is a balance between the requirements of privacy for dwellings and the creation of a suitable interface with Walpole Street:

Development Controls

C1. Service areas fronting Walpole Street are to be adequately screened such that they are obscured from pedestrian view.

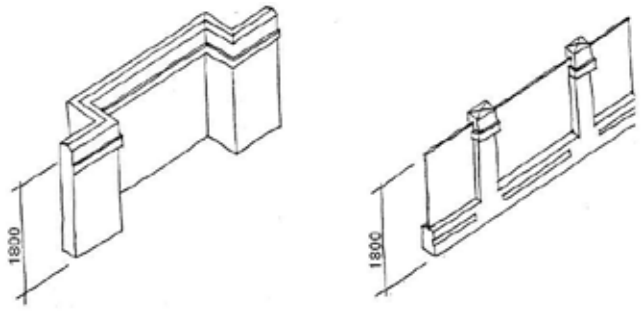
C2. Building services such as water heaters, rainwater tanks etc may not be located on facades facing Walpole Street.

C3. Boundary fencing must be coordinated along the length of Walpole Street.

C4. Boundary fencing may be no higher than 1.8 metres in height.

C5. Boundary fencing should utilise a variety of materials and/or incorporate substantial articulation and modulation in order to create visual interest. The creation of recessed bays, incorporating planting is encouraged in this respect.

C6. Buildings with frontage to Walpole Street shall include adequate measures to ameliorate noise impacts generated from both passing traffic and industrial activities located opposite. These measures, and their appropriateness, must be demonstrated through submission of an acoustic assessment.



Built Form
Potential Fencing Types for Walpole Street.

Figure 5.8

4.8. Development Adjacent to the Main Southern Railway & Adjoining Industrial Development

Objectives

O1. To ensure buildings located adjacent to the Main Southern Railway present a suitable facade to the railway alignment in order to enhance the visual perception of the site:

Development Controls

C1. Service areas fronting the railway alignment are to be adequately screened/obscured from view.

C2. Building services such as water heaters, rainwater tanks etc should not be located on facades facing the railway alignment.

C3. No building should be located within 3 metres of the railway alignment or the common boundary of adjoining industrial development.

C4. All buildings located adjacent to the railway alignment and/or adjoining industrial activities must include adequate measures to ameliorate noise impacts generated from the railway and/ or industrial activities. These measures, and their appropriateness, must be demonstrated through submission of an acoustic assessment.

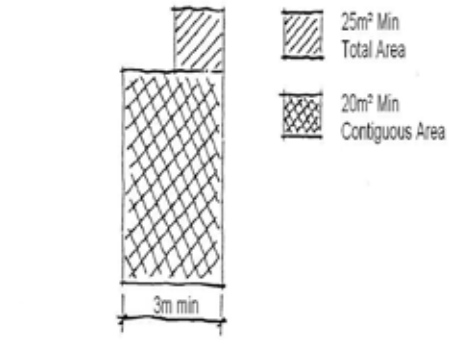


Figure 5.9

4.9. Site Development Issues

a) On Site Open Space

C1. All dwellings are to be provided with private open space which achieves the following principles:

- Amenity, slope and dimensions suited to the needs of users;
- Adequate privacy for residents;
- Access to adequate direct sunlight, particularly during winter months; and
- Be adjacent and/or visible from the main living areas of dwellings.

C2. Each dwelling must be provided with a minimum area of private open space consisting of one of the following attributes:

- Ground level area totalling 25m², having a

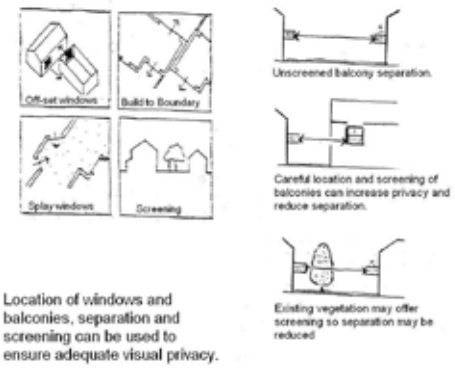


Figure 5.10

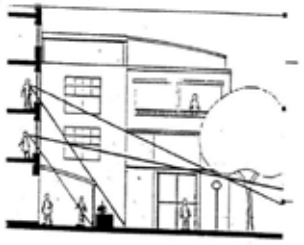
minimum contiguous area of 20m^2 and a minimum dimension of 3 metres; or

- A balcony, located immediately adjacent to the main living area, with a minimum area of 6m^2 and a minimum dimension of 1.5 metres (only applicable for blocks of units).

a) Privacy and Overlooking

Visual Privacy

C3. Direct overlooking of main internal living areas and private open spaces of adjacent properties should be minimised through building location, the offset-positioning and design of windows, the positioning and design of balconies and/or the use of screening devices where necessary.



The location of living spaces and position of windows should maximise potential for casual surveillance of streets and public spaces.

Figure 5.11

Acoustic Privacy

C4. Site layout and building design minimises the transmission of external noise to habitable rooms through attention to:

- Siting of buildings
- Internal room layout
- Location of private open space
- Location and design of windows
- Building construction methods

C5. Habitable rooms, particularly bedrooms, shall be separated from significant noise sources

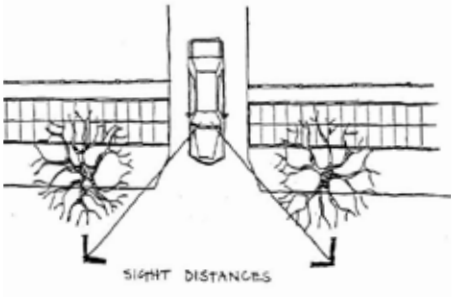


Figure 5.12

Casual Surveillance

C6. Casual surveillance of streets and other public spaces is to be maximised through the following design principles:

- Living areas should be located in areas which directly overlook public spaces.
- Windows should be located such that they provide for casual surveillance of public spaces.
- Planting located in semi-public and private areas should be selected such that a generally unobstructed view of public spaces may be available.

a) Access and Parking

C7. Parking areas, driveways and street access design are to comply with the relevant Australian Standards. Refer to Part B of Holroyd Development Control Plan.

Car Parking

C8. On site car parking for residents is to be provided according to the following:

Apartments	1 space per apartment, dedicated to that apartment; and 1 space per 5 apartments for visitor parking.
Houses, Duplexes & Terracehouses	At least 1 space undercover; and At least one additional space on site

C9.

C10. Bicycle parking is to be provided in multi- unit buildings at a rate of 1 space per 3 apartments.

Driveways

C11. Where paving materials are utilised, these should be:

- In materials, other than plain concrete, and of colours which complement the site.
- The use of colour and materials should be coordinated across the site and be selected from a defined palette for the site.
- Of adequate strength and non-slip qualities.

Access for the Street

C12. Double driveways should be no greater than 5.0 metres in width. Single car driveways should be no greater than 3.0 metres in width.

Flooding and Stormwater Disposal

C13. Habitable floor levels of buildings are to be located at least 300mm above the 1 in 100 year ARI flood level.

C14. Basement level carparks are to incorporate measures such that they are able to remain flood free for the 1 in 100 year ARI flood event

C15. Connection of developments to the street or piped stormwater disposal system

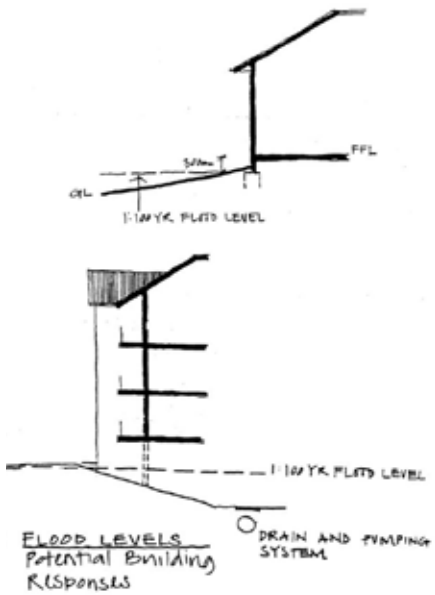


Figure 5.13

5. Disabled Access and Adaptable Housing

The term adaptable housing implies that flexibility is built in at the design stage in order to allow dwellings to be modified when and if, changing circumstances dictate. In this way, adaptable housing achieves principles of robustness in the urban environment. Similarly, adequate provision of disabled access to buildings provides for greater equity and recognises the diversity of potential user groups in the community.

Disabled Access

C1. Access into or around detached dwellings, townhouses and duplexes is to be flat, or gently sloping. The majority of all ground floor dwellings (detached, terrace houses and duplexes) should be capable of adaptation to allow barrier free access.

C2. All public spaces should be designed in a manner which allows their equitable use by disabled residents and visitors.

Adaptable Housing

C3. Development of the site is to achieve the provision of a total of 26 adaptable dwellings, in accordance with AS 4299-Adaptable Housing (Class C), This standard is based on a rate of provision of 1 adaptable unit per 10 dwellings.

6. Ancillary Issues

a). Energy Efficiency

Objectives

O1. To ensure the design and layout of housing on the site facilitates the achievement of appropriate levels of energy efficiency

O2. To encourage building design to minimise fossil fuel energy use and to maximise use of natural ventilation, daylight and solar energy.

O3. To encourage buildings to utilise layouts that minimise winter heat loss and make use of solar energy for heating wherever possible.

O4. To ensure buildings are designed to minimise excessive exposure to summer sun.

Development Controls

C1. Windows shall be located to facilitate thermal control.

C2. Building materials should be durable and require low levels of maintenance.

C3. Materials, which have a higher thermal mass value (e.g. bricks, concrete and stone), shall be utilised where they may benefit thermal control and energy efficiency of a building.

C4. Buildings are to utilise materials which posses a low level of embodied energy.

C5. Buildings are to maximise the use of recycled and recyclable materials. In particular, building materials currently located on the site should be reused wherever possible.

C6. Building fitouts shall utilise energy efficient appliances where available.

C7. All dwellings are to achieve a minimum 3.5 star rating under the Housing Energy Scheme (NatHERS) Compliance with this requirement is to be demonstrated by the applicant as part of the development application submission.

b). Garbage Disposal and Waste Storage

C1. Appropriate space shall be provided within each dwelling for the temporary storage of garbage and recyclables.

C2. A waste storage area is provided on site, is accessible to users and is of a size that caters for the following requirements:

	Height	Width	Depth
120 litre bin	930 mm	480 mm	550 mm
240 litre bin	1080 mm	575 mm	730 mm
1100 litre bin	1465 mm	1360 mm	1220 mm

Dwelling Type	Provision
Detached House	1 x 240 litre garbage bin. 1 x 240 litre split recycling Bin
Villa or Townhouse	1 x 120 litre garbage bin. 1 x 240 litre split recycling Bin
Apartments	1 x 1100 litre container per 8 units
Apartments (not exceeding 10 units)	1 x 240 litre split recycling bin
Apartments (greater than 10 units)	1 x 240 litre paper recycling bin per 6 units 1 x 240 litre comingled bin per 6 units

C3. The location and design of waste storage facilities is complementary to the architecture, landscape and street frontage of the development.

c). Boundary Fencing

Objectives

O1. To utilise fencing to enhance an image/perception of quality and provide appropriate levels of privacy.

O2. To utilise front fences to provide a suitable transition between the public domain and semi-public areas located within individual allotments.

O3. To discourage high front fences which are not transparent

Development Controls

C1. Detached, Terrace houses Duplexes

a) The option of no front fence is encouraged.
b) Front fences must not exceed 1.5 metres from ground level (excluding piers).
c) Front fences must be highly transparent

C2. Apartment Buildings

a) Front fences are required for all buildings in order to provide an appropriate transition between public and semi-public space.
b) Front fences must not exceed 1.8 metres (excluding piers)
c) Front fences must be highly transparent.

C3. Side and rear fencing should be generally no higher than 1.8 metres. They should provide an adequate level of privacy to private open spaces and should be consistent with building design and where visible from the street.

d). Street Numbers

C1. All street numbers must be clearly visible from the principal street frontage.

e). Garages and Outbuildings

C1. Garages and outbuildings are to comply with all other relevant sections of this DCP, Specifically, Building Envelope, Building Form, Building Appearance and Specific Precinct Controls where applicable.

C2. Garages and outbuildings should be designed to complement the architecture of the main building to which they are related.

C3. All garages and carports must be set back behind the main front facade of the building to which they are related.

f). Clothes Drying Areas

C1. Clothes drying areas are to be screened from both the street and adjoining properties.

C2. Clothes drying areas are to be easily accessible from dwellings and should not dominate the form and availability of private open space within a development.

g). Storage Areas

C1. Adequate storage space is to be provided for all residential development and may be provided either within a dwelling or within common areas such as parking garages.

h). Telecommunications Facilities

C1. Telecommunications facilities are to be located such that they do not detract from the

Figure 7.1 Appropriate boundary fencing for detached dwellings

Figure 7.2 Appropriate boundary fencing and landscape for apartment buildings

Figures 7.1 & 7.2

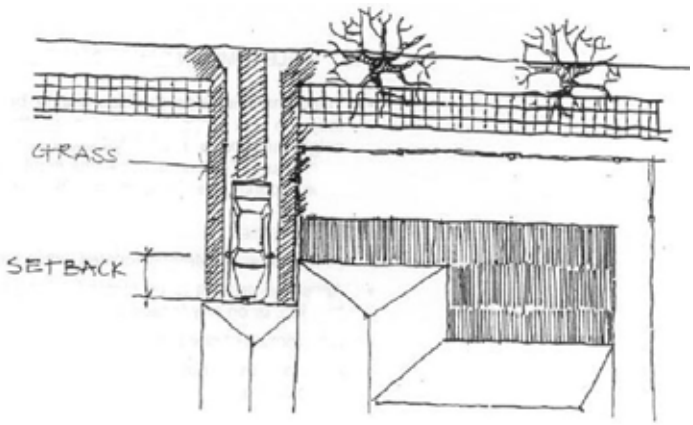


Fig. 7.3 GARAGE SETBACK

Figure 7.3

aesthetic appeal of the neighbourhood or adversely impact on the visual amenity of neighbours.

C2. Telecommunications services are to be located underground (see also section 4.6).

i). Antennae

C1. Antennae are preferably located within the roof cavity.

C2. Antennae are not to be located on the front facade of any building, or on any facade facing Walpole Street.

C3. A maximum of one antenna is permitted per building.

C4. Antennae must not extend above the uppermost ridge line of a building.

j). Cabling

C1. All cabling, for the purposes of pay TV etc, must be located below ground.

k). Satellite Dishes

C1. No satellite dish is to be located on the front facade of a building, or be visible from a public street.

C2. Satellite dishes are to be located below the ridgeline (or parapet) of the roof.

C3. A maximum of one satellite dish is permitted per building.

Part L

Town Centre Controls

Holroyd Development Control Plan 2013

Holroyd City

Town Centres

Contents

Town Centres

Introduction

Land covered by this Part

This Part applies to all development on land identified within the town centres of Toongabbie, Pendle Hill, Wentworthville and Guildford, as shown in Figures 1- 4.

Relationship of Part L- Town Centre Controls to Holroyd Development Control Plan 2013

Part L - Town Centre Controls of Holroyd DCP 2013 shall be read in conjunction with the following Parts of Holroyd DCP 2013 which contain objectives and controls that relate to development in this Part:

Part A - General Controls

Part B - Residential Controls

Part C - Commercial, Shop Top Housing and Mixed Use Development Controls

Part E - Public Participation

Part F - Advertising and Signage Controls

Part G - Places of Public Worship Controls

Part H - Heritage and Conservation Controls

Part I - Child Care Centre Controls

Part R - Definitions

Figure 1- Toongabbie Town Centre

Figure 2- Pendle Hill Town Centre

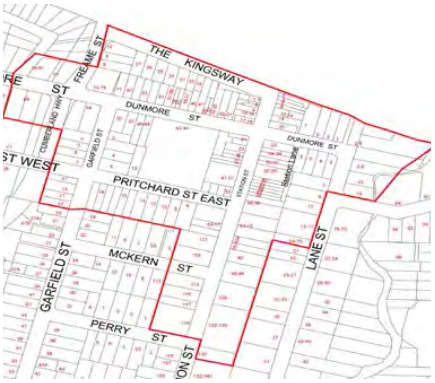


Figure 3- Wentworthville Town Centre

Figure 4- Guildford Town Centre

1. Toongabbie Town Centre

1.1. Site Consolidation

Objectives

O1. To ensure all sites achieve the required minimum width to adequately provide for basement car parking.

O2. To minimise vehicular and pedestrian conflicts throughout the town centre through the appropriate location and number of vehicular access points.

O3. To require the provision of laneways to enable access of secondary streets for better vehicular circulation and to reduce pedestrian vehicular conflict.

O4. To enable better circulation and vehicular amenity on for high density residential development.

O5. To ensure all sites achieve the required minimum width to allow for a site configuration that permits a consistent landscaped open space to the rear of sites.

O6. To ensure any site amalgamation pattern does not restrict the development opportunity of any adjoining site or the ability of adjoining sites to provide basement carparking or rear open space.

O7. To establish fine grain shopfronts along primary retail streets within the town centre.

O8. To ensure new developments do not reduce the opportunity for the development of adjoining properties to develop in accordance with this DCP and adversely impact on the economic viability of development in accordance with s79C of the Environmental Planning and Assessment Act 1979.

Development Controls

C1. The amalgamation of lots in accordance with Figure 5 is required for development to meet the objectives and desired future character contained within this DCP within the Toongabbie Town Centre.

C2. The minimum lot frontage requirements for all development within a Business zone is located in Part C.

C3. The minimum lot frontage requirements for all development within a Residential zone is in Part B.

C4. Notwithstanding the above, development within Business zones located on Aurelia Street are to provide a fine grain retail shopfront character.

C5. In instances where amalgamation cannot be achieved, the following information must be submitted with any development application:

- Two written valuations indicating the value of the remaining sites that were to be developed in

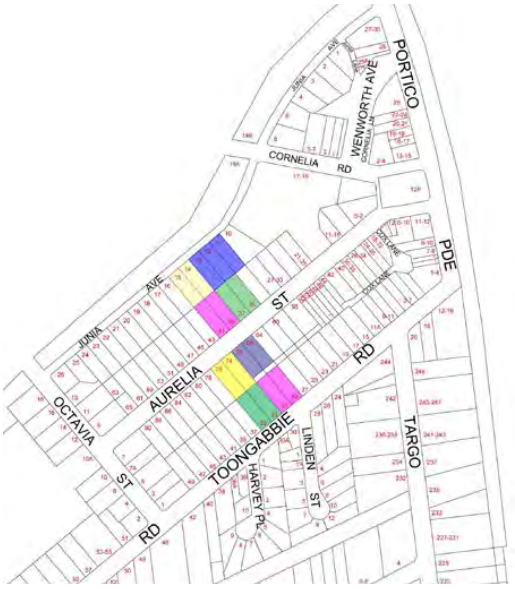


Figure 5- Toongabbie site consolidation

conjunction with the applicants properties. These are to be undertaken by two independent valuers registered with the Australian Institute of Valuers, and;

- Evidence that a reasonable offer has been made to the owner(s) of the affected sites to purchase and valuation reports.

C6. Where amalgamation (as required) is not achieved, the applicants must show that the remaining sites, which are not included in the consolidation, and the proposed development site, will still be able to achieve the development outcome prescribed in this DCP, including achieving the required vehicular access, basement parking and built form.

C7. Sites must not be left such that they are physically unable to develop in accordance with the prescribed built form outcomes outlined in this DCP.

Note:

- Potential value can include, (but is not limited to) the land locked site developed jointly with adjoining properties, or on its own, under Holroyd LEP and this plan.
- A reasonable offer shall be a fair market value, and include for all expenses that would be incurred by the owner in the sale of the land locked site.
- Council will accept as documentary evidence a copy of a written offer delivered by registered mail to the affected owner(s) and dated no more than 3 months prior to the date of lodgment of the development application.

1.2. Rear laneways, land dedication, Access and Vehicular Entries

Objectives

O1. To require the provision of rear access ways on properties for private and service vehicle access in order to reduce vehicular and pedestrian conflict and provide greater amenity to future residents.

O2. To require buildings fronting primary roads to have vehicular access from the rear of the property in order to reduce vehicular and pedestrian conflict and create a safe retail environment.

O3. To require all sites with existing access ways from the rear of the property to be used for vehicular access and parking.

O4. To mitigate any impacts of vehicular traffic on adjoining residences.

O5. To allow improved circulation space for pedestrians and future residents within the precinct.

O6. To limit or prohibit vehicular access from primary street frontages.

Development Controls

C1. Where new development has access available off existing or proposed laneways, vehicular access must be provided from the laneway.

C2. An 8 metre laneway between Junia Avenue and Aurelia Street is to be provided as shown in Figure 6.

C3. Land shall be dedicated to Council to finalise the completion of proposed Cox Lane as shown in Figure 6.

C4. An 8 metre laneway between Aureila Street and Toongabbie Road is to be provided as shown in Figure 6.

C5. An 8 metre laneway between Linden Street and Harvey Street is to be provided as shown in Figure 6.

C6. The existing footpath and verge in Linden Street (Figure 6) shall be reduced to 3.5 metres, with the residual land used to widen the existing carriageway.

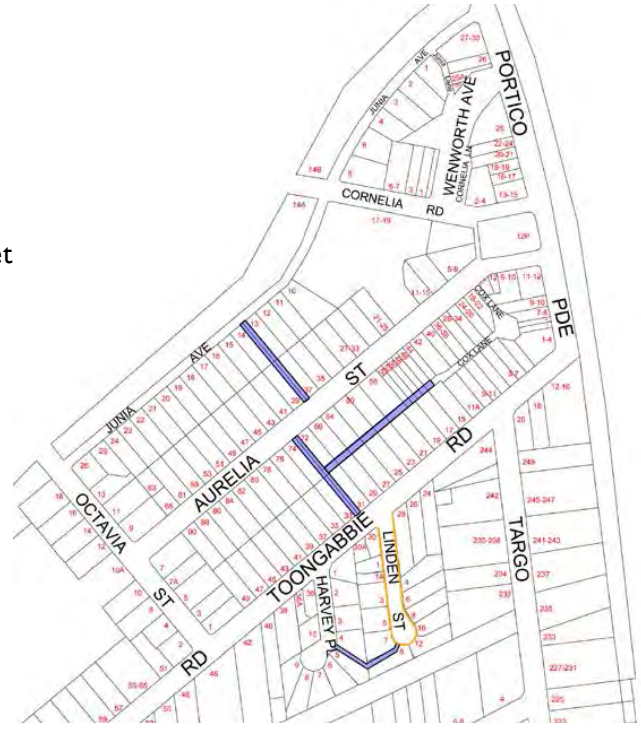


Figure 6- Proposed Laneways

1.3. Building Height

Objectives

O1. To require an appropriate scale relationship between building heights and street width.

O2. To ensure the appropriate management of overshadowing, access to sunlight and privacy.

O3. To enable flexibility of used by implementing higher floor to ceiling heights within buildings for the ground and first floors.

O4. To allow activation of the street edge on primary roads.

O5. To allow for reasonable daylight access to other development and the public domain.

Development Controls

C1. The maximum height for development within the Toongabbie Town Centre is detailed within Holroyd Local Environmental Plan 2013 as a written statement and associated maps.

C2. The maximum building storey limits within the Toongabbie Town Centre is detailed in Figure 7

C3. The minimum floor to ceiling height requirement are located in Part B and C.

C4. The prominence of street corners shall be reinforced by concentrating the tallest portion of the building on the corner in relation to the overall building height and predominant street wall height.

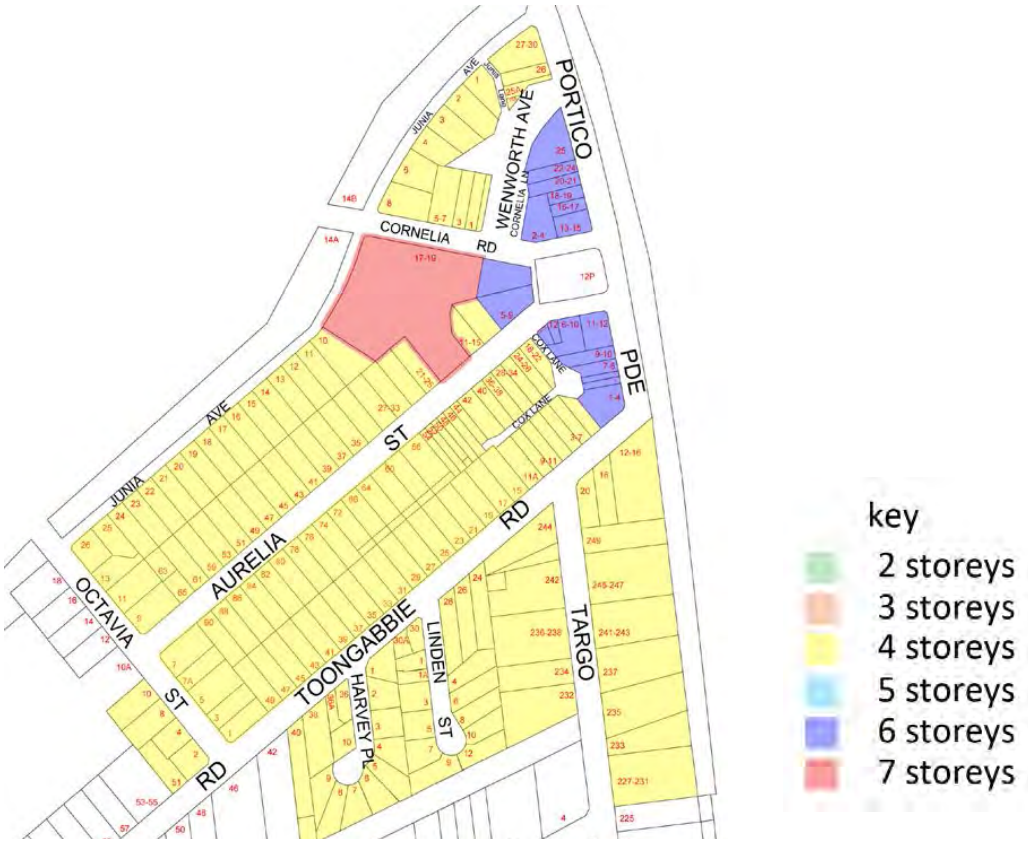


Figure 7- Building Height

1.4. Building Setbacks, Separation and Street Presentation

Objectives

O1. To require suitable definition of the public domain and public spaces.

O2. To require a continuous built edge within commercial and mixed use development for activation of the street edge.

O3. To retain a landscaped setback character for residential development.

O4. To ensure setbacks respond to the building separation requirements.

O5. To reduce the visual impact of buildings on the public domain.

Development Controls

C1. All front setbacks shall be in accordance with Figure 8.

C2. Where a 0 metre setback is permitted, buildings shall form a continuous street edge.

C3. Rear and side setbacks (unless indicated otherwise in Figure 8) are to be in accordance with setbacks indicated in Part B or Part C of this DCP.

C4. Residential Development shall correspond to building depth and separation requirements in Part B.

C5. Development shall present and address the street.

C6. Sites with corner lots shall present and articulate to both street frontages.

C7. Where sites are adjacent to Portico Park, development shall primarily be orientated to address the park.

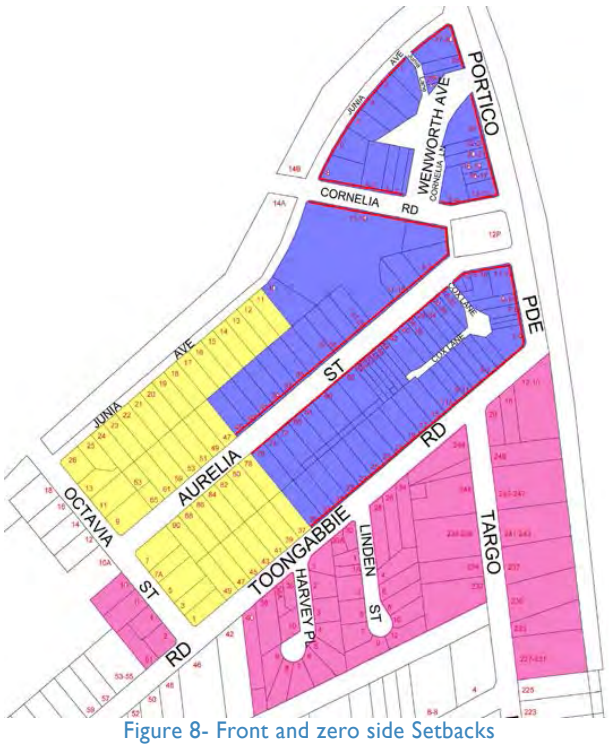


Figure 8- Front and zero side Setbacks

Note:

- Detailed building design requirements are contained with Part C of this DCP.

2. Pendle Hill Town Centre

2.1. Site Consolidation

Objectives

O1. To ensure all sites achieve the required minimum width to adequately provide for basement car parking.

O2. To minimise vehicular and pedestrian conflicts throughout the town centre through the appropriate location and number of vehicular access points.

O3. To ensure all sites achieve the required minimum width to allow for a site configuration that permits a consistent landscaped open space to the rear of sites.

O4. To ensure any site amalgamation pattern does not restrict the development opportunity of any adjoining site or the ability of adjoining sites to provide basement carparking or rear open space.

O5. To establish fine grain shopfronts along primary retail streets within the town centre.

O6. To ensure new developments do not reduce the opportunity for the development of adjoining properties to develop in accordance with this DCP and adversely impact on the economic viability of development in accordance with s79C of the Environmental Planning and Assessment Act 1979.

Development Controls

C1. The minimum lot frontage requirements for all development within a Business zone is located in Part C.

C2. The minimum lot frontage requirements for all development within a Residential zone is located in Part B.

C3. Notwithstanding the above, development within Business zones located on Pendle Way, between Stapleton and Joyce Street, and on Joyce Street are to provide a fine grain retail shopfront character.

2.2. Rear laneways, land dedication, Access, Vehicular Entries and Pedestrian access

Objectives

O1. To require the provision of rear access ways on properties for private and service vehicle access, in order to reduce vehicular and pedestrian conflict and provide greater amenity to future residents.

O2. To require buildings fronting primary roads to have vehicular access from the rear of the property in order to reduce vehicular and pedestrian conflict and create a safe retail environment.

O3. To require all sites with existing access ways from the rear of the property to be used for vehicular access and parking.

O4. To mitigate any impacts of vehicular traffic on adjoining residences.

O5. To allow improved circulation space for pedestrians and future residents within the precinct.

O6. To limit or prohibit vehicular access from primary street frontages.

Development Controls

C1. Where new development has access available off existing or proposed laneways, vehicular access must be provided from that laneway.

C2. A minimum 4 metre wide, 4 metre high pedestrian accessway must be maintained and dedicated for public access as part of any redevelopment of the site as shown in Figure 9.

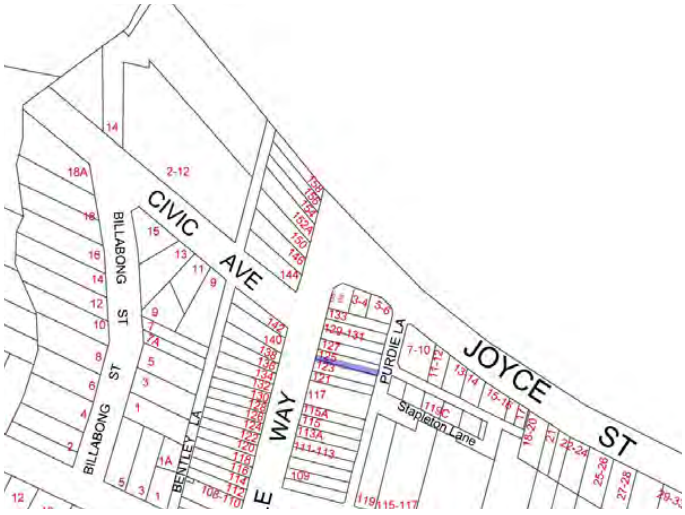


Figure 9- Proposed Pedestrian Access

2.3. Building Height

Objectives

O1. To require an appropriate scale relationship between building heights and street width.

O2. To ensure the appropriate management of overshadowing, access to sunlight and privacy.

O3. To enable flexibility of used by implementing higher floor to ceiling heights within buildings for the ground and first floors.

O4. To allow activation of the street edge on primary roads.

O5. To allow for reasonable daylight access to other development and the public domain.

Development Control

C1. The maximum height for development within the Pendle Hill Town Centre is detailed within Holroyd Local Environmental Plan 2013 as a written statement and associated maps.

C2. The maximum building storey limits within the Pendle Hill Town Centre is detailed in Figure 10.

C3. The minimum floor to ceiling height requirements are located in Part B and C.

C4. The prominence of street corners shall be reinforced by concentrating the tallest portion of the building on the corner in relation to the overall building height and predominant street wall height.

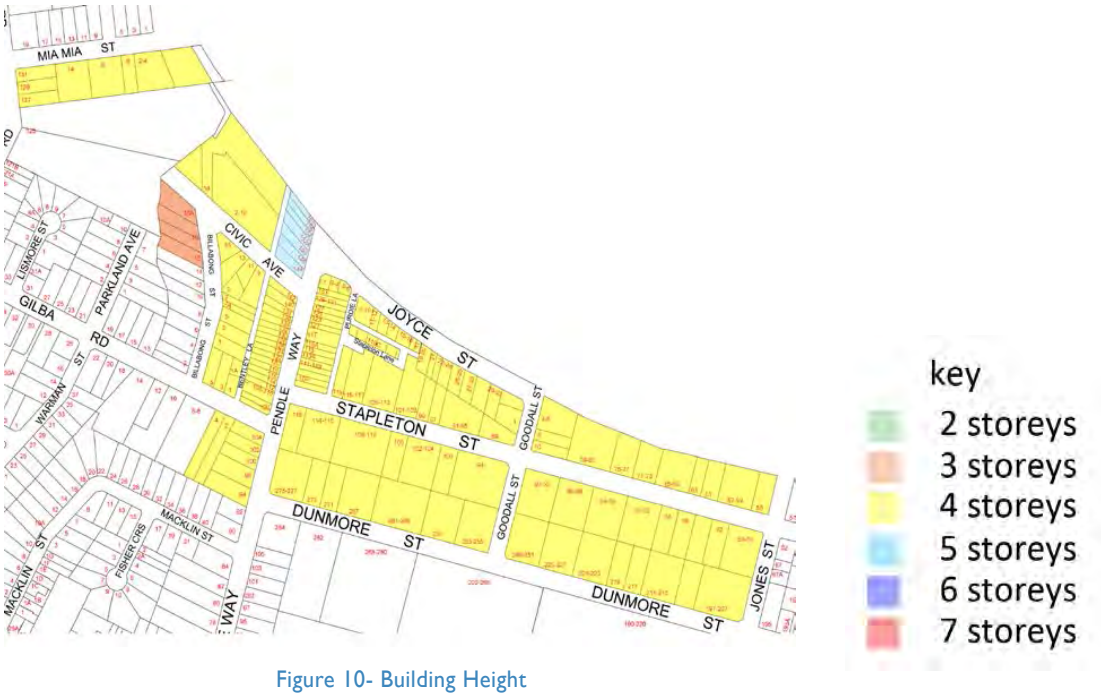


Figure 10- Building Height

2.4. Building Setbacks, Separation and Street Presentation

Objectives

O1. To require suitable definition of the public domain and public spaces.

O2. To require a continuous built edge within commercial and mixed use development for activation of the street edge.

O3. To retain a landscaped setback character for residential development.

O4. To ensure setbacks respond to the building separation requirements.

O5. To reduce the visual impact of buildings on the public domain.

Development Controls

C1. All front setbacks shall be in accordance with Figure 11.

C2. Where a 0 metre setback is permitted, buildings shall form a continuous street edge.

C3. Rear and side setbacks (unless indicated otherwise in Figure 11) are to be in accordance with setbacks indicated in Part B or Part C of this DCP.

C4. Notwithstanding the above, a 6 metre setback is required to R2 low density residential lots between Gilba Road and Macklin Street.

C5. Residential development shall correspond to building depth and separation requirements in Part B.

C6. Developments shall present and address the street.

C7. Sites with corner lots shall present and articulate to both street frontages.

C8. Where sites are adjacent to Civic Park, development shall be orientated to address the park.

Note: Detailed building design requirements are contained with Part C of this DCP.

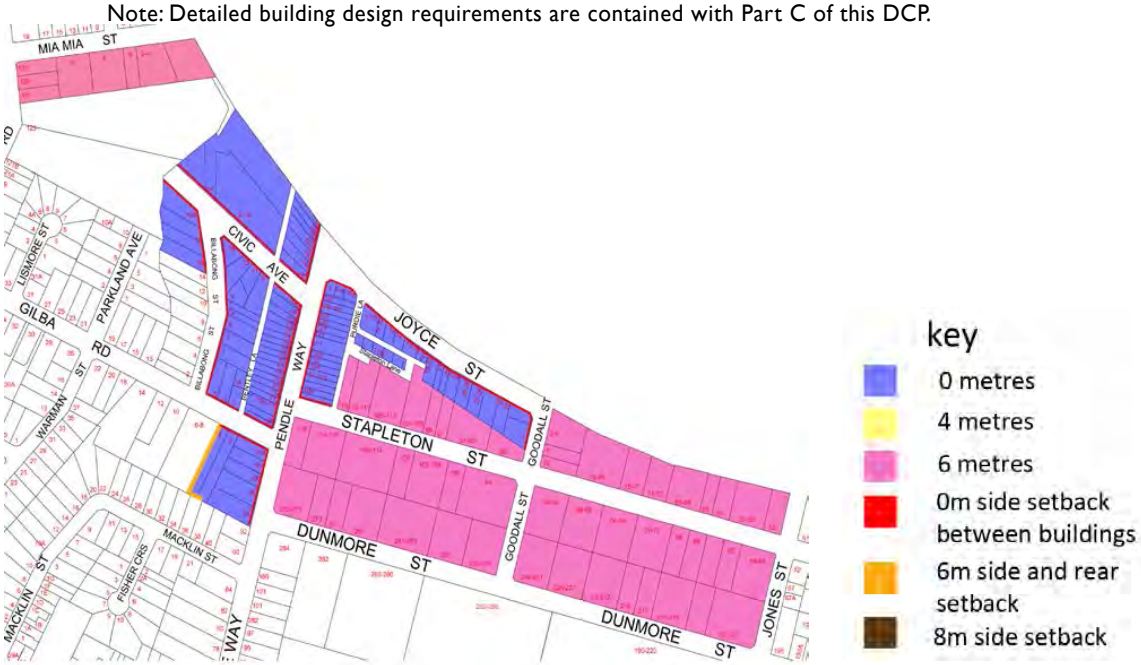


Figure 11- Front setback and side setbacks

3. Wentworthville Town Centre

3.1. Site Consolidation

Objectives

O1. To ensure all sites achieve the required minimum width to adequately provide for basement car parking.

O2. To minimise vehicular and pedestrian conflicts throughout the town centre through the appropriate location and number of vehicular access points.

O3. To ensure all sites achieve the required minimum width to allow for a site configuration that permits a consistent landscaped open space to the rear of sites.

O4. To ensure any site amalgamation pattern does not restrict the development opportunity of any adjoining site or the ability of adjoining sites to provide basement carparking or rear open space.

O5. To establish fine grain shopfronts along primary retail streets within the town centre.

O6. To ensure new developments do not reduce the opportunity for the development of adjoining properties to develop in accordance with this DCP and adversely impact on the economic viability of development in accordance with s79C of the Environmental Planning and Assessment Act 1979.

Development Controls

C1. The minimum lot frontage requirements for all development within a Business zone is located in Part C.

C2. The minimum lot frontage requirements for all development within a Residential zone is located in Part B.

C3. Notwithstanding the above, development located on Dunmore Street (between Cumberland Highway and Lane Street) and Station Street (between Pritchard St East and The Kingsway) are to provide a fine grain retail shopfront character.

3.2. Rear laneways, Land Dedication, Access, Vehicular Entries and Pedestrian Access

Objectives

O1. To require the provision of rear access ways on properties for private and service vehicle access, in order to reduce vehicular and pedestrian conflict and provide greater amenity to future residents.

O2. To require buildings fronting primary roads to have vehicular access from the rear of the property in order to reduce vehicular and pedestrian conflict and create a safe retail environment.

O3. To require all sites with existing access ways from the rear of the property to be used for vehicular access and parking.

O4. To mitigate any impacts of vehicular traffic on adjoining residences.

O5. To allow improved circulation space for pedestrians and future residents within the precinct.

O6. To limit or prohibit vehicular access from primary street frontages.

O7. To improve the pedestrian circulation system in the major centres.

Development Controls

C1. Where new development has access available off existing or proposed laneways, vehicular access must be provided from the laneway.

C2. Where vehicular access is currently achieved from the Kingsway commuter carpark, this is permitted to continue, however a formal right of way is to be established during redevelopment.

C3. Where a development proposes a right of way over adjacent properties for vehicular access, permission for the right of way must be demonstrated to Council.

Note: If no opportunity exists to use a rear laneway or secondary street for vehicular access for a site and where driveways are proposed to be located on Dunmore Street or Station Street, they shall not be within 10 metres of an adjacent driveway on the same street.

C4. A 6 metre wide, 4 metre high pedestrian arcade must be provided and dedicated for unrestricted public access as part of any redevelopment of the site as shown in Figure 12.

C5. A minimum 4 metre wide pedestrian accessway must be maintained and dedicated for public access as part of any redevelopment of the site as shown in Figure 12.

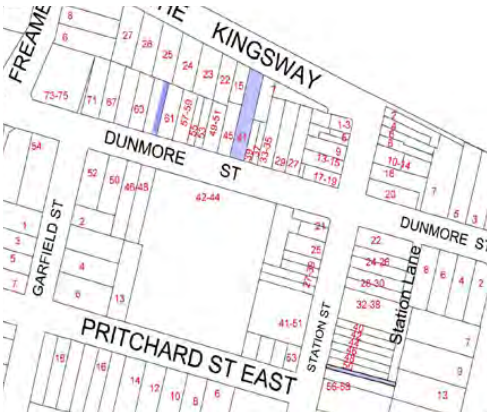


Figure 12- Proposed Pedestrian Accessways. (L) Accessway (M) Arcade (R) Accessway

3.3. Building Height

Objectives

O1. To require an appropriate scale relationship between building heights and street width.

O2. To ensure the appropriate management of overshadowing, access to sunlight and privacy.

O3. To enable flexibility of used by implementing higher floor to ceiling heights within buildings for the ground and first floors.

O4. To allow activation of the street edge on primary roads.

O5. To allow for reasonable daylight access to other development and the public domain.

Development Control

C1. The maximum height for development within the Wentworthville Town Centre is detailed within Holroyd Local Environmental Plan 2013 as a written statement and associated maps.

C2. The maximum building height in storeys within the Wentworthville Town Centre is detailed in Figure 13.

C3. The minimum floor to ceiling height requirements are located in Part B and C.

C4. The prominence of street corners shall be reinforced by concentrating the tallest portion of the building on the corner in relation to the overall building height and predominant street wall height.

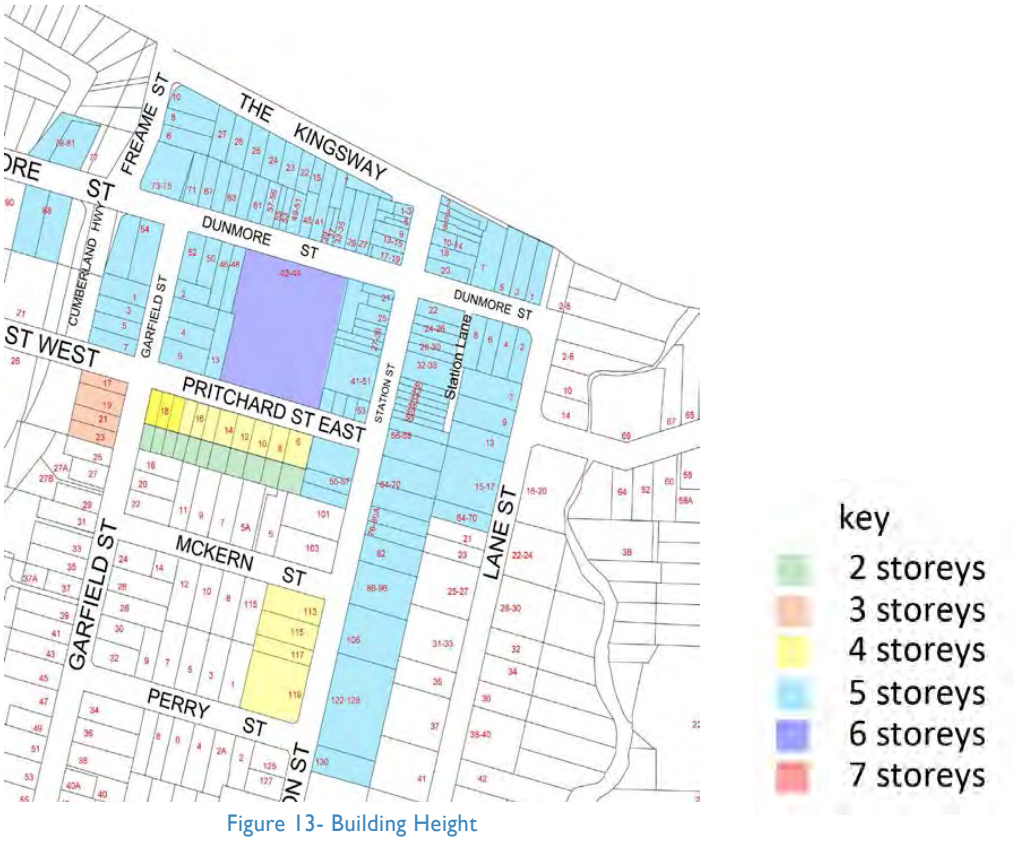


Figure 13- Building Height

3.4. Building Setbacks, Separation and Street Presentation

Objectives

O1. To require suitable definition of the public domain and public spaces.

O2. To require a continuous built edge within commercial and mixed use development for activation of the street edge.

O3. To retain a landscaped setback character for residential development.

O4. To ensure setbacks respond to the building separation requirements.

O5. To reduce the visual impact of buildings on the public domain.

O6. To ensure the maintenance of amenity, including privacy and sunlight, to adjacent residential development.

Development Controls

C1. All building setbacks shall be in accordance with Figure 14.

C2. Where a 0 metre setback is permitted, buildings shall form a continuous street edge.

C3. Rear and side setbacks (unless indicated otherwise in figure 14) are to be in accordance with setbacks indicated in Part B or Part C of this DCP.

C4. Residential Development shall correspond to building depth and separation requirements in Part B.

C5. A 8m rear setback is required for properties 8-16 Pritchard Street East (as indicated in Figure 14).

C6. Developments shall present and address the street.

C7. Sites with corner lots shall present and articulate to both street frontages.

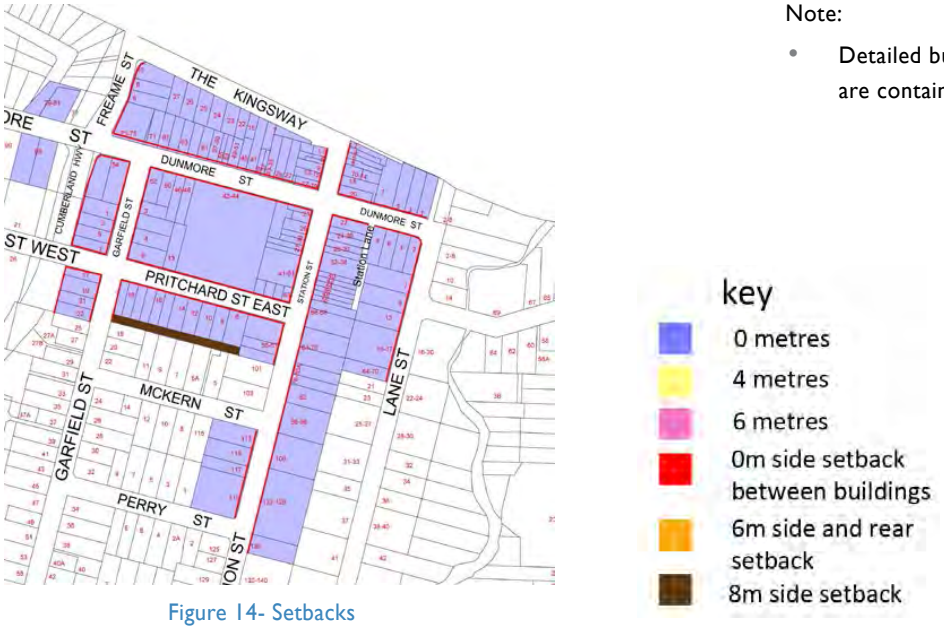


Figure 14- Setbacks

Note:

- Detailed building design requirements are contained with Part C of this DCP.

4. Guildford Town Centre

4.1. Site Consolidation

Objectives

O1. To ensure all sites achieve the required minimum width to adequately provide for basement car parking;

O2. To minimise vehicular and pedestrian conflicts throughout the town centre through the appropriate location and number of vehicular access points.

O3. To ensure all sites achieve the required minimum width to allow for a site configuration that permits a consistent landscaped open space to the rear of sites;

O4. To ensure any site amalgamation pattern does not restrict the development opportunity of any adjoining site or the ability of adjoining sites to provide basement carparking or rear open space;

O5. To establish fine grain shopfronts along primary retail streets within the town centre;

O6. To ensure new developments do not reduce the opportunity for the development of adjoining properties to develop in accordance with this DCP and adversely impact on the economic viability of development in accordance with s79C of the Environmental Planning and Assessment Act 1979;

Development Controls

C1. The minimum lot frontage requirements for all development within a Business zone is located in Part C.

C2. The minimum lot frontage requirements for all development within a Residential zone is located in Part B.

C3. Development within Business zones located on Military Road are to provide a fine grain retail shopfront character.

C4. Sites must not be left such that they are physically unable to develop in accordance with the prescribed built form outcomes outlined in this DCP.

4.2. Rear laneways, Land Dedication, Access and Vehicular Entries

Objectives

O1. To require the provision of rear access ways on properties for private and service vehicle access, in order to reduce vehicular and pedestrian conflict and provide greater amenity to future residents.

O2. To require buildings fronting primary roads to have vehicular access from the rear of the property in order to reduce vehicular and pedestrian conflict and create a safe retail environment.

O3. To require all sites with existing access ways from the rear of the property to be used for vehicular access and parking.

O4. To mitigate any impacts of vehicular traffic on adjoining residences.

O5. To allow improved circulation space for pedestrians and future residents within the precinct.

O6. To limit or prohibit vehicular access from primary street frontages.

Development Controls

C1. Where new development has access available off existing or laneways, vehicular access must be provided from the laneway.

4.3. Building Height

Objectives

O1. To require an appropriate scale relationship between building heights and street width.

O2. To ensure the appropriate management of overshadowing, access to sunlight and privacy.

O3. To enable flexibility of used by implementing higher floor to ceiling heights within buildings for the ground and first floors.

O4. To allow activation of the street edge on primary roads.

O5. To allow for reasonable daylight access to other development and the public domain.

Development Control

C1. The maximum height for development within the Guildford Town Centre is detailed within Holroyd Local Environmental Plan 2013 as a written statement and associated maps.

C2. The maximum building height in storeys within the Guildford Town Centre is detailed in Figure 15.

C3. The minimum floor to ceiling height requirement are located in Part B and C.

C4. The prominence of street corners shall be reinforced by concentrating the tallest portion of the building on the corner in relation to the overall building height and predominant street wall height.

Figure 15- Building Height

4.4. Building Setbacks, Separation and Street Presentation

Objectives

O1. To require suitable definition of the public domain and public spaces.

O2. To require a continuous built edge within commercial and mixed use development for activation of the street edge.

O3. To retain a landscaped setback character for residential development.

O4. To ensure setbacks respond to the building separation requirements.

O5. To reduce the visual impact of buildings on the public domain.

Development Controls

C1. All building setbacks shall be in accordance with Figure 16.

C2. Where a 0 metre setback is permitted, buildings shall form a continuous street edge.

C3. Side setbacks (unless indicated otherwise in Figure 16) are to be in accordance with setbacks indicated in Part B or Part C of this DCP.

C4. Rear setbacks for development within business zones shall correspond to building depth and separation requirements in this Section.

C5. Rear setbacks for development within residential zones shall be in accordance with development controls within Part B of this DCP.

C6. Developments shall present and address the street.

C7. Sites with corner lots shall present and articulate to both street frontages.

Note:

- Detailed building design requirements are contained with Part C of this DCP.

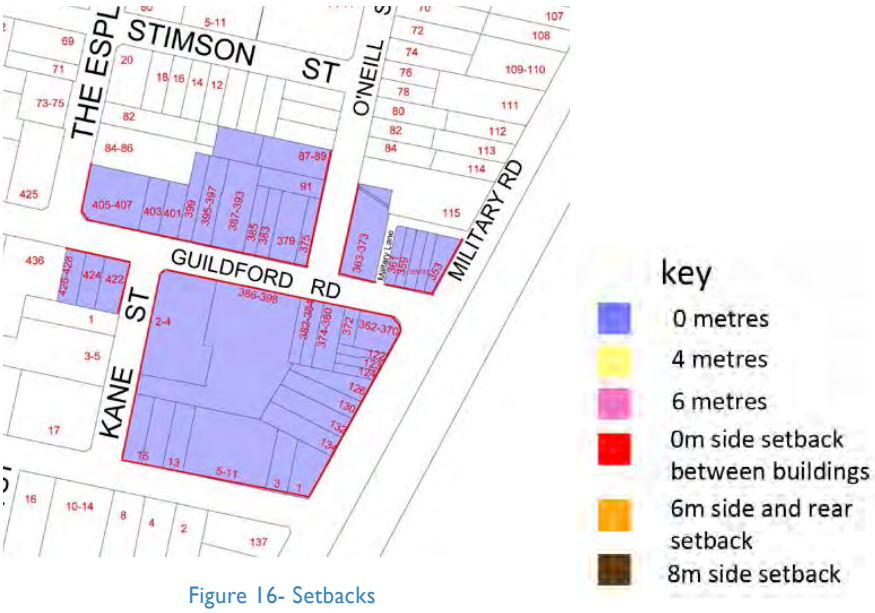


Figure 16- Setbacks

Part M

Merrylands Centre Controls

Holroyd Development Control Plan 2013

Merrylands Centre

Contents

Merrylands Centre

Introduction

Land covered by this Part

This Part applies to all development within the Merrylands Centre, including land within the Neil Street Precinct as shown in Figure 1.

Relationship to other parts of Holroyd Development Control Plan 2013.

This Part of Holroyd DCP 2013 shall be read in conjunction with all other Parts of Holroyd DCP 2013 which contains objectives and development controls that relate to development in this Part.

Part A - General Controls

Part B - Residential Controls

Part C - Commerical, Shop Top Housing and Mixed Use Development Controls

Part E - Public Participation

Part F - Advertising and Signage Controls

Part G - Places of Public Worship Controls

Part H - Heritage and Conservation Controls

Part I - Child Care Centre Controls

Part R - Definitions

Figure 1

Merrylands Centre

1. Aims & Objectives

Aims of the plan

- Renew and revitalise the Merrylands Centre.
- Provide increased growth capacity with Merrylands.
- Provide greater housing sustainability.
- Promote steady local economic growth over the next 20 years.

Objectives

- Strengthen the economic and employment role of Merrylands.
- Provide for an active and vibrant centre.
- Ensure buildings are designed to maximise appropriate amenity outcomes for the centre.
- Ensure development design promotes the principles of ecologically sustainable development.
- Create a centre for a diverse community.
- Promote public transport use, cycling and walking and reduce reliance on private car travel.
- Improve pedestrian and vehicular traffic movement within the centre.
- Achieve urban design strategies that acknowledge the role of Merrylands within Holroyd and the subregion.
- Maintain and create clear linkages within the centre and with adjoining residential precincts.

2. Urban Design Strategies

In order to achieve the objectives for the redevelopment of the Merrylands Centre, the following urban design strategies have been established. These have been implemented through development controls in this plan. The success of the centre plan is reliant on the achievement of these strategies.

Strengthen the economic and employment role of Merrylands.

- Create an active centre for opportunities to live, work and play.
- Facilitate the development of commercial, office and retail development at grade, with commercial and/or ancillary residential development above;
- Facilitate the growth of retail, and commercial development within the Town Centre, with ancillary residential development;
- Become a destination through additional retail, commercial and entertainment uses.
- Ensuring interim development does not hinder or detract from the attainment of commercial or mixed use development in the town centre.

Provide for an active and vibrant centre

- Ensure buildings address the street and the public domain by providing a consistent built edge and street frontage height.
- Facilitate of mixed use development with retail and commercial at grade and first floor, residential or commercial development above.
- Maintain Merrylands Road as the main street within the precinct.
- Improve the landscaping and public domain spaces along McFarlane Street.
- Create an active town centre where walking is encouraged by requiring future development to activate the street with quality design and provide for at grade pedestrian connectivity.
- Enable McFarlane Street to become an 'eat street' restaurant space.
- Requiring development to activate the street and enhance at grade pedestrian connectivity

Ensure buildings are designed to maximise appropriate amenity outcomes for the centre.

- Provide setbacks and separation on upper storeys to lessen overshadowing impacts.
- Provide height transition from the lower scale residential buildings to the higher scale buildings on Merrylands Road and McFarlane Street in order to lessen overshadowing impacts.
- Maintain the amenity of the Centre by maximising solar access to the street.
- Require appropriate building setbacks and separation to allow for solar access and privacy.
- Require the design of buildings to implement 'safer by design' principles.
- Create a centre where pedestrians can feel safe during the day and night.
- Provide public open space and landscaping for amenity and passive recreation opportunities.

Merrylands Centre

Ensure development design promotes the principles of ecologically sustainable development

- Respond to the opportunities and constraints of the site; the hierarchy and proposed uses of streets and laneways; flood hazard and the need for high quality public spaces and public and private amenity.
- Ensure that redevelopment within the Centre does not increase the impact of flood inundation on property or person (or both), within or beyond the Centre's boundaries.
- Provide an overland flow path across which reduces flood levels while also serving as a pedestrian thoroughfare and focus for shopfronts and activity.
- Minimise the impacts of development on the environment.

Create a centre for a diverse community

- Facilitate the provision of a variety of dwelling sizes within the residential component of buildings.
- Promote a variety of uses within the centre.
- Provide public spaces for the community to meet and congregate.

Promote public transport use, cycling and walking and reduce reliance on private car travel

- Create a safe, pedestrian friendly environment through the activation of streets and public places
- Create clear linkages within the centre and to adjoining residential precincts.
- Contribute to a mix of residential, business, commercial and entertainment uses in the centre to maximise public transport use.
- Improve pedestrian connectivity through providing designated pedestrian linkages;

Improve pedestrian and vehicular traffic movement within the centre

- Restrict egress and ingress of vehicular traffic onto Merrylands Road from private properties.
- Facilitate the creation of laneways and rear private access ways for key sites within the centre.
- Provide new roads and infrastructure to improve accessibility and circulation in the Neil Street Precinct.

Achieve urban design that acknowledge the role of Merrylands within Holroyd the subregion

- Provide a transition in building heights through increasing height when approaching from the west and north east to enable the built form to signal the presence of the town centre.
- Maintain the amenity of surrounding lower scale development.
- Comply with site requirements to enable better amenity outcomes for taller buildings.
- Development responds to site opportunities and constraints and the need for high quality public spaces.
- Facilitate the location of civic and public uses within the centre.
- Provide appropriate public open spaces within the core of the centre and with the Neil Street Precinct.
- Deliver quality designed buildings that reflect the role of the centre.

Merrylands Centre

Maintain and create clear linkages within the centre and with adjoining residential precincts

- Provide clear vehicular and pedestrian linkages with Neil Street Precinct, Holroyd Gardens and surrounding residential areas.
- Maintain and enhance a primary north-south pedestrian corridor from Memorial Avenue to Neil Street.
- Provide suitable crossings and infrastructure for pedestrians and cyclists.
- Create of pedestrian linkages that provide connections within the centre.

3. Public Domain

3.1. Roads and circulation

A number of new intersections, roads, laneways and accessways are proposed under this plan, as indicated in the tables below and in Figure 2. Road widening along Merrylands Road will be required to enable a greater footpath area for street tree planting and pedestrian movement. Points where vehicular entry is not permitted are also identified. Indicative street sections are provided in Section 3.4.

Urban design strategies achieved:

- Create clear linkages within the centre and to adjoining residential precincts.
- Improve pedestrian connectivity through providing designated pedestrian linkages.
- Restrict egress and ingress of vehicular traffic onto Merrylands Road from private properties.
- Facilitate the creation of laneways and rear private access ways for key sites within the centre.
- Provide new roads and infrastructure to improve accessibility and circulation in the Neil Street Precinct.
- Provide clear vehicular and pedestrian linkages with Neil Street Precinct, Holroyd Gardens and surrounding residential areas.
- Create of pedestrian linkages that provide connections within the centre.
- Maintain Merrylands Road as the main street within the precinct.
- Create a safe, pedestrian friendly environment through the activation of streets and public place.

Table 1- New Roads, laneways. accessways in Merrylands Centre

New Roads
Extension of Sheffield Street
Extension of Gladstone Street
New Road 1- between Terminal Place and Sheffield Street Extension
New Road 2- between Dressler Court and New Road 1

Signalised intersections
Neil Street and New Road 1
Gladstone Street and Pitt Street

Laneways (public)
Extension of Main Lane
Laneway 1- between Merrylands Road and McFarlane Street
Laneway 2- between Memorial Avenue and Addlestone Road

Accessways (public or private)
Accessway 1- between Military Road and Miller Street
Accessway 2- between Addlestone Road and Burford Street
Accessway 3- between Neil Street and Sheffield Street

Merrylands Centre

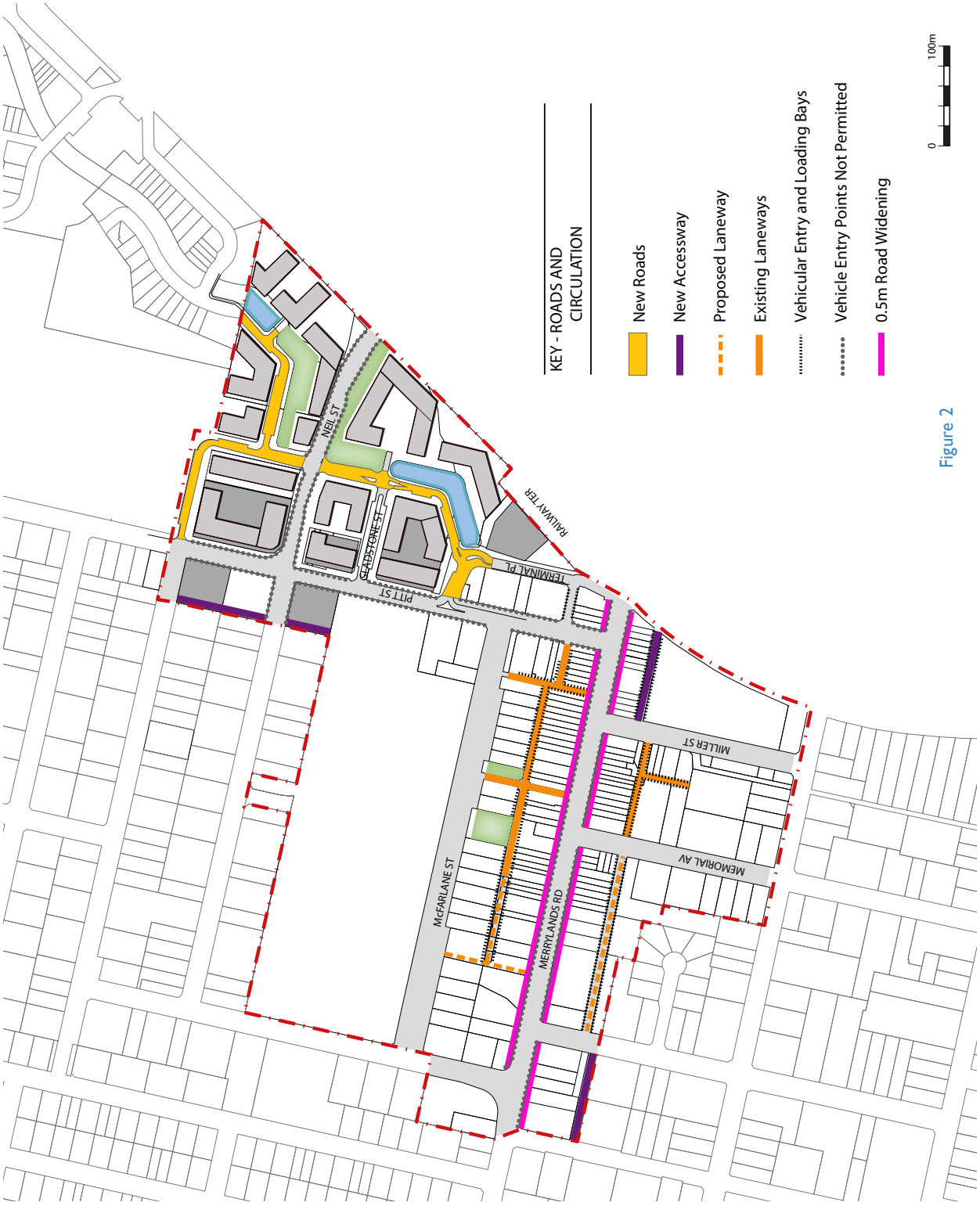


Figure 2

3.2. Pedestrian and Bicycle Network

Figure 3 includes footpaths, required new pedestrian access and crossings and bicycle access.

Pedestrian accessways create linkages to key locations in the centre. The proposed cycleway links to Holroyd Gardens, which is part of the regional cycle network.

Urban design strategies achieved:
• Create an active town centre where walking is encouraged by requiring future development to activate the street with quality design and provide for at grade pedestrian connectivity. • Create a safe, pedestrian friendly environment through the activation of streets and public places • Create clear linkages within the centre and to adjoining residential precincts. • Improve pedestrian connectivity through providing designated pedestrian linkages; • Provide clear vehicular and pedestrian linkages with Neil Street Precinct, Holroyd Gardens and surrounding residential areas. • Provide suitable crossings and infrastructure for pedestrians and cyclists. • Create of pedestrian linkages that provide connections within the centre.

Merrylands Centre

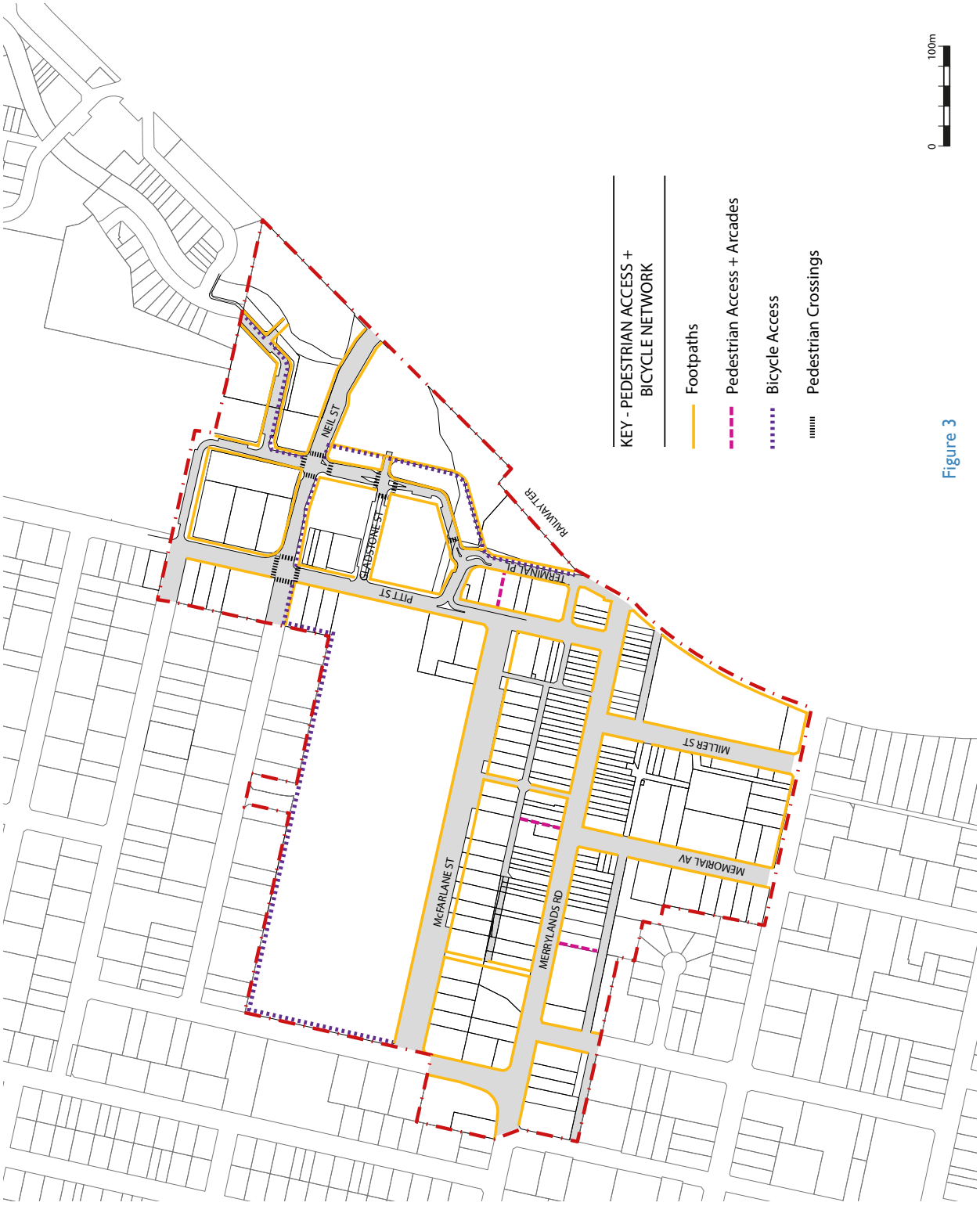


Figure 3

3.3. Landscaping and Open Space

The Centre proposes public and private open spaces, including deep soil zones, swales and planting on structures. Parks in Neil Street are located adjacent to roads to provide overland flow paths and to increase the visibility and safety. They also provide connectivity within the precinct. A town square between Merrylands Road and McFarlane Street is to provide focus for the city.

Opportunity to provide deep soil zones within the centre is limited therefore opportunities for planting on structures (i.e roof gardens) is promoted.

Trees planting will be important to the centre in providing streetscape character and providing amenity. Figure 4 indicates locations for open spaces and landscaping, including indicative locations for existing and proposed street tree planting.

Urban design strategies achieved:

- Create an active centre for opportunities to live, work and play.
- Improve the landscaping and public domain spaces along McFarlane Street.
- Provide public open space and landscaping for amenity and passive recreation opportunities.
- Respond to the opportunities and constraints of the site; the hierarchy and proposed uses of streets and laneways; flood hazard and the need for high quality public spaces and public and private amenity.
- Ensure that redevelopment within the Centre does not increase the impact of flood inundation on property or person (or both), within or beyond the Centre's boundaries.
- Provide an overland flow path across which reduces flood levels while also serving as a pedestrian thoroughfare and focus for shopfronts and activity.
- Minimise the impacts of development on the environment.
- Provide public spaces for the community to meet and congregate.
- Provide appropriate public open spaces within the core of the centre and with the Neil Street Precinct.

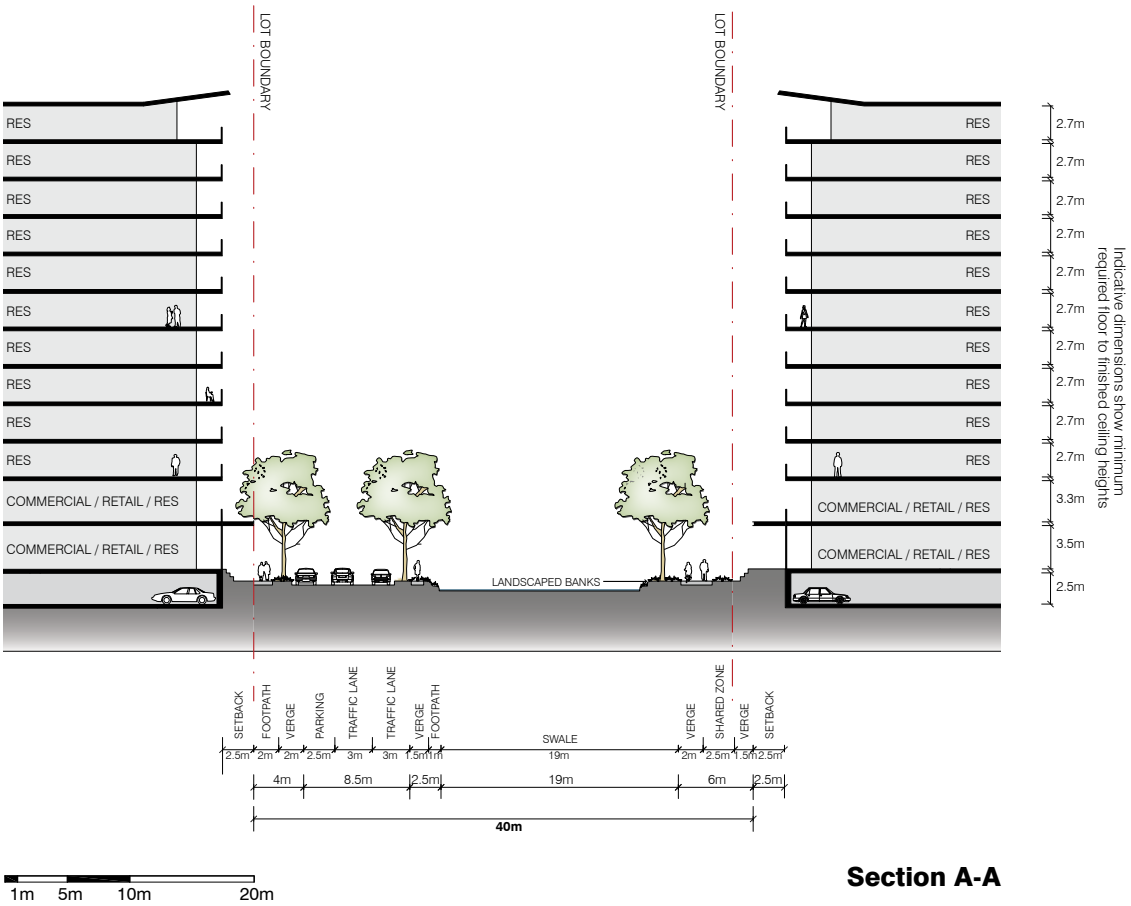
Merrylands Centre

Figure 4

3.4. Indicative Street Sections

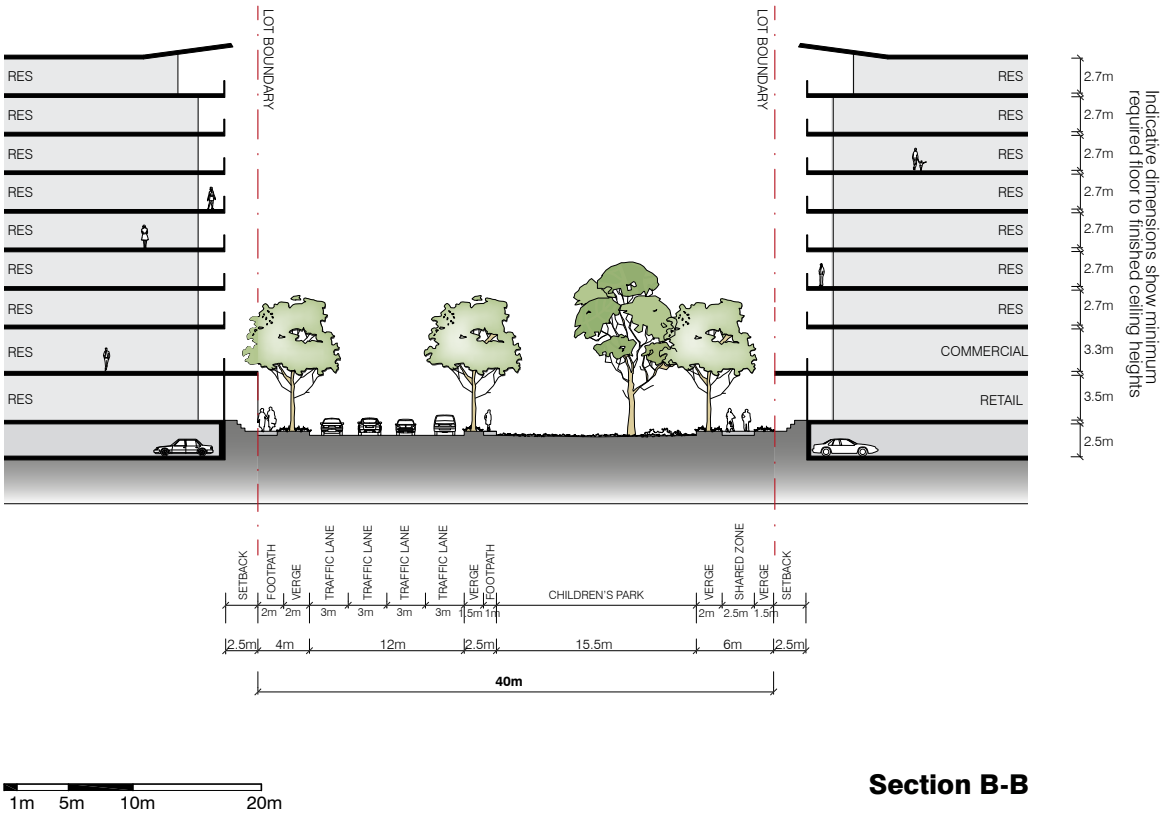
The key map below shows a number of street sections within the centre. Indicative street sections have been provided on the following pages to indicate carriageway, footpath, verge widths and setbacks.

Merrylands Centre



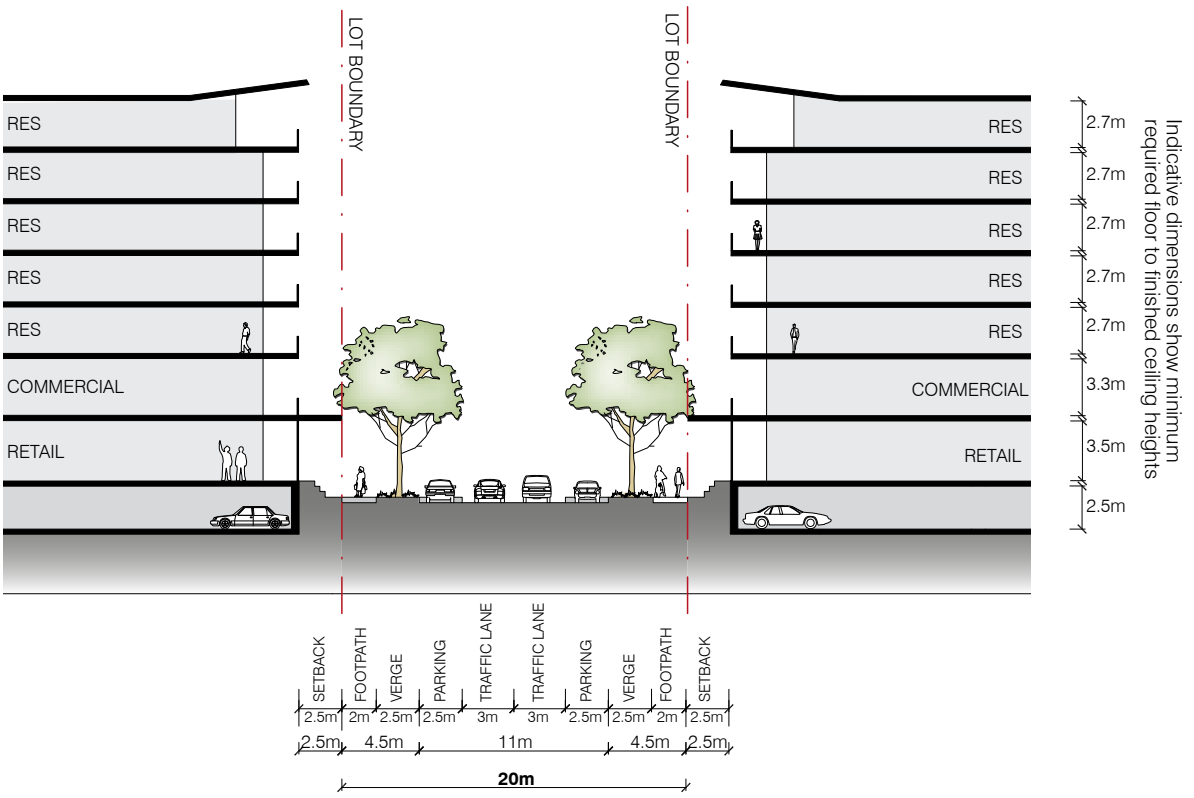
Section A-A

Merrylands Centre



Section B-B

Merrylands Centre



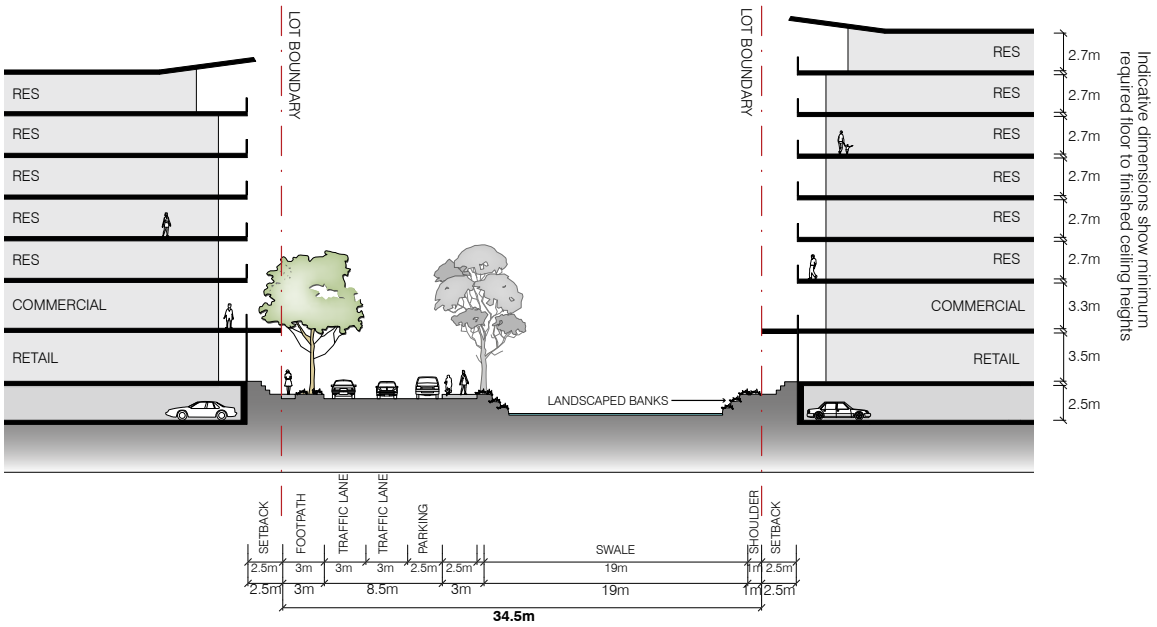
Section C-C

1m 5m 10m 20m

Merrylands Centre

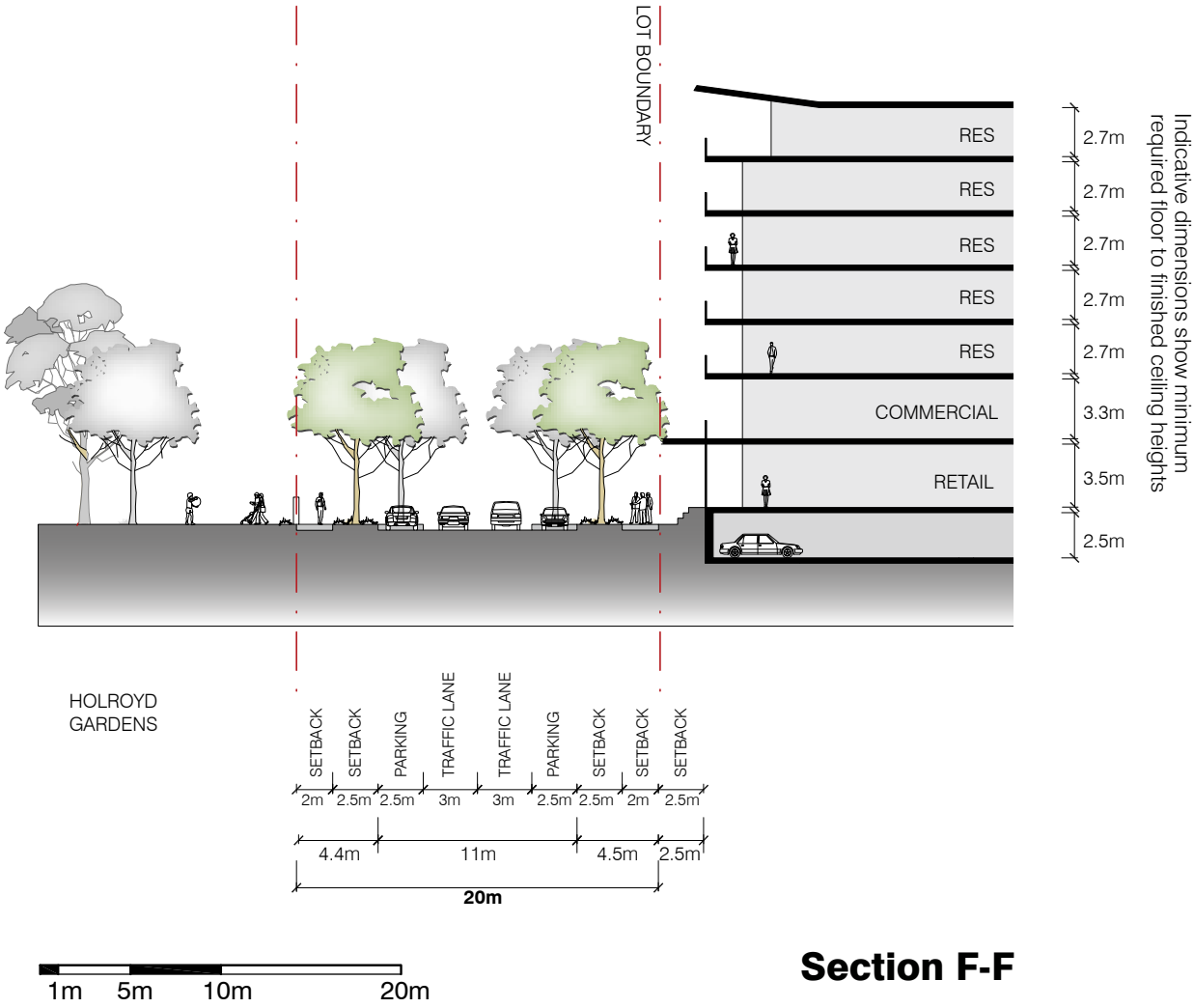
Section D-D

Merrylands Centre

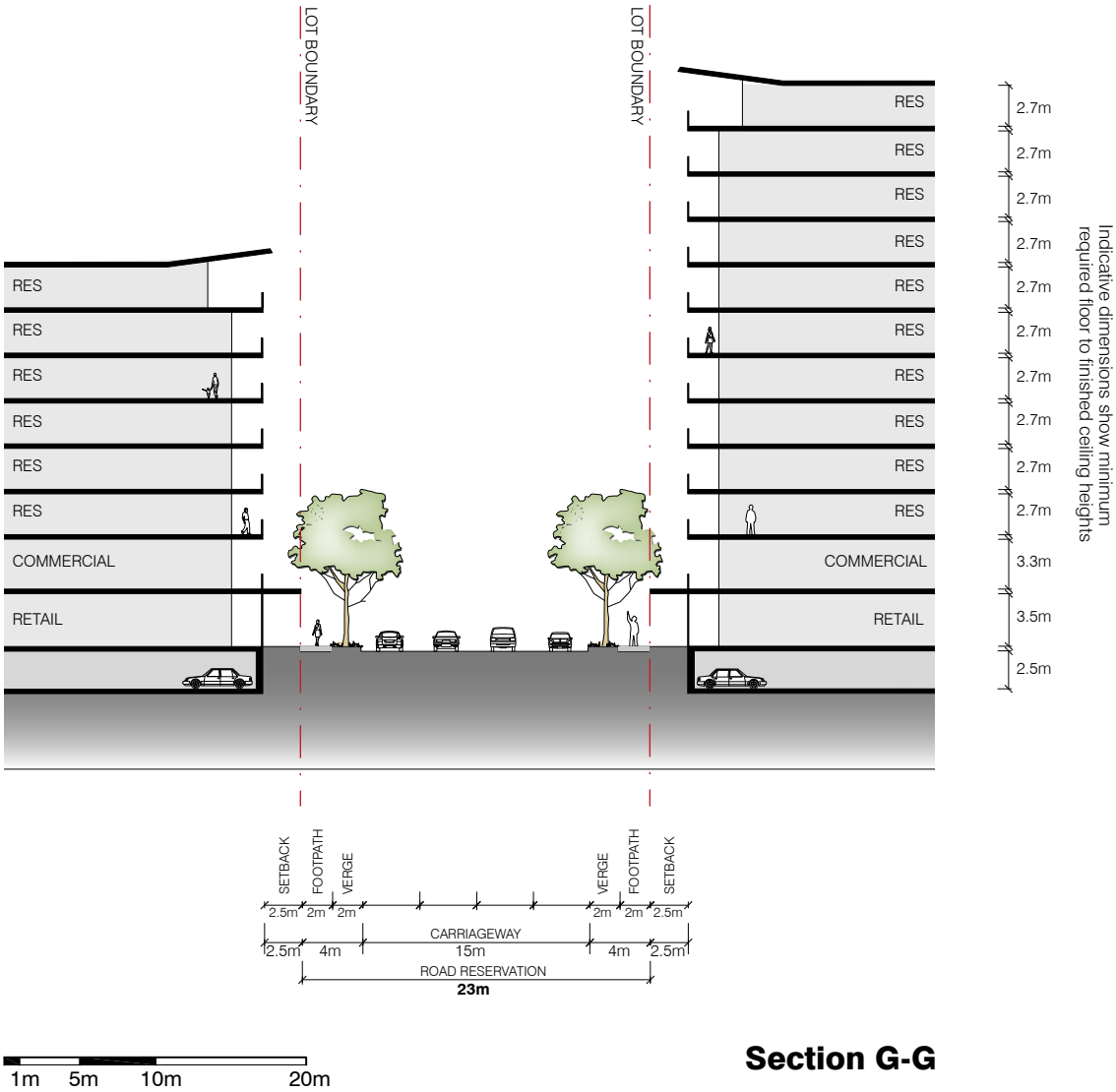


Section E-E

Merrylands Centre



Section F-F


LOT BOUNDARY
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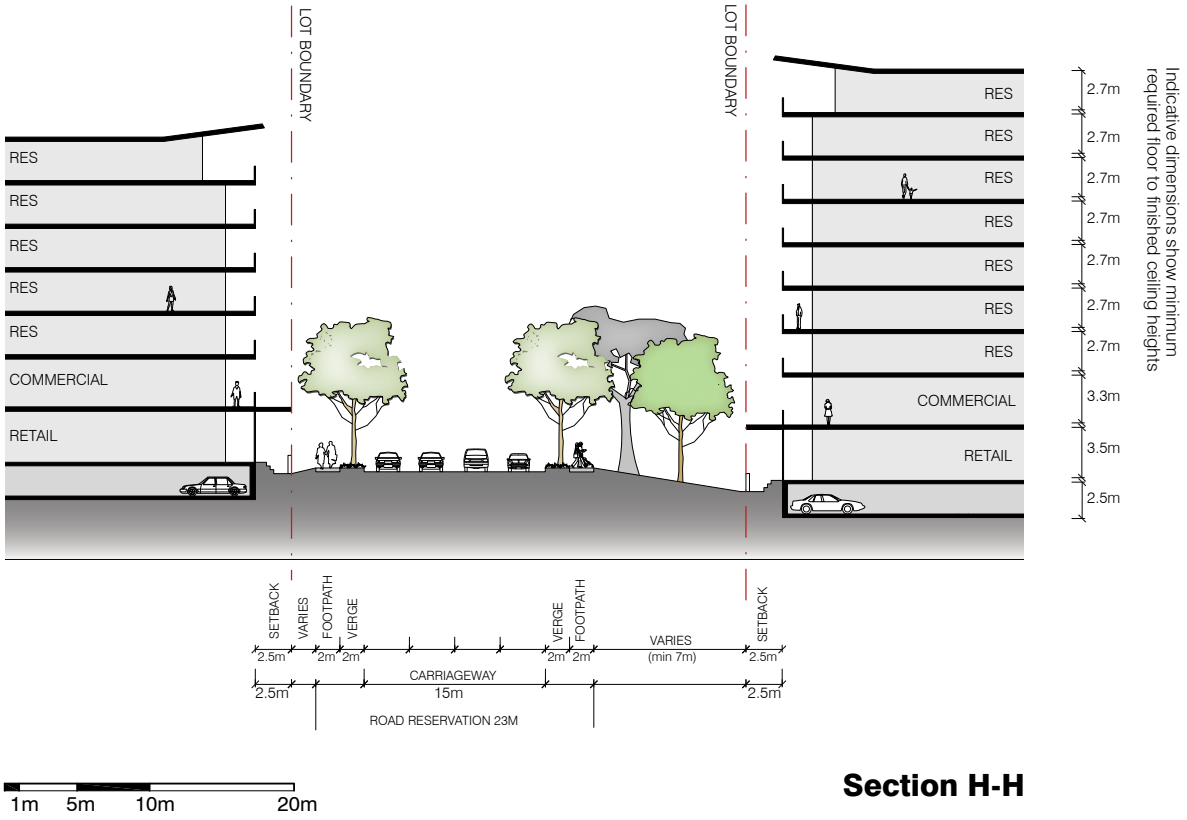
3.3m
3.5m
2.5m
Indicative dimensions show minimum required floor to finished ceiling heights
SETBACK
FOOTPATH
VERGE
VERGE
FOOTPATH
SETBACK
2.5m
2m
2m
2m
2m
2.5m
CARRIAGEWAY
2.5m
4m
15m
4m
2.5m
ROAD RESERVATION
23m
1m
5m
10m
20m

Section G-G

Merrylands Centre

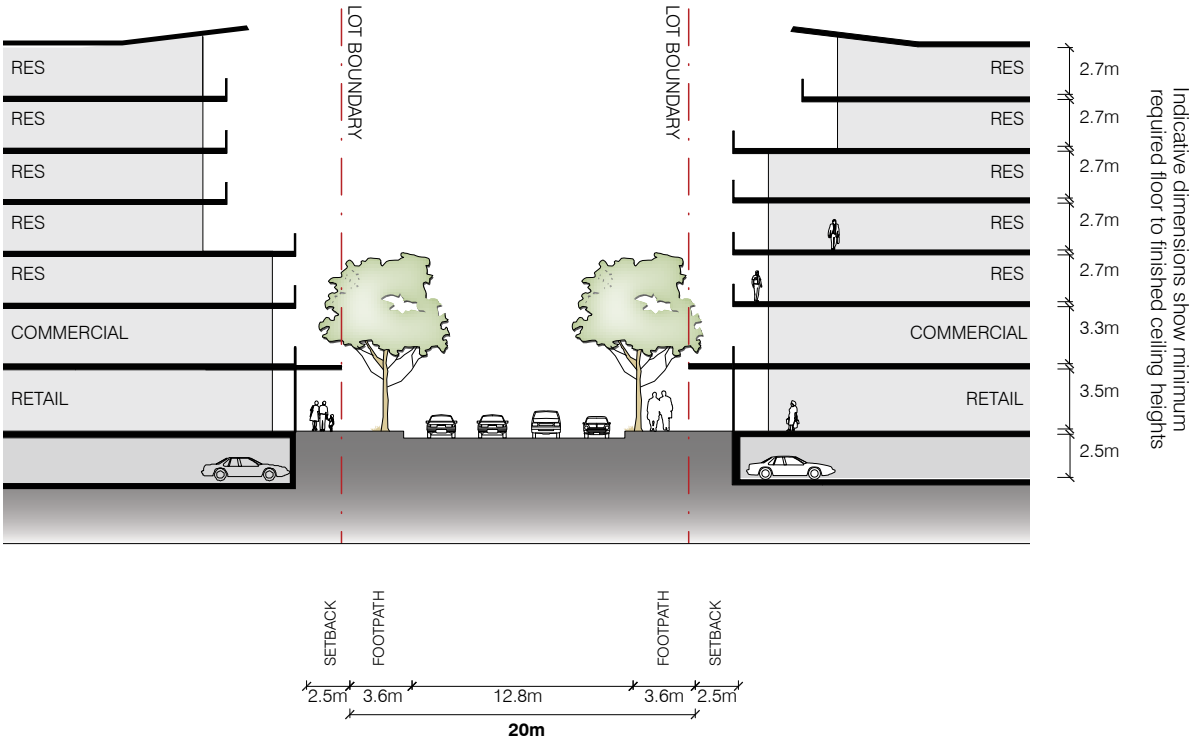


Section H-H

Merrylands Centre

Section I-I

Merrylands Centre



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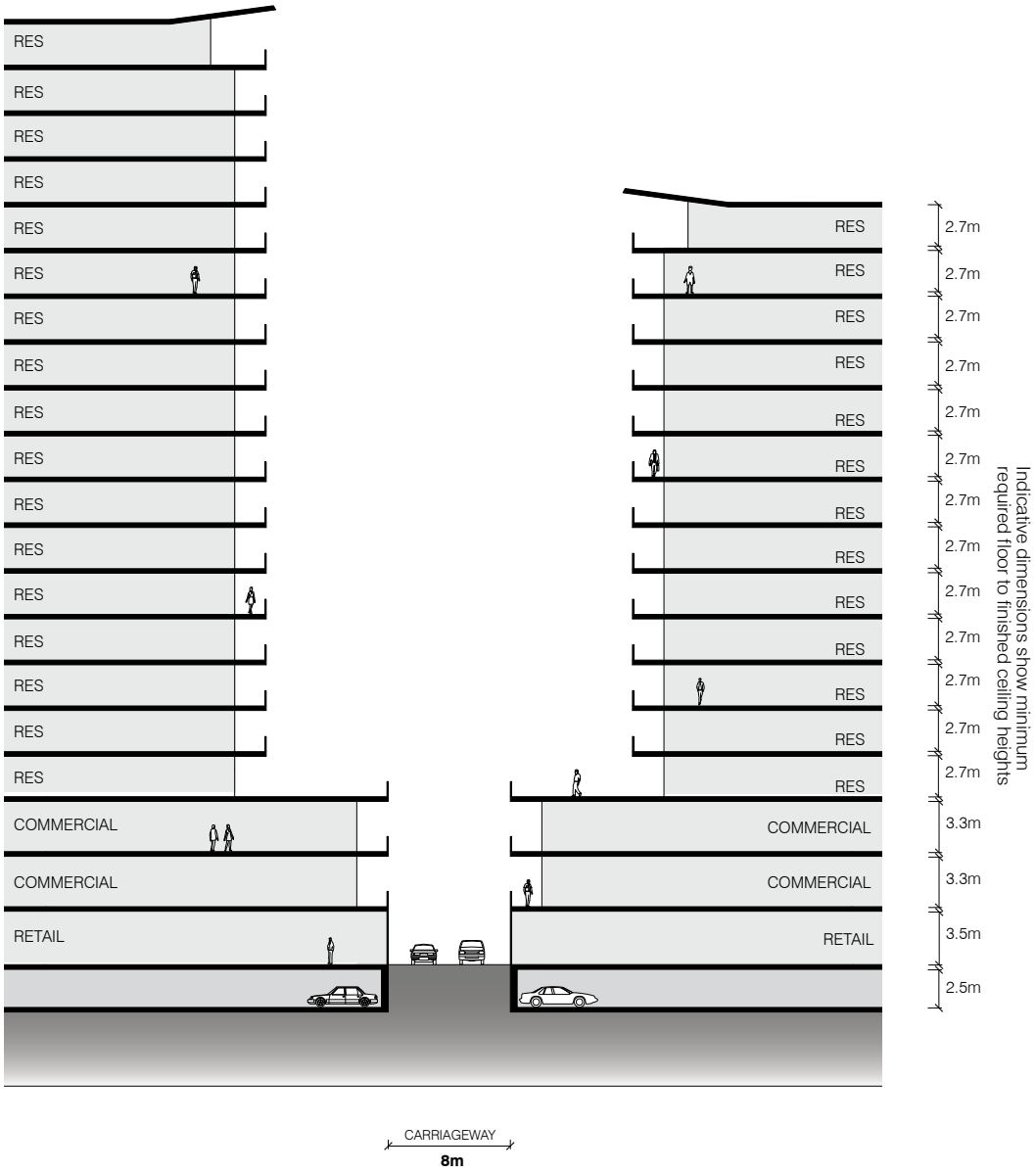
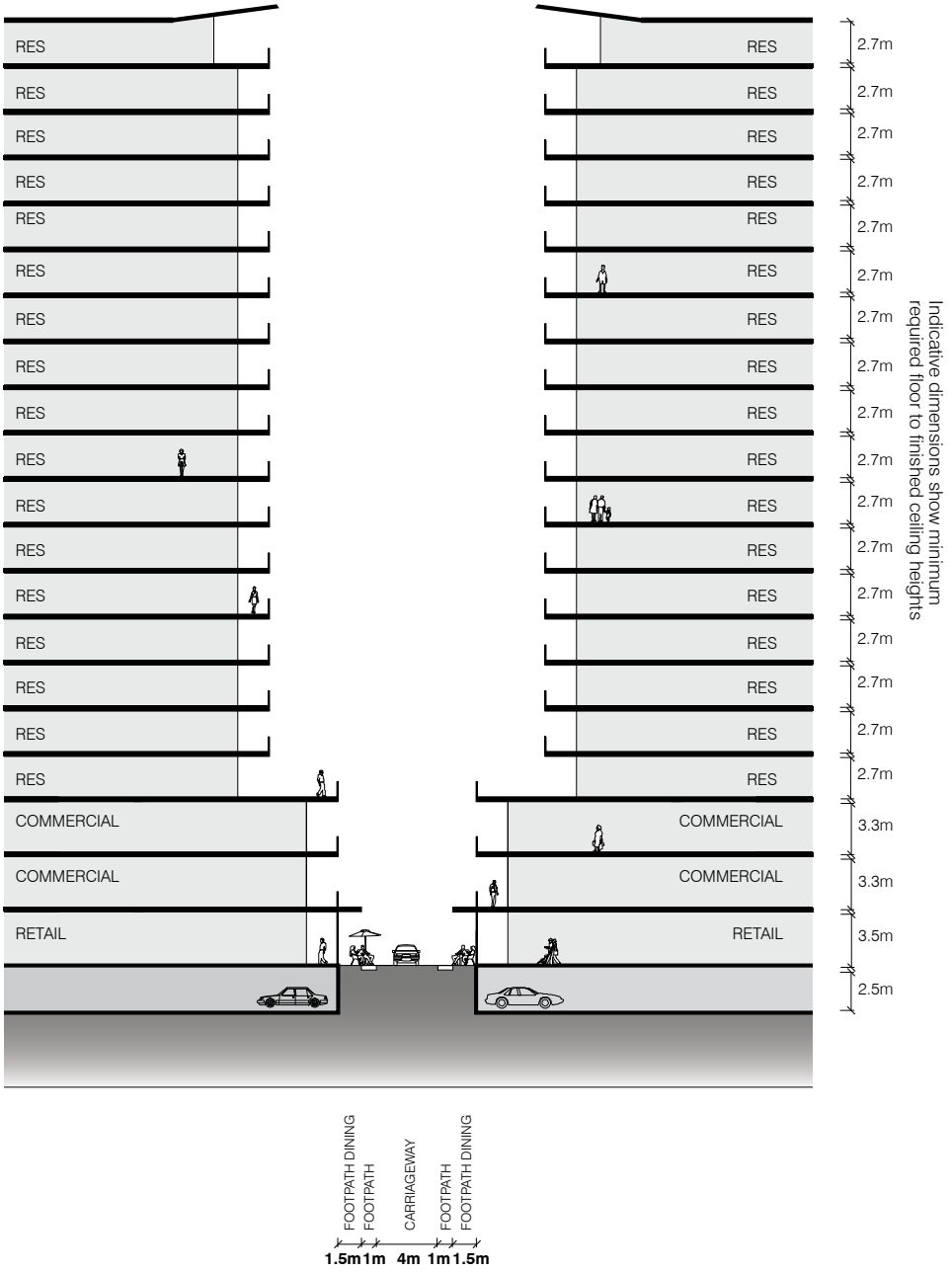
Section J-J



East-West Laneway

Section K-K

Merrylands Centre



North-South Laneway

Section L-L

4. Building Envelope

4.1. Site amalgamation and minimum frontage

In order for taller buildings to achieve suitable building amenity outcomes and to ensure building sites can accommodate appropriate vehicular access and carparking facilities, a suitable minimum site frontage needs to be obtained for all developments.

In some instances specific site amalgamations will be required, this may be where the provision of a laneway is required, where vehicular entry points are required in a certain location or where a specific building footprint is required due to flood conditions.

Objectives

O1. Ensure the achievement of laneways and private accessways in order to require development fronting Merrylands Road to have rear vehicular access.

O2. Ensure vehicular access can be obtained from secondary streets and laneways.

O3. Ensure sites are sufficient in frontage in order to provide adequate vehicular access and basement carparking.

O4. Ensure site dimensions allow for the achievement of appropriate building setbacks and separation.

O5. For new development not to reduce the reasonable development opportunity of adjoining lots.

Development Controls

C1. Amalgamation of lots in accordance with Figure 5 is required for redevelopment.

C2. Where amalgamation is not required by this plan, the minimum site width for redevelopment is 20m

C3. The minimum site width achieved shall determine the height of buildings (in storeys) in accordance with the table below. Site width shall be measured at the primary frontage.

Site width (m)	Permitted Height (storeys)
20m	Maximum 3 storeys
26m	Maximum 8 storeys
32m	Maximum 20 storeys

C4. Sites must not be left such that they are physically unable to reasonably develop a three storey building in accordance with the controls in Sections 4 and 5 of this Part.

C5. Development must not prevent the provision of laneways, accessways or vehicular access locations is prevented, or cannot be achieved in accordance with this plan.

C6. Where required amalgamations cannot be achieved:

a) Applicants are to negotiate with all affected property owners prior to the lodgement of a development application, in an attempt to achieve the preferred development outcome.

b) In instances where amalgamation cannot be achieve (because a landowner chooses not

to take-up a reasonable offer) the following information must be submitted with any development application:

- two (2) written valuations indicating the value of the remaining sites that were to be developed in conjunction with the applicants properties. These are to be undertaken by two independent Valuers registered with the Australian Institute of Valuers, and
- evidence that a reasonable offer has been made to the owner(s) of the affected sites to purchase and valuation reports.

C7. Where amalgamation (as required) is not achieved the applicants must show that the remaining sites, which are not included in the consolidation will still be able to achieve the development outcome prescribed in this DCP (i.e. minimum site frontage of 20m). This includes achieving the required vehicular access, basement parking and built form.

Note:

- Potential value can include, (but is not limited to) the land locked site developed jointly with adjoining properties, or on its own, under Holroyd LEP 2013 and this plan.
- A reasonable offer shall be a fair market value, and include for all expenses that would be incurred by the owner in the sale of the land locked site.

Merrylands Centre

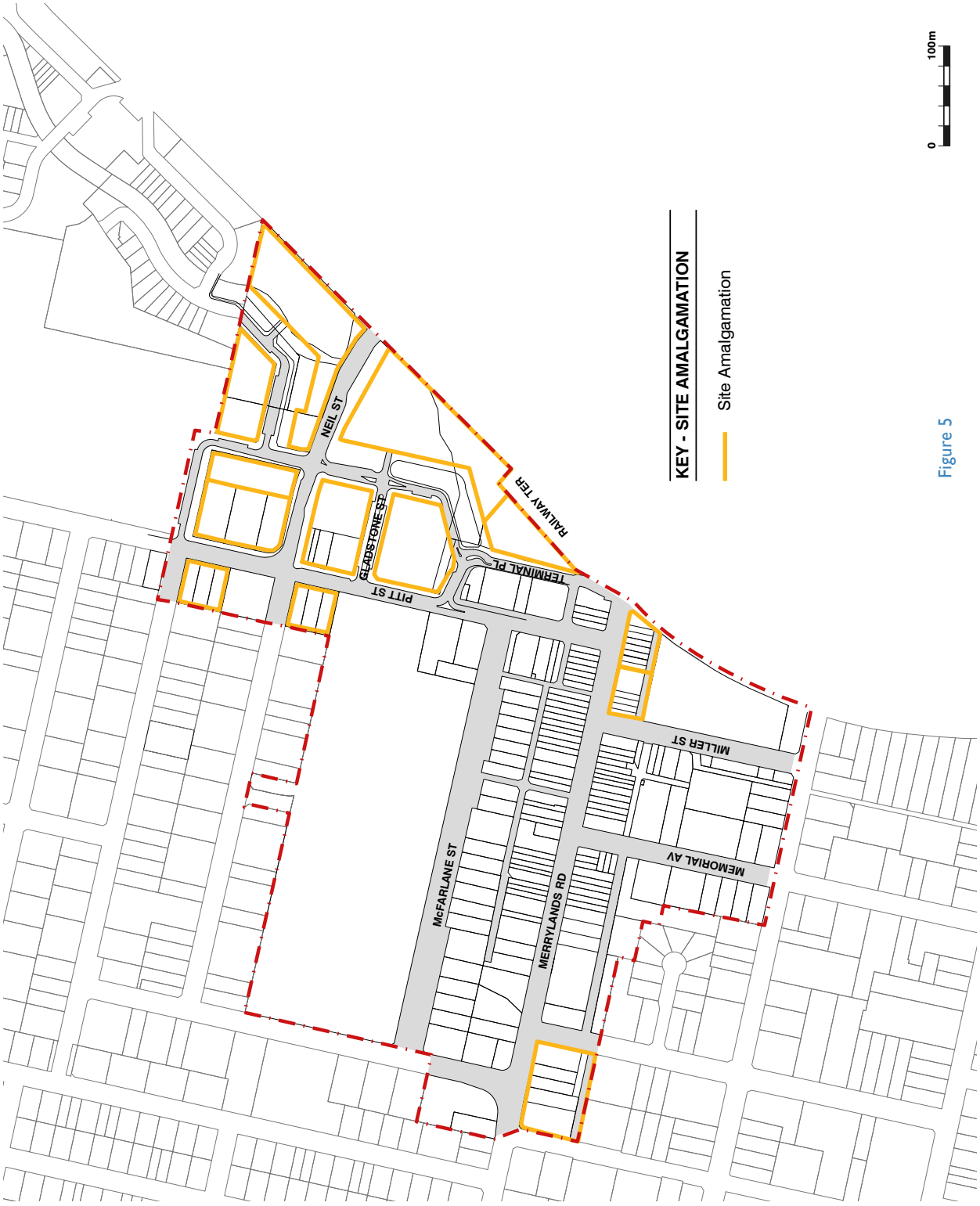


Figure 5

4.2. Building and Ceiling Height

Built form scale is important in establishing the role and character of a centre. It can provide visual cues to signal the presence of the town centre and also provide legibility within the centre itself. The built form of Merrylands centre will reflect its role as a town centre, whilst having regard for surrounding lower density development.

The built form scale established for Merrylands provides a height transition, from lower scale when approaching from the west, north-east and surrounding lower scale residential buildings to towers in the core of the centre. The scale has been specifically developed to ensure that an appropriate level of daylight access is achievable for dwellings within and immediately outside of the centre and that the scale of building reflects its proximity to the core of the centre.

Objectives

O1. Achieve appropriate management of overshadowing, access to sunlight and privacy

O2. Deliver a built form that provides a height transition, from lower scale on the edges of the centre to higher scale in the core of the centre.

O3. Ensure the scale of the built form provides for a legible centre.

O4. Provide appropriate transition in building heights from public spaces.

Development Controls

C1. Maximum permitted building height in storeys* shall be in accordance with the table below.

Permitted Height (storeys)	
Height (m)	storeys
10	1
12.5	2
14	3
17	4
20	5
23	6
26	7
29	8
32	9
38	11
41	12
50	15
53	16
65	20

C3. Each storey shall have the following minimum floor to ceiling heights:

- Ground floor- 3.5m
- First floor (regardless of use)- 3.3m
- All other floors- 2.7m

C4. Development in the centre shall establish a consistent building height transition, from the edges

of the centre, to the core of the centre.

C5. Ensure the achievement of daylight access to public open spaces in accordance with Section 7.4.

* Building heights set under Holroyd LEP 2013 accommodate flood management measures, such as floor level heights.

4.3. Street setbacks, road widening and street frontage heights

The street setback and frontage height of buildings establishes different character areas and spaces, through the definition of streets. Consistent street alignment provides continuity of street facades and enhances the character of the area. Street frontage height determines the scale of buildings on the street and reflects the role of the centre and the intended experiences for pedestrians.

The street setbacks in Merrylands reflect the retail and commercial uses within the core, civic streets and the transition to lower scale residential areas. Street frontage heights provide a human scale to the centre, to optimize pedestrian experience and allow for the achievement of sunlight access.

Objectives

O1. Provide street edges that reinforce and reflect the various uses and characters within the centre.

O2. Ensure the location of shop fronts are adjacent to pedestrian activity.

O3. Create a pleasant environment and amenity for residents and visitors through the provision of street trees and wider footpaths on Merrylands Road.

O4. Encourage the establishment of active laneway uses through street setbacks.

O5. Enhance the character of the centre through consistent and continuous street facades.

O6. Ensure building heights at street level are at a human scale.

O7. Ensure the pedestrian environment is pleasant and inviting through access to sunlight, appropriate scale and massing of buildings and wind mitigation.

Development Controls

C1. Street setbacks in accordance with Figure 6 are required for redevelopment.

C2. 0.5m road widening is required for both sides of Merrylands Road in accordance with Figure 2.

C3. On Pitt Street a 0.65m road widening is required for 185 Pitt Street, to enable the cycle path connection.

C4. A 3m x 3m splay corner is required at the south-western corner of the Neil Street/Pitt Street intersection.

C5. On Neil Street, road widening is required at 185 Pitt Street, to require the footpath dimensions to match existing to the east of the site.

C6. Street wall height of buildings (podium) shall be 3 storeys, with a minimum height of 11m and maximum height of 14m.

C7. Upper level (above street wall)street frontage setbacks for Merrylands Road, McFarlane Street and Pitt Street will be based on storey height, in accordance with the table below and Figure 7:

Storeys	Street frontage setback (m)
4-8	4
9-12	5
13-20	6

C8. Upper level street frontage setbacks for Memorial Avenue shall be in accordance with Figure 8

C9. Minor projections into the street setback will be accepted for sites where 0m setback is required, in accordance with the table below:

Permitted projection	Permitted length of projection
Awnings	3.0m
Awnings (laneways)	Maximum 1.5m
Balconies (above 3rd storey)	600mm

Note: Awning requirements are provided in Section 7.3

Merrylands Centre

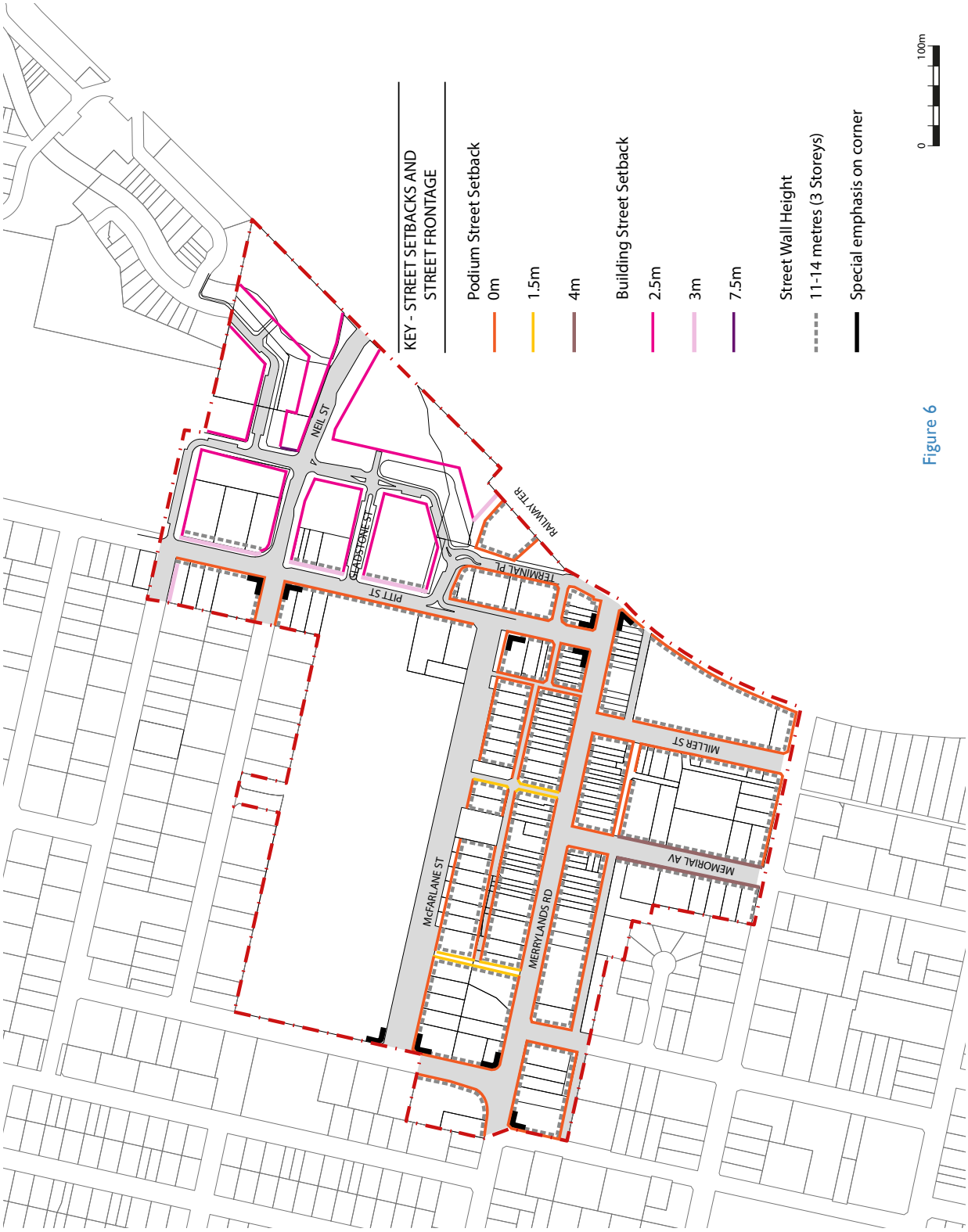
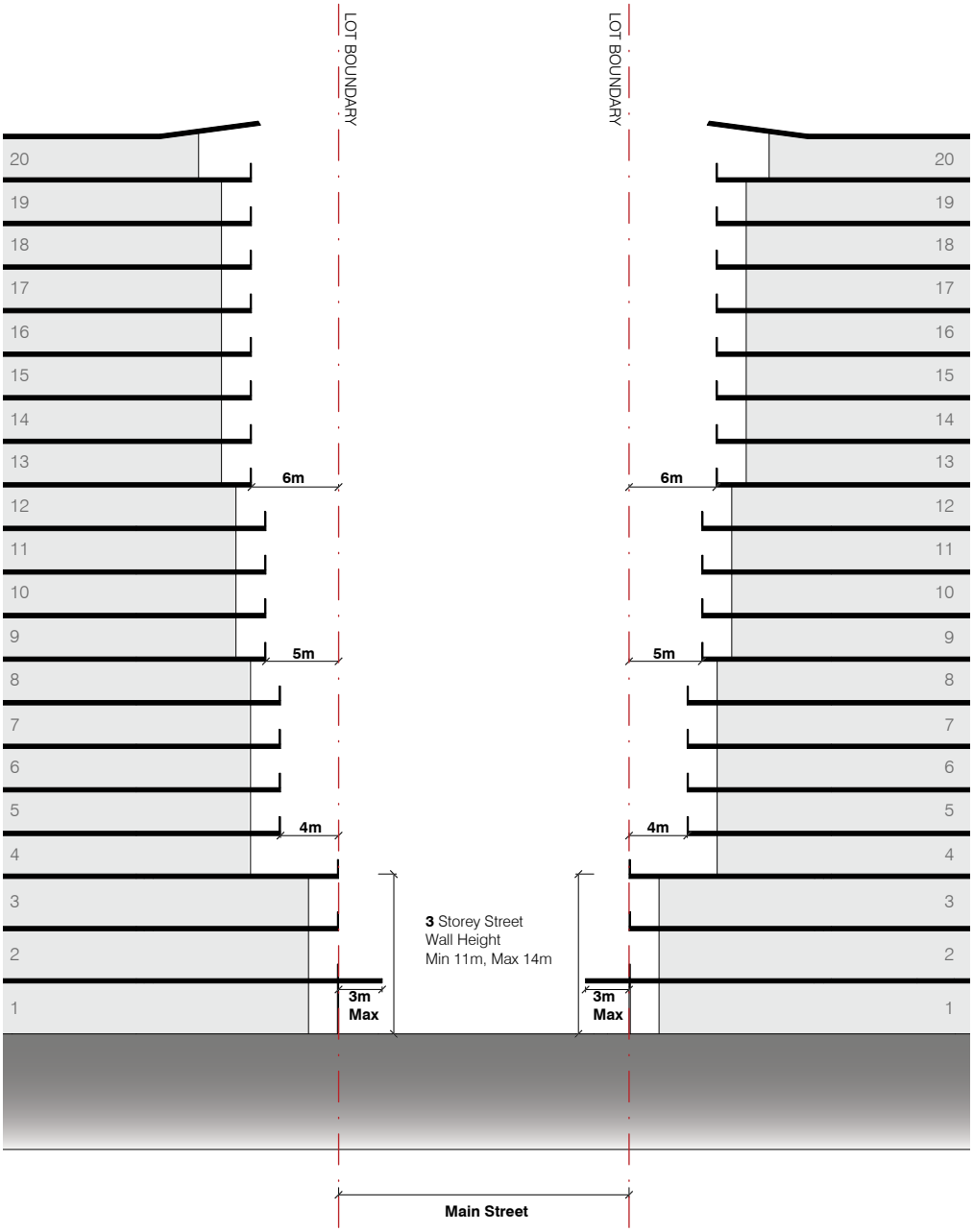


Figure 6

Merrylands Centre



1m 5m 10m 20m

Figure 7

Merrylands Centre

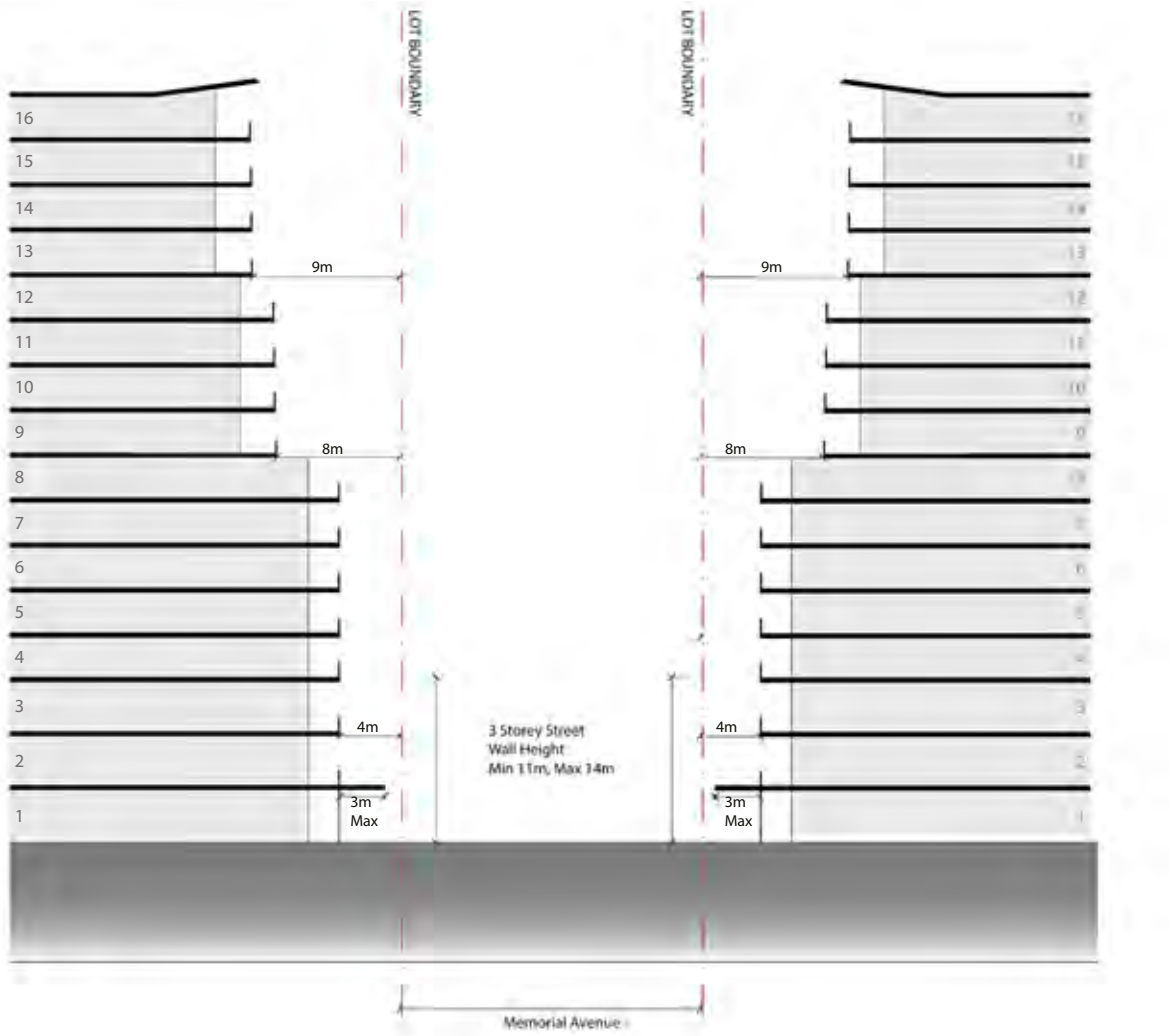


Figure 8

4.4. Building Depth and length

Building depths directly impact the residential amenity for dwelling occupants. Achieving adequate building depths can ensure access to natural ventilation and sunlight, which provides amenity and energy savings. Limiting building depth and length also reduces the bulk of a building, which provides benefits to the public domain of sunlight access and streetscape amenity.

Building depth is related to building use and different site conditions such as size, orientation and density which may require different design solutions.

Building depth will be calculated as Building plan (glass line to glass line) + articulation zone (including balconies).

Objectives

O1. Promote sustainable building design and development and reduce reliance on artificial heating, cooling and lighting.

O2. Ensure that adequate cross ventilation and sunlight access is achieved in residential apartments within the high density centre.

O3. Provide for viable and functional commercial spaces.

O4. Consider the amenity of future residents and workers through building design.

O5. Provide sunlight access and streetscape amenity to the public domain.

Development Controls

C1. There is no maximum building depth requirement for floors used as commercial premises.

C2. The maximum permissible building plan depth for residential accommodation is 18m.

C3. The maximum permissible building envelope depth for residential accommodation is 22m.

C4. Residential apartments on the 2nd and 3rd storey levels are limited in depth to 8m from the glassline and 11m from the outer edge of the building envelope.

C5. Where office premises are proposed, all points on an office floor should be no more than 15m from a source of daylight.

C6. The maximum horizontal length of any building above the podium shall not exceed 50m.

C7. All residential and mixed use developments shall be, or substantially contain, dual aspect apartments.

Note:

- Bui.lding depth controls for Neil Street Precinct are location in Section 5 of this part.
- Development applications shall provide detailed supporting documentation demonstrating how the building depth, bulk, scale, length and the achievement of adequate natural ventilation and sunlight is respondent to site conditions.

4.5. Setbacks and Separation

Building setbacks and separation is significant in establishing and maintaining residential and pedestrian amenity within and outside of the centre. Sunlight access, privacy and airflow to both buildings and public spaces can only be achieved through the adequate separation of buildings.

Sufficient building separation can reduce the appearance of building bulk and allows for the definition of public space, including laneways, open space and landscaping. Providing spaces between buildings also contributes in creating legibility within the centre.

Setbacks and separation proposed for Merrylands responds to the future role of the centre, in order to provide a balance between the future density of the centre and the amenity for residents and pedestrians.

Objectives

O1. Ensure residents within buildings and adjoining buildings have adequate access to sunlight, airflow and visual and acoustic privacy.

O2. Provide visual legibility and a pleasant public domain through breaks in the built form.

O3. Mitigate the impacts of wind within the centre.

O4. Create a consistent streetscape character.

Development Controls

C1. Where the street setback is 0m, a continuous built edge shall be provided up to the 3rd storey, regardless of use.

C2. Where a laneway or accessway is required the minimum rear setback shall be 8m, unless shown otherwise.

C3. Setbacks to secondary streets (above podium) to the property line shall be provided as below:

Storeys	Setback (m)
4-8	3m
9-20	6m

C4. 0m side setback to Terminal place and or Milne Lane will be accepted for properties 266 Pitt Street and 135-137 Merrylands Road.

C5. Minimum setbacks to side boundaries shall be provided in accordance with the table below:

Building uses	Storeys	Side setbacks
Non habitable rooms and commercial with no windows	1-3 storeys	0 metres
	4-8 storeys	3 metres
	9-20 storeys	6 metres
Habitable rooms/balconies	4 storeys	6 metres
	5-8 storeys	9 metres
	9-20 storeys	12 metres

Habitable rooms/balconies and non habitable rooms	4 storeys	4.5 metres
	5-8 storeys	6.5 metres
	9-20 storeys	9 metres

C6. Minimum rear setbacks to buildings with a common boundary to a business zone.

Building use	Storeys	Rear Setback
Ground floor	0-3 storeys	0 metres
Non habitable rooms (including commercial)	4-8 storeys	3 metres
	9-20 storeys	6 metres
Habitable rooms/balconies	4 storeys	6 metres
	5-8 storeys	9 metres
	9-20 storeys	12 metres
Habitable rooms/balconies and non habitable rooms	4 storeys	4.5 metres
	5-8 storeys	6.5 metres
	9-20 storeys	9 metres
Where rear laneway or accessway is required		8 metres

C7. Minimum rear setbacks to a common boundary with a residential zone.

Building use	Storeys	Rear Setback
Non habitable rooms (including commercial)	0-8 storeys	6 metres
	9-12	9 metres
	13-20 storeys	12 metres
Habitable rooms/balconies	4 storeys	6 metres
	5-8 storeys	9 metres
	9-20 storeys	12 metres
Habitable rooms/balconies and non habitable rooms	Up to 4 storeys	4.5 metres
	5-8 storeys	6.5 metres
	9-20 storeys	9 metres
Where a rear laneway or accessway is required		8 metres

C8. Minimum separation between upper levels (above podium) on one site.

Building uses	Storeys	Side Separation
Non habitable rooms (including commercial)	4-8 storeys	6 metres
	9-20 storeys	12 metres
Habitable rooms/balconies	4 storeys	12 metres
	5-8 storeys	18 metres
	9-20 storeys	24 metres
Habitable rooms/balconies and non habitable rooms	4 storeys	9 metres
	5-8 storeys	12 metres
	9-20 storeys	18 metres

4.6. Active frontages, Street Address and Building Use

Building frontages that contribute positively to the public domain through activity and design not only encourage pedestrian activity, which can bring vitality and vibrancy to a centre, but also provides pedestrians with amenity and a safer environment.

Entrances to buildings define the private and public domain and need to be legible and free of barriers. Frontages should also enable accessibility for the entire community.

Objectives

O1. Provide for a vibrant, pedestrian focused centre through the orientation and design of ground floor entries and shop fronts.

O2. Require activation of the street through the reinforcement of activities along the main streets and some laneways.

O3. Maintain the established character of fine grain frontages at ground level.

O4. Provide well designed building facades and entrances.

O5. Contribute to a safe environment for pedestrians and residents through both passive and active surveillance.

O6. Ensure the accessibility of the centre for the entire community.

Development Controls

Active Frontages

C1. Provide Active frontages at street level, orientating onto streets,laneways and public places, as identified on Figure 9.

C2. Active frontages consist of the following:

- i) Shopfront
- ii) Food and Drink premises such as Restaurant or Café
- iii) Entrance to public buildings or commercial building foyers
- iv) Customer service areas and receptions (where visible from the street)

C3. At least 70% of street level frontages shall be transparent glazing. Blank or solid walls and the use of dark or obscured glass on active frontages are prohibited.

C4. Restaurants, cafes and the like are to consider providing openable shop fronts.

C5. Active frontages located on Merrylands Road (to Addlestone Street) and McFarlane Street should aim to provide at least 10-14 separate tenancy entries per 100m.

C6. Large developments shall provide multiple entrances.

C7. Solid roller shutters or the like that obscure windows and entrances are not permitted. Security grilles which are fixed internally to the shop front, fully retractable and are at least 50% transparent when closed, are acceptable.

C8. The ground floor level of active frontages shall be at the same level as the footpath, unless otherwise required by this plan.

C9. The location of fire escapes, service doors, plant equipment and the like are to be minimised on active streets.

Street Address

C10. Street address in the form of entries, lobbies and/or habitable rooms with clear glazing are required at ground level, in accordance with Figure 9.

C11. Direct pedestrian access off the primary street front shall be provided.

C12. Direct 'front door' access to residential units is encouraged.

C13. Open space should be oriented to overlook pedestrian access points.

C14. Blank walls or dark or obscured glass is not permitted.

Building Use

C15. Retail and commercial uses are to be located on at the ground floor level for all development within the B4 zone.

C16. Residential development is not permitted to be located at the ground floor level of any development within the B4 zone.

C17. Commercial office space or other suitable non residential uses must be provided at the first floor level of development for the entire premises street frontage.

Note: Block by block controls in Section 5 indicate required building uses within the Neil Street precinct.

Merrylands Centre

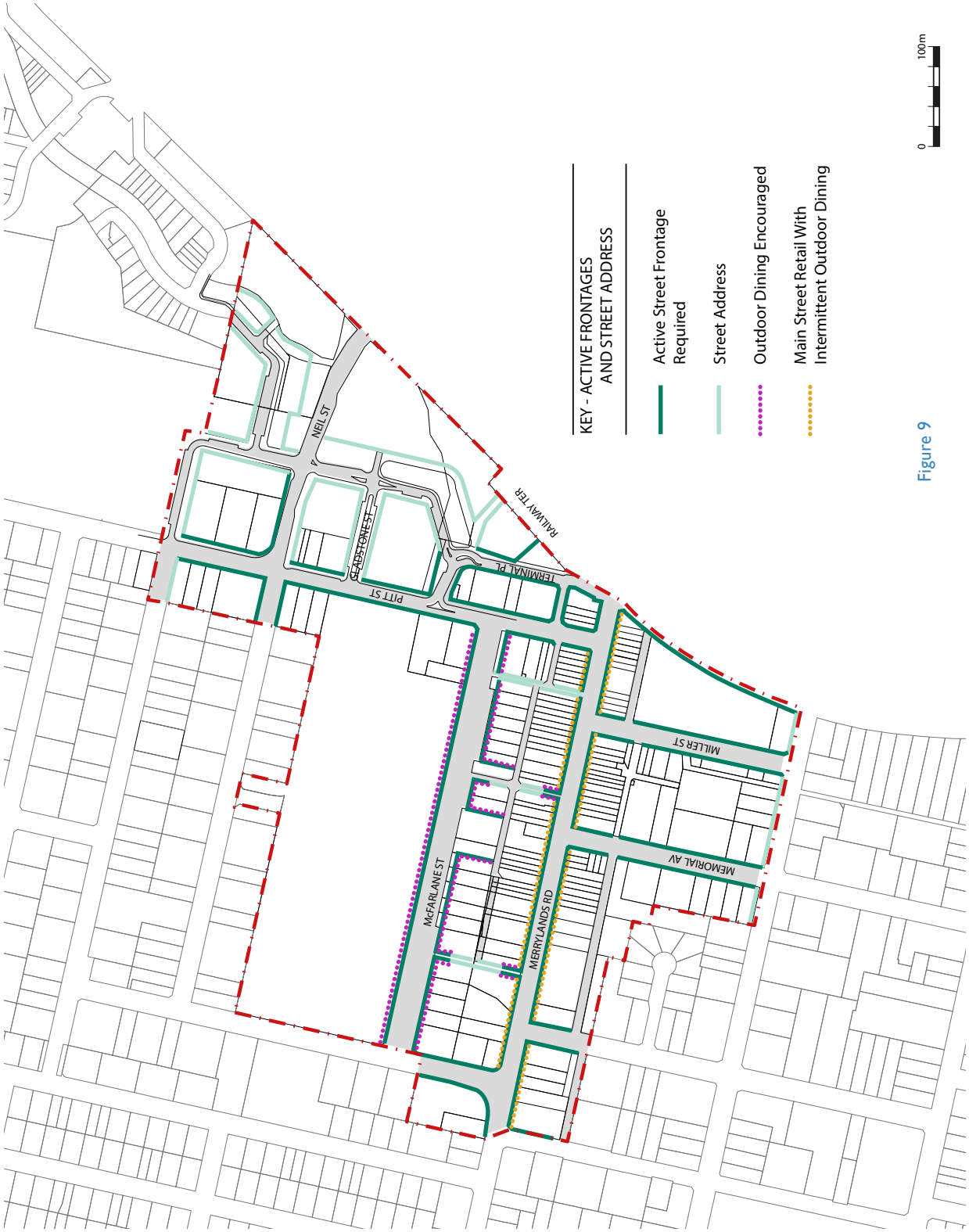


Figure 9

4.7. Landscaping and Open Space

Landscaping should build on a site's existing natural and cultural features to contribute to a developments positive relationship to its context and site. Landscape design should optimize usability, privacy, social opportunity, equitable access and respect for neighbours' amenity. It plays a significant role in improving the amenity of open space and the visual quality for residents and visitors to the centre.

Together, landscape and buildings operate as an integrated and sustainable system, resulting in greater aesthetic quality and amenity for occupants and the adjoining public domain. As such, it should not be generated by left over spaces resulting from building siting and location.

Objectives

O1. Enhance the amenity and liveability for residents, workers and visitors to the centre through integrated landscape design, improvements to the public domain and the provision of passive and recreational opportunities.

O2. Provide a pleasant and enhanced streetscape character and amenity through the retention and/or planting of trees.

O3. Provide for pleasant and safe public open spaces through designing for accessibility and surveillance.

O4. Assist the management of the water table, stormwater and water quality through maximising site infiltration through deep soil and permeable surfaces.

O5. Require communal open space that is assessable, functional and attractive and provides for passive recreation and landscaping.

O6. Enhance liveability for residents by requiring every dwelling to have access to a private, useable and functional private open space directly adjacent to living areas and providing an extension of the living spaces.

O7. Provide balconies and terraces of sufficient size and proportion, which are functional and allow for outdoor living and planter opportunities.

O8. Require balconies and terraces to be integrated into the overall architectural form of the building and to contribute to the articulation and modulation of the building façade.

O9. Contribute to the safety and liveliness of the street by allowing for casual overlooking and address.

O10. Ensure private and communal open space areas are adequately landscaped and able to accommodate a range of plant species.

O11. Provide appropriate soil conditions, drainage and irrigation measures that encourage plant growth.

Development Controls

Note: For general landscaping and open space development controls, refer to Part C of this DCP.

Public Open Space

C1. Public open spaces for passive recreation and for overland flow paths shall be provide as identified in Figure 4.

Streetscape planting and public domain works

C2. Streetscape planting shall be provided in accordance with Figure 4.

C3. Planting and public domain works shall be in accordance with Council's Landscape Masterplan.

Deep Soil zones

C4. Deep soil zones shall be provided in accordance with Figure 4.

C5. Where there is limited capacity for water infiltration, stormwater treatment measures are to be integrated with the design of the buildings.

5. Block by Block Controls Neil Street Precinct

5.1. Block 1

Block 1 is currently bound by Holroyd Gardens on the north, Neil Street on the south, and Pitt Street on the west. Pitt Street is a significant street in the road hierarchy as an important connector between Parramatta and Merrylands. Block 1 benefits from its close proximity to Holroyd Gardens, which provides recreational opportunities and attractive views into the park. Commercial development within the mixed use precinct is to have active street frontages.

The proposed plan for the block shows the introduction of two new roads. New Road 1 (north) has been introduced on the eastern boundary, and Sheffield Street has been extended on the northern boundary of the block. These two new roads provide access to the block, provide

for the overland flow path, and also create an address to any future development on the block. They also help in increasing the developable area on the site. Sheffield Street extension will provide the park (Holroyd Gardens) with an address, and will thereby increase its useability.

There will be a southern gate to the park off Sheffield Street extension, which will open it up more to the public, and will also make the park feel more a part of the

town centre than it is currently. Street tree planting on New Road 1 (north) helps emphasise the view corridor from the Merrylands transit interchange into the park (Holroyd Gardens). Developments fronting Sheffield Street Extension will promote passive surveillance of the park and will thus aid in improving its security.

A building height of 6 storeys is allowed on the block. A building height of 7 storeys is allowed on the corner of Neil and Pitt Streets. This has been allowed in order to emphasise this important Junction, as well as to reflect this important entry point into the Merrylands town centre from the north. The top two floors of buildings along Pitt Street (except for buildings on the corner of Pitt and Neil Streets) have been set back, in order to maintain a four-storey streetwall height. The buildings along Pitt Street have been set back 3m from the street, in keeping with the 'green' nature of Holroyd Gardens. This setback area will be landscaped, and will have tree planting. This also helps to give a distinction in the character of Pitt Street as one moves from the Neil Street Precinct, towards the heart of the town centre (ie Merrylands Road).

The building adjacent to Pitt Street should enable an active street frontage through the provision of ground floor commercial use. A maximum building depth of 25m is allowed for retail/commercial floors (max 23m glassline

to glassline. Residential building depths are maximum 18m (15m glassline to glassline) and 22m (18m glassline to glassline). See section drawings and written controls for details.

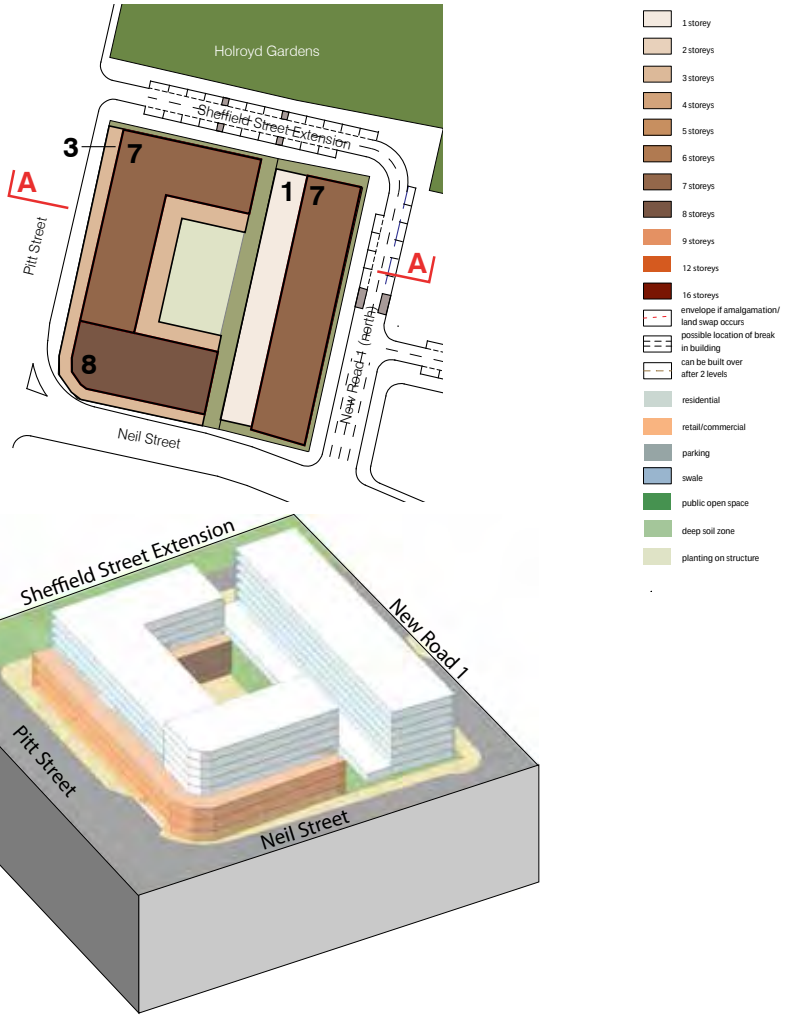
On-street parking has been provided on both sides of Sheffield Street Extension, which is an added attraction for people to use the park. On-street parking has also been provided on New Road 1 (north) . On-site parking for future development is envisaged to be provided in basement/sub-basement floors, and/or at ground level (screened from the street by a skin of either residential or commercial/retail uses on the street frontage). This is explained in the section drawing provided.

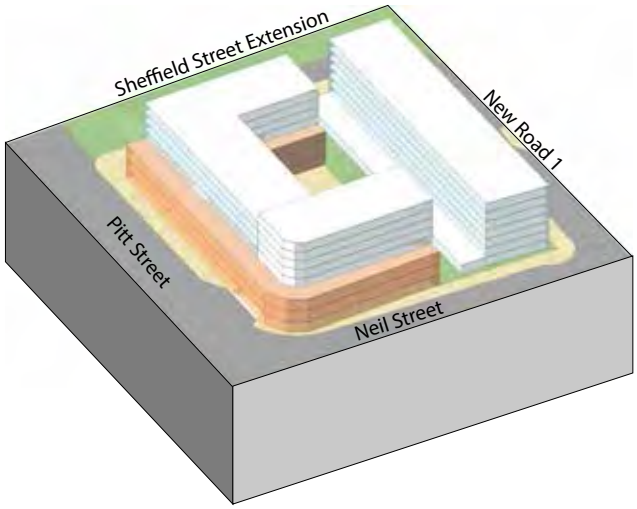
Landscaping is to be provided on top of basement car parks. These will act as communal open spaces for the developments. Deep soil zones are to be provided, as indicated in the building envelope plan. Car parking areas must not extend into deep soil zones.

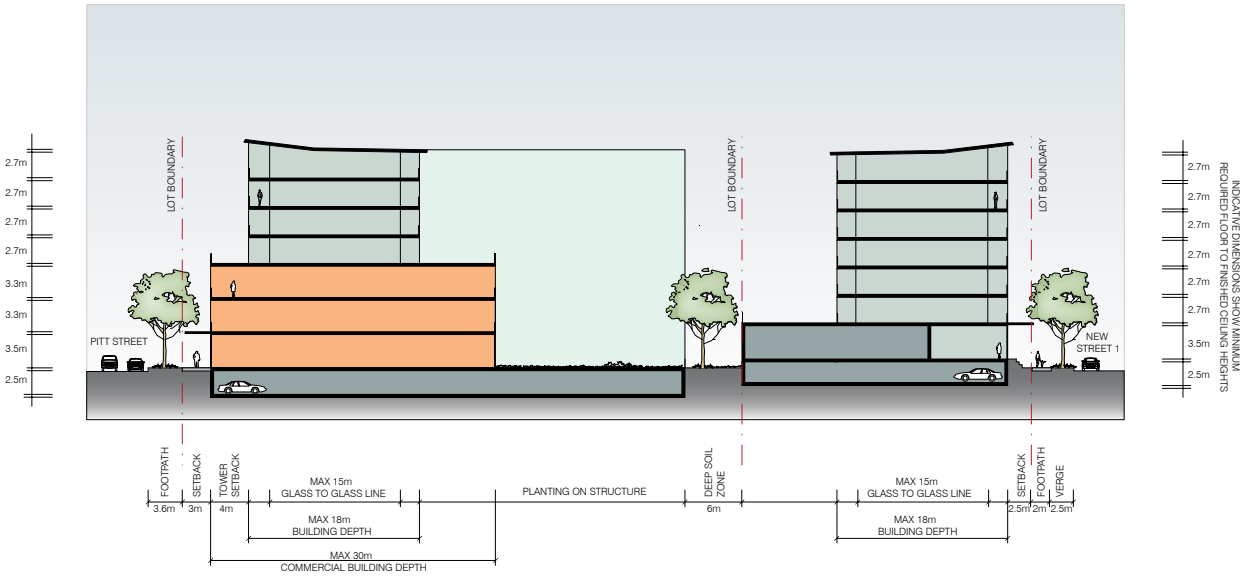
Merrylands Centre

Building Height	
In general	• Max 7 storeys
On the corner of Pitt and Neil Streets	• max 8 storeys to a maximum extent of 18 metres from the corner in each direction
Building Use:	
B4 zone	Ground and first floor • commercial / retail Second floor and above • commercial/ retail or residential
R4 zone	All floors residential
Building Depth:	
Commercial / retail on ground and first floors	• max 25m (max 23m glass line to glass line)
Commercial / retail on second floor and above	• max 18m (max 15m glass line to glass line)
Residential on second floor and above	• max 28m (max 15m glass line to glass line)
Setback:	
Street setback	Pitt Street • min 3m
	Neil Street and New Road 1 (north) • min 2.5m
Rear setback	For lots fronting Pitt Street • min 6m
	For lots fronting New Road 1 (North) • 0m
Deep Soil Zone + Open Space	• Development is to comply with all open spaces, deep soil zones and planting on structures indicated in the building envelope plan and the section • Development is to comply with all open spaces, deep soil zones and planting on structures indicated in the building envelope plan and the section

Merrylands Centre







5.2. Block 2

Block 2 is currently bound by Neil Street on the north, Gladstone Street on the south, and Pitt Street on the west. Pitt Street is an important connector road between Parramatta and Merrylands, and hence, is high on the hierarchy of roads. The proximity of Block 2 to the town centre and the transit interchange provides it with high a high level of amenity. Commercial development within the mixed use precinct is to have active street frontages.

The proposed plan for the block shows the introduction of a new road, New Road 1 (south), on the eastern boundary of the block, with a public park adjacent to the road. This new road and park area:

- provides access to the block
- provides an address to any future development on the block
- helps in increasing the developable area on the site
- helps to emphasise the view corridor from the Merrylands transit interchange into the park (Holroyd Gardens)
- contributes to flood management within the precinct
- provides a public park which improves the amenity of the area.

A building height of 6 storeys is allowed on the block. A building height of 7 storeys is allowed on the corner of Neil and Pitt Streets. This has been allowed in order to emphasise this important Junction, as well as to reflect this important entry point into the Merrylands town centre from the north. The top two floors of buildings along Pitt Street (except for buildings on the corner of Pitt and Neil Streets) have been set back, in order to maintain a four-storey streetwall height. The buildings along Pitt Street have been set back 3m from the street, in keeping with the green nature of Holroyd Gardens.

This setback area will be landscaped, and will have tree planting. This also helps to give a distinction in character of Pitt Street as one moves from the Neil Street Precinct towards the heart of the town centre (ie Merrylands Road).

A maximum building depth of 25m is allowed for retail/commercial floors (max 23m glassline to glassline. Residential building depths are maximum 22m (18m glassline to glassline). See section drawings and written controls for details.

On-street parking has been provided on both sides of Gladstone Street. On-site parking for future development is envisaged to be provided in basement/sub-basement floors, and/or at ground level (screened from the street by a skin of either residential or commercial/retail uses on the street frontage). This is better explained in the accompanying section.

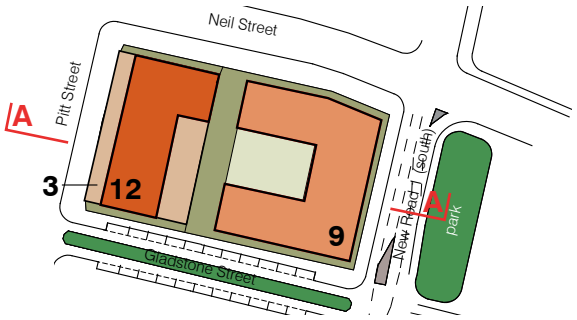
A contamination pit may affect part of this block. Investigation is needed to determine the exact extent of the building envelopes.

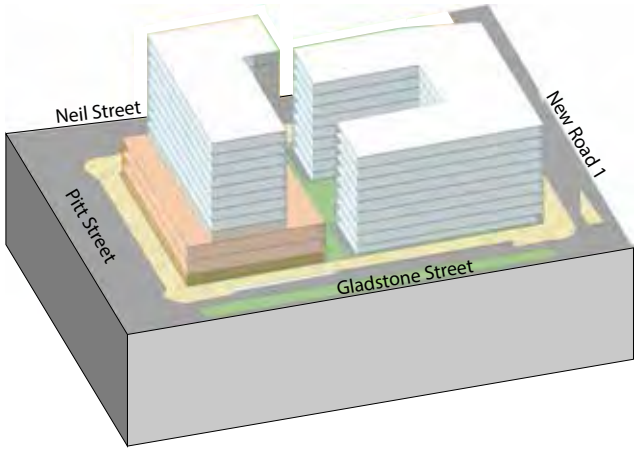
Landscaping is to be provided on top of basement car parks. These will act as communal open spaces for the developments. Deep soil zones are to be provided, as indicated in the building envelope plan. Car parking areas must not extend into deep soil zones.

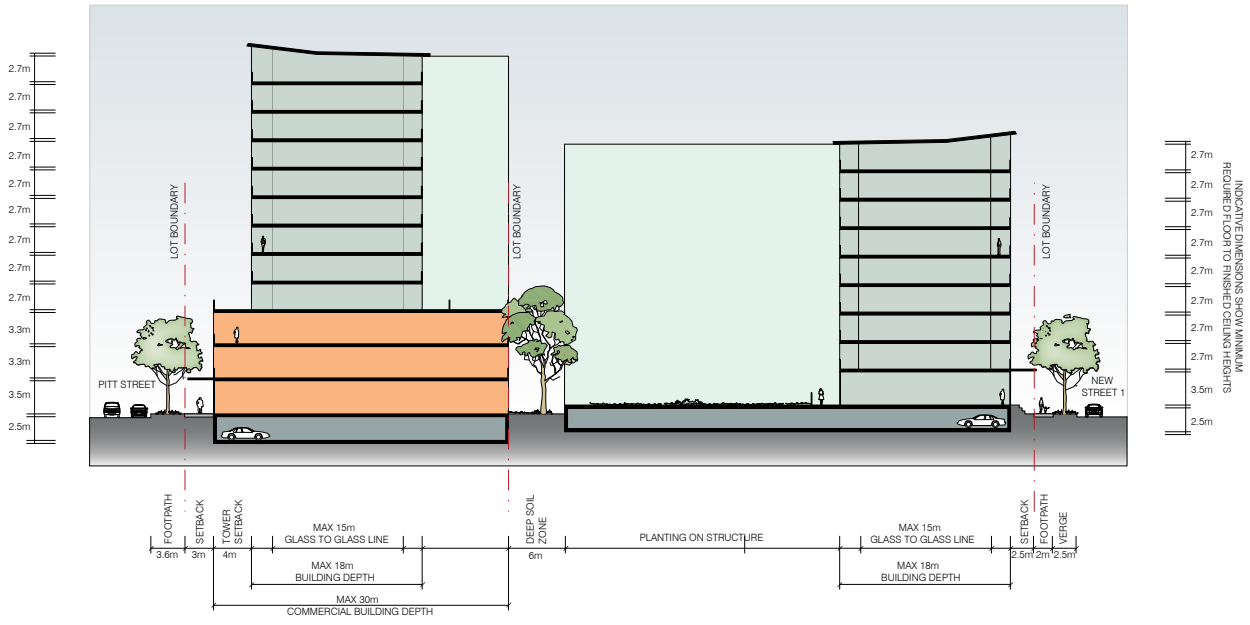
Merrylands Centre

Building Height	
In general	• max 9 storeys
On the corner of Pitt and Neil Streets	• max 12 storeys
Building Use	
B4 Zone	Ground and first floor • commercial/retail Second floor and above • commercial/retail or residential
Along Neil Street, New Road 1 (south) and Gladstone Street	All floors residential
Building Depth	
Commercial/retail on ground and first floors	• max 25m (max 23m glass line to glass line)
Commercial/retail on second floor and above	• Max 22m (max 18m glass line to glass line)
Residential on second floor and above	• Max 22 (max 18m glass line to glass line)
Road Widening	
208-212 Pitt Street	7m x 7m splay corner
	2.94m road widening to Pitt Street
	2.44m road widening to Neil Street
214-220 Pitt Street	• 0.9m road widening to Pitt Street • splay corner at intersection of Pitt/Gladstone Street shall be adjusted to incorporate road widening.
Setback	
Street setback	Pitt Street • min 3m
	Neil Street, New Road 1 (South) and Gladstone Street • min 2.5m
Neil Street, New Road 1 (south) and Gladstone Street	Min 2.5m
Rear setback	For lots fronting Pitt Street • 0m For lots fronting New Road 1 (South) • min 6m
Landscaping	
Deep Soil Zone + Open Space	• Development is to comply with all open spaces, deep soil zones and planting on structures indicated in the building envelope plan and the sections.

Merrylands Centre







5.3. Block 3

Block 3 is currently bound by Gladstone Street on the north, Terminal Place on the south, and Pitt Street on the west. Pitt Street is an important connector road between Parramatta and Merrylands. Block 3 is well located close to both the town centre and the transit interchange. The part of this block within the mixed use precinct is required to provide ground floor commercial uses with active frontages.

The proposed plan for the block shows the introduction of a new road, New Road 1 (south), on the eastern boundary of the block. This new road:

- provides access to the block.
- provides an address to any future development on the block.
- helps in increasing the developable area on the site.
- helps to emphasise the view corridor from the Merrylands transit interchange into the park (Holroyd Gardens)
- contributes to flood management within the precinct.

A maximum building height of 6 stories is allowed on the block. The top two floors of buildings along Pitt Street have been set back, in order to maintain a four-storey streetwall height. The buildings along Pitt Street have been set back 3m from the street, in keeping with the 'green' nature of Holroyd Gardens. This setback area will be landscaped, and will have tree planting in it. This also helps to give a distinction in the character of Pitt Street as one moves from the Neil Street Precinct towards the heart of the town centre (ie Merrylands Road).

On Pitt Street, a maximum building depth of 25m (23m glassline to glassline) is allowed for retail/commercial floors (ground and first floor), 22m (18m glassline to glassline) for residential floors and for the commercial / mixed use second floor. (See section drawings and written controls for details of allowable building depths).

Building depths on Gladstone Street and the northern portion of New Road South are constrained by the shallowness of the block and the need for adequate building separation for sun access, privacy and open space for building users. These building depths are limited to 18 metres (max 15m glassline to glassline).

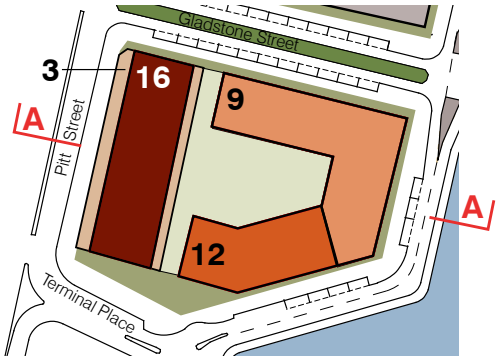
On-street parking has been provided on both sides of Gladstone Street, and on the western side of New Road 1 (south). On-site parking for future development is envisaged to be provided in basement/sub-basement floors, and/or at ground level (screened from the street by a skin of either residential or commercial/retail uses on the street frontage). This is better explained in the cross sections provided.

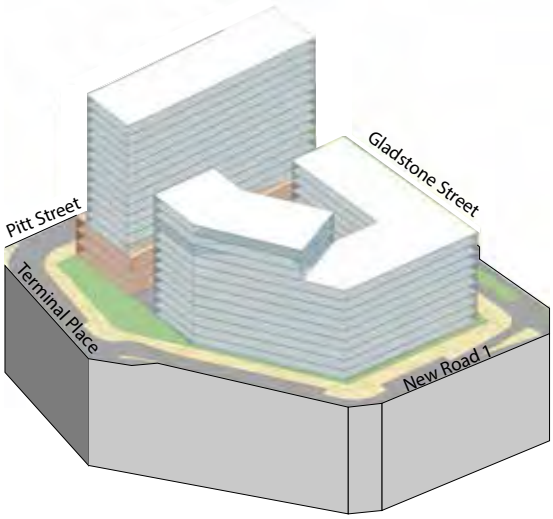
Landscaping is to be provided on top of basement/sub-basement car parks. These will act as communal open spaces for the developments. Deep soil zones are to be provided, as indicated in the building envelope plan.

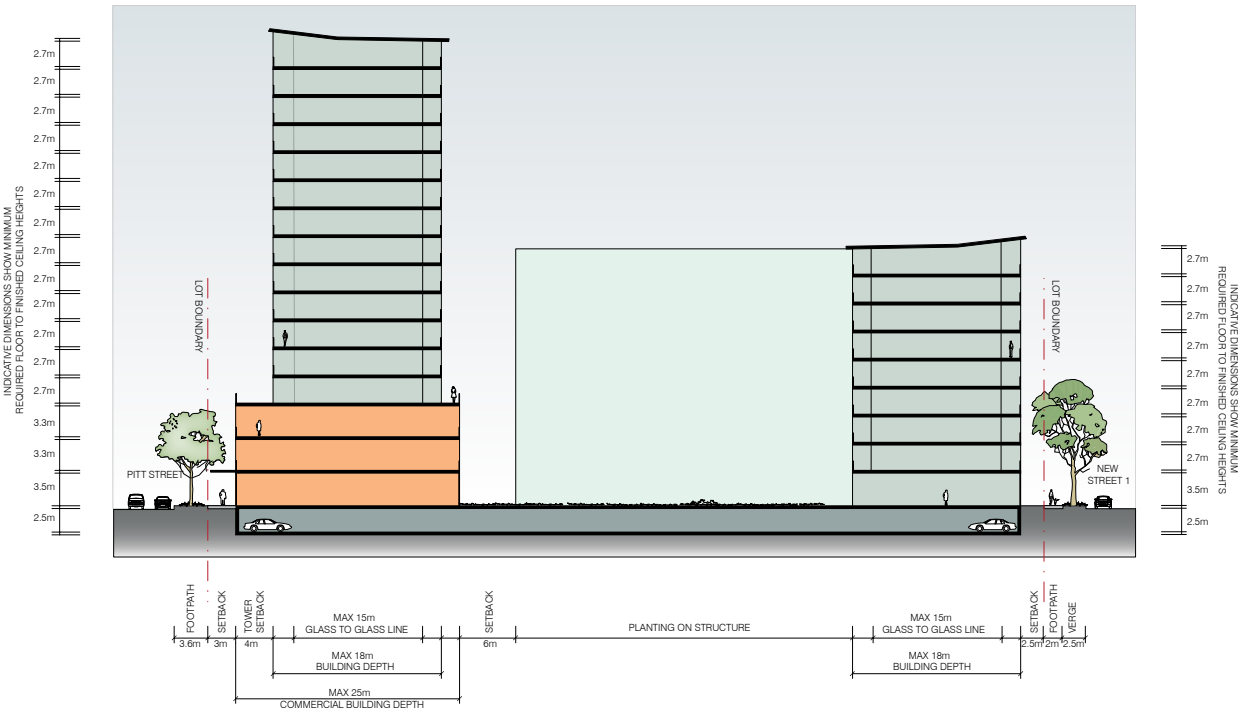
Merrylands Centre

Building Height	
Along Pitt Street	• max 16 storeys
Gladstone Street/Terminal Place	• max 9-12 storeys
Building Use	
Along Pitt Street	Ground and first floor • commercial/retail/residential Second floor and above • commercial/retail or residential
Along New Road 1 (south) and Gladstone Street	Ground and first floor • commerical/retail/residential All floors above first floor • residential
Building Depth	
Commercial/retail on ground and first floors	• max 25m (max 23m glass line to glass line) • Consideration may be given to a larger ground floor plate, where compliance with flood controls can be demonstrated.
Commercial/retail and residential on all floors above first floor	• max 22m (max 18m glass line to glass line)
Setback	
Street setback	Pitt Street • min 3m Terminal Place, New Road 1 (south) and Gladstone Street • min 2.5m
Rear setback	Comply with Separation controls.
Landscaping	
Deep Soil Zone + Open Space	Development is to comply with all open spaces, deep soil zones and planting on structures indicated in the building envelope plan and the sections
Other Controls	
	• Any building along New Road 1(south) is to follow the bend of the road (as shown in the building envelope plan) in order to reinforce the spatial quality of the road and also in order to directionally orient pedestrians and vehicles • Any building along New Road 1(south) is to follow the bend of the road (as shown in the building envelope plan) in order to reinforce the spatial quality of the road and also in order to directionally orient pedestrians and vehicles

Merrylands Centre







5.4. Block 4

Block 4 is currently bound by Neil Street on the north, Merrylands bus transit interchange on the south, and the railway on the east. The proximity of block 4 to the town centre and the transit interchange provides it with a high level of amenity.

The proposed plan for the block shows the introduction of a new road, New Road 1 (south), on the western boundary of the block, with a public park adjacent to the road. This new road and park area:

- provides access to the block
- provides an address to any future development on the block
- helps increase the developable area on the site
- helps to emphasise a view corridor from the Merrylands transit interchange into Holroyd Gardens
- contributes to flood management within the precinct
- provides a public park which improves the amenity of the area.

A building height of 6 storeys is allowed on the block. Higher built form is allowed along the railway (9 storeys), based on the following factors:

- the precinct is a high hazard flood zone due to which a 40m floodway is required through the middle of the site, which in turn results in a large loss of developable land from the site
- the existence of a 5.5m deep pit on the site means that pile foundation is required on part of the site, which in turn means higher development costs
- the location of the site parallel to the railway, and parallel to a road, means that there is minimal overshadowing of other developable sites

A maximum building depth of 18m (15m glassline to glassline) is allowed for residential floors (See sections and written controls for details on allowable building depths). Development applications for buildings next to the railway line will be required to demonstrate how noise and vibration impacts will be managed.

On-street parking may be provided on internal/private roads within the site. These have not been indicated on the building envelope plan. On-site parking for future development is envisaged to be provided in basement/ sub-basement floors, and/or at ground level (screened from the street by a skin of residential uses on the street frontage). This is better explained in the cross sections provided.

An underground culvert runs through the site. This constrains the location and design of basement and sub-basement car parking. Detailed investigation of the position and depth of the culvert is required before building envelopes may be finalised.

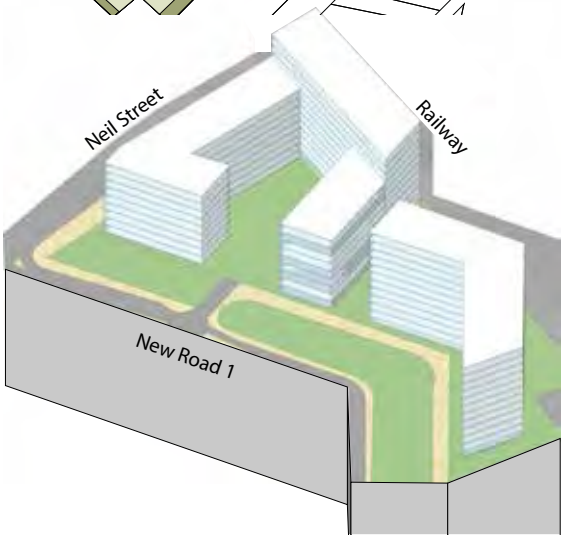
Landscaping is to be provided on top of basement/sub-basement car parks. These will act as communal open spaces for the developments. Deep soil zones are to be provided, as indicated in the building envelope plan.

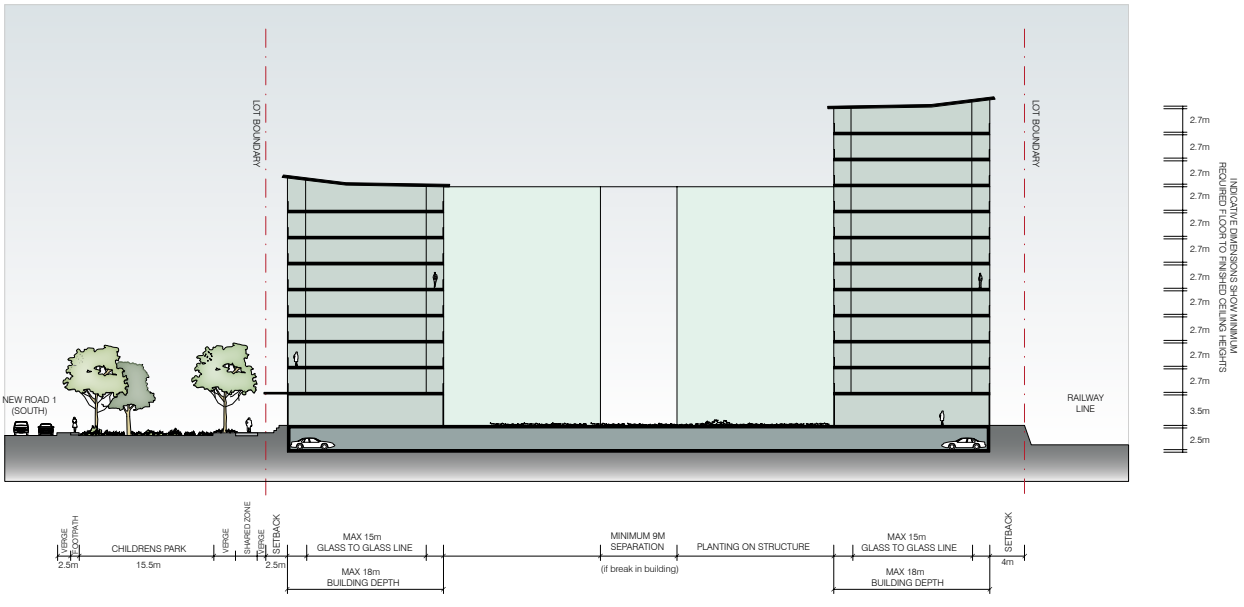
Access to the southernmost portion of Block 4 may be achieved directly off New Road 1 (south), subject to the detailed design of the swale.

Merrylands Centre

Building Height	
Parts of buildings along railway	• max 12 storeys
Other buildings	• max 9 storeys
Building Use	
Ground and first floor	• commercial/retail/residential
All floors above first floor	• residential
Building Depth	
All buildings	• max 18m (max 15m glassline to glassline)
Setback	
Street setback	Shared zone east of New Road 1 (South) • min 2.5m
Side setback	From Merrylands Transit Interchange • min 3m All other lots • Comply with masterplan
Rear setback	From the railway • min 6m For all other lots • Comply with minimum separation controls
Landscaping	
Deep Soil Zone + Open Space	Development is to comply with all open spaces, deep soil zones and planting on structures indicated in the building envelope plan and the sections
Other Controls	
	Any building along New Road 1(south) is to follow the bend of the road (as shown in the building envelope plan) in order to reinforce the spatial quality of the road and also in order to directionally orient pedestrians and vehicles

Merrylands Centre





5.5. Block 5

Block 5 is currently bound by the old brickworks site on the north, Neil St on the south, and the railway on the east. No.1 Neil Street (Millmaster site) is listed as a site of potential archaeological significance. On this site are located mill buildings and silos which are the only remnants of the industrial past of Merrylands. The proximity of Block 5 to the town centre, transport, and the park (Holroyd Gardens), provides it with a high level of amenity.

The proposed plan for the block shows the introduction of two new roads, New Road 1 (north), on the western boundary of the block, with a public park adjacent to the road, and New Road 2, on the northern boundary of the site. These new roads and park area:

- provide access to the block
- provide an address to any future development on the block
- help in increasing the developable area on the site
- Increases connectivity between the Merrylands transit interchange and the park (Holroyd Gardens)
- provides a public park which improves the amenity of the area.

A building height of 6-8 storeys is allowed on the block. 8 storeys is allowed along the railway line due to the following factors:

- the precinct is a high hazard flood zone due to which a 40m floodway is required through the middle of the site, which in turn results in a large loss of developable land from the site which has to be compensated to some extent by a slightly higher built form
- the location of the site parallel/adjacent to the railway means that there is minimal overshadowing of other neighbouring developable sites

A maximum building depth of 18m (15m glassline to glassline) is allowed for residential floors (See section drawings and written controls for details on allowable building depths).

Development applications for buildings next to the railway line will be required to demonstrate how noise and vibration impacts will be managed. Buildings in this block adjacent to the railway line are required to be oriented perpendicular to, not parallel with, the railway line to minimise the area of building, and hence the number of apartments, impacted by railway noise and vibration.

On-street parking has been provided on New Road 2 and New Road 1 (north). On street parking may also be provided on internal/private streets. These have not been indicated on the building envelope plan. On-site parking for future development is envisaged to be provided in basement/sub-basement floors, and/or at ground level (screened from the street by a skin of residential uses on the street frontage). This is better explained in the cross sections provided.

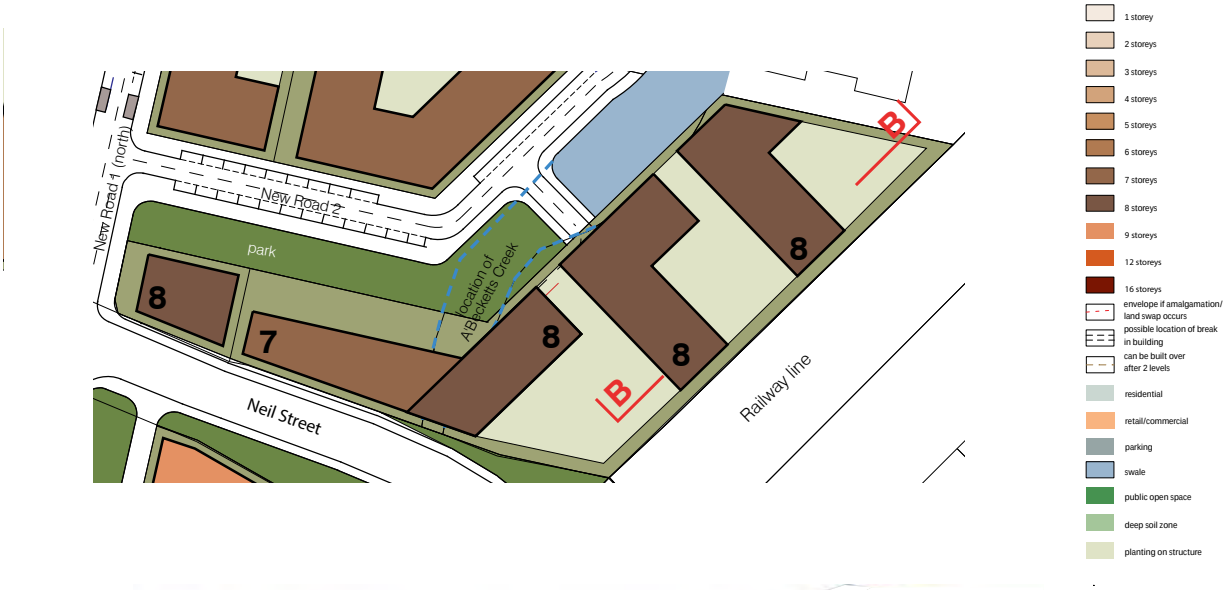
Landscaping is to be provided on top of basement/sub-basement car parks. These will act as communal open spaces for the developments. Deep soil zones are to be provided, as indicated in the building envelope plan. Future development on this block is to take maximum advantage of its view and close proximity to the park (Holroyd Gardens).

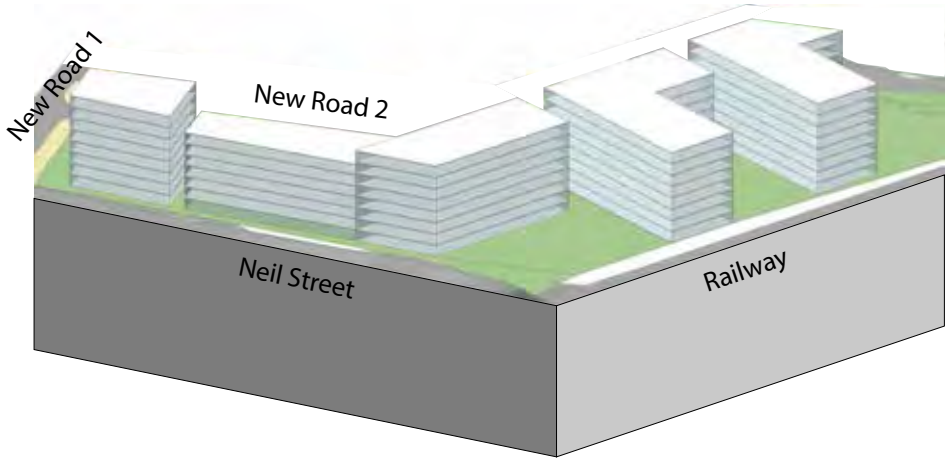
Building envelopes will be required to accommodate a 19m wide riparian corridor to ensure the retention of A'Becketts Creek. A portion of the creek is shown within the swale / park area and the location of the Creek is indicated on the plan diagram.

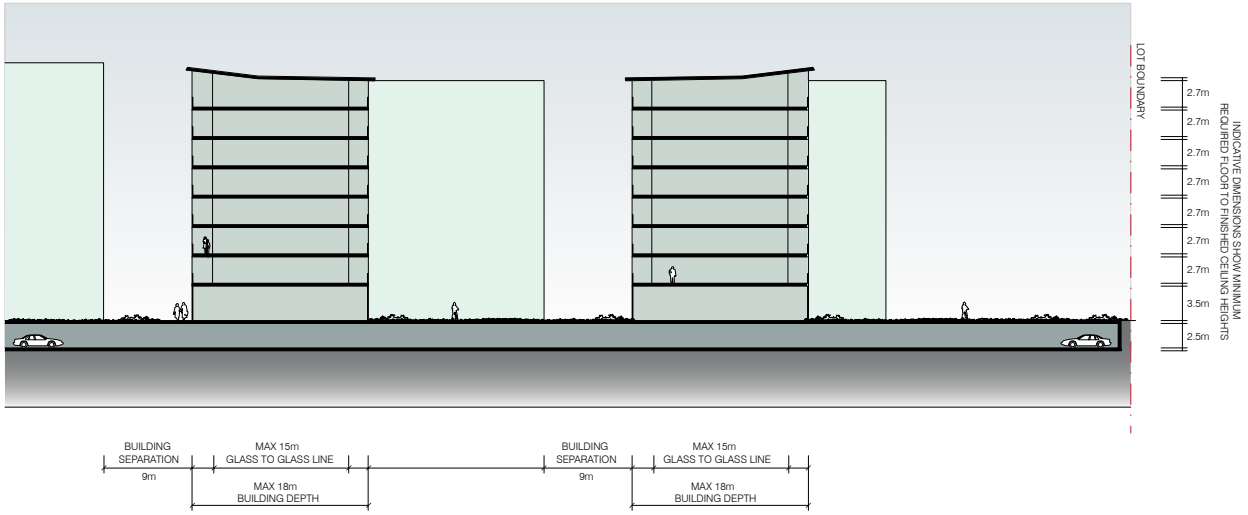
Merrylands Centre

Building Height	
Along Railway Line and corner of Pitt and Neil	• max 8 storeys
Other (along Neil Street)	• max 7 storeys
Building Use	
Ground and first floor	• commercial/retail/residential
All floors above first floor	• Residential
Building Depth	
All buildings	• max 18m (max 15m glass line to glass line)
Setback	
Street setback	From New Road 1 (north) • 7.5m (required to allow for 30m floodway) From eastern and southern boundary of park / swale • min 2.5m
Side setback	On lots running parallel to the railway line • comply with minimum separation controls From Holroyd Gardens on the north • min 3m On all other lots • comply with minimum separation controls
Rear setback	On lots running parallel to the railway line • min 6m On other lots • comply with minimum separation controls
Landscaping	
Deep Soil Zone + Open Space	Development is to comply with all open spaces, deep soil zones and planting on structures indicated in the building envelope plan and the sections
Other Controls	
	A Heritage Impact Statement is to be submitted to Council prior to the approval of any Development Application on this block (see HLEP 2013)
	Any building along New Road 2 is to follow the bend of the road (as shown in the building envelope plan) in order to reinforce the spatial quality of the road and also in order to directionally orient pedestrians and vehicles

Merrylands Centre







5.6. Block 6

Block 6 is currently bound by the old brickworks site and Holroyd Gardens on the north, and Neil Street on the south. The proximity of block 6 to the town centre, transport, and the park (Holroyd Gardens), provides it with a high level of amenity.

The proposed plan for the block shows the introduction of two new roads, New Road 1 (north), on the eastern boundary of the block, and New Road 2, on the southern boundary of the site. These new roads:

- provide access to the block
- provide an address to any future development on the block
- help in increasing the developable area on the site
- increases connectivity between the Merrylands transit interchange/Merrylands town centre and the park (Holroyd Gardens).

A maximum building height of 6 storeys is allowed on the block. A maximum building depth of 18m (15m glassline to glassline) is allowed for residential floors (See section drawings and written controls for details on allowable building depths).

On-street parking has been provided on New Road 2 and New Road 1 (north). On-site parking for future development is envisaged to be provided in basement/sub-basement floors, and/or at ground level (screened from the street by a skin of residential uses on the street frontage).

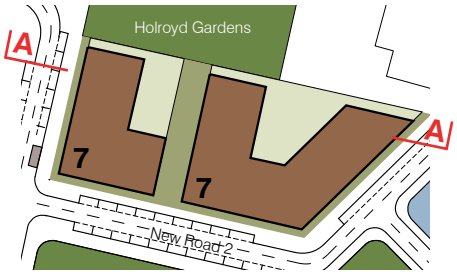
Landscaping is to be provided on top of basement/sub-basement car parks. These will act as communal open spaces for the developments. Deep soil zones are to be provided, as indicated in the building envelope plan. Future development on this block is to take advantage of its view and close proximity to the park (Holroyd Gardens).

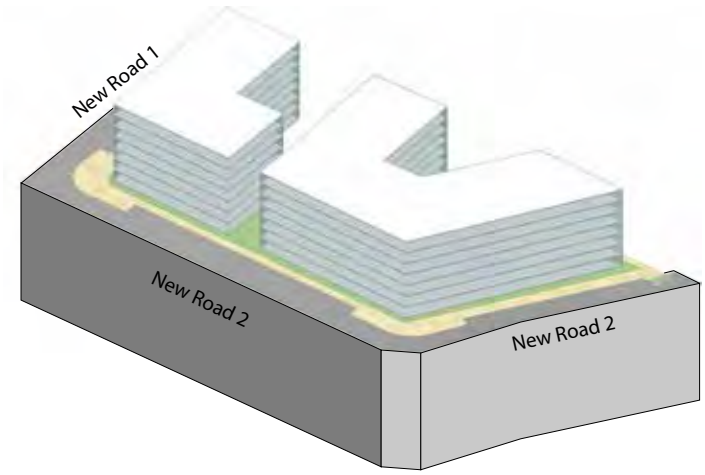
A contamination pit may affect part of this block. Investigation is needed to determine the exact extent of the building envelopes and car parks. On-grade car parking may be provided where contamination pit has been capped.

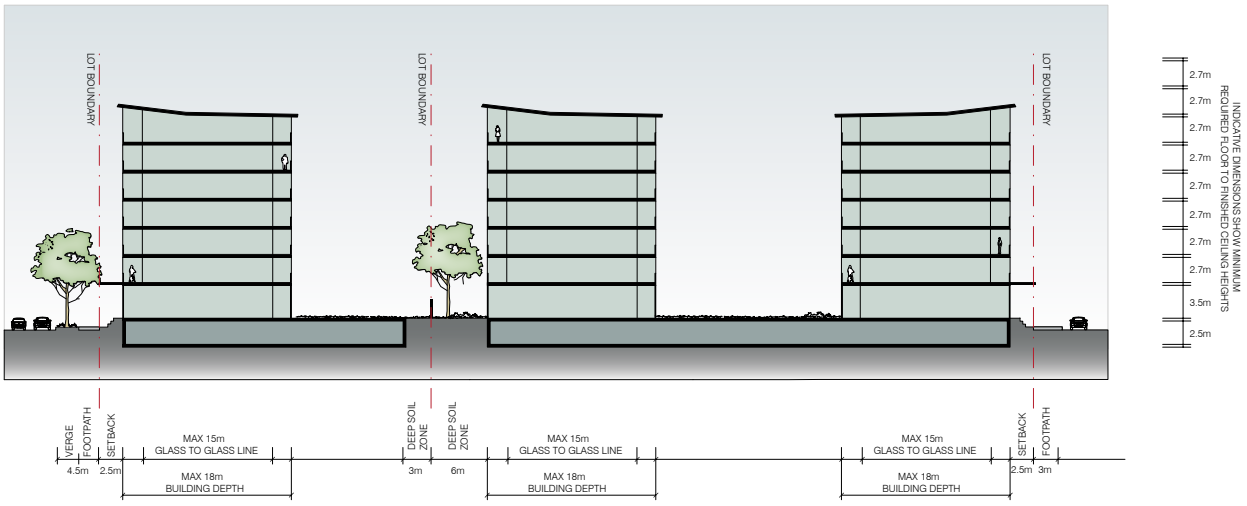
Merrylands Centre

Building Height	
On all lots	• max 7 storeys
Building Use	
Ground and first floor	• commercial/retail/residential
All floors above first floor	• Residential
Building Depth	
All buildings	• max 18m (max 15m glass line to glass line)
Setback	
Street setback	• New Road 1, New Road 2 min 2.5m
Side setback	• comply with minimum separation controls
Rear setback	For lots fronting New Road 2 • min 3m • comply with minimum separation controls
Landscaping	
Deep Soil Zone + Open Space	• Development is to comply with all open spaces, deep soil zones and planting on structures indicated in the building envelope plan and the sections
Other Controls	
	• Any building along New Road 2 is to follow the bend of the road (as shown in the building envelope plan) in order to reinforce the spatial quality of the road and also in order to directionally orient pedestrians and vehicles

Merrylands Centre







6. Movement

6.1. Rear laneways and private accessways

Good vehicular circulation in the centre is important for pedestrians and residents. Vehicular crossings over footpaths not only can restrict vehicle and pedestrian movement, it can be dangerous within a town centre environment. Enabling access to developments through a secondary street or accessway will improve movement in the centre whilst making it a safer place.

The addition of laneways can also add to the vibrancy of the centre, providing opportunities for retail uses at grade.

Objectives

O1. Make vehicular access to buildings more compatible with pedestrian movements and the public domain.

O2. Require buildings fronting primary roads to gain vehicular access from the rear of the property.

O3. Enable the maintenance of continuous retail frontages.

Development Controls

Note: For general rear laneway and private accessway development controls, refer to Part C of this DCP.

C1. Rear laneways and private accessways are to be provided in accordance with Figure 2.

C2. Where buildings front Merrylands Road, McFarlane Road or Pitt Street, vehicular access must be provided from the rear via laneways or private accessways, as indicated in Figure 2. No vehicle entrances are permitted from primary roads, as indicated in Figure 2.

C3. Where other buildings have access to existing laneways, vehicular access must be provided from the laneway.

6.2. Pedestrian access

Pedestrian accessibility is critical to establishing a vibrant and safe centre. Designing for pedestrians within the centre focuses on delivering high quality, safe and pleasant walking environments, which is person centred, rather than vehicular centred. Pedestrian access should be equitable, barrier free where all people who live, work and visit can enjoy the public domain and access communal use areas and apartments.

Objectives

O1. Ensure access to workspaces, retail areas, apartments and to the public domain is direct and efficient for the entire community, regardless of age, physical condition or mobility restriction.

O2. Require development to be well connected to the street and contributes to the accessibility of the public domain.

O3. Provide an environment which is permeable for pedestrians.

O4. Create a safe environment for all pedestrians.

Development Controls

Note: For general pedestrian access development controls, refer to Part C of this DCP.

C1. Pedestrian site through links shall be provided in accordance with Figures 2 and 3.

C2. Required pedestrian access identified at 246 Pitt Street, between Terminal Place and Pitt Street, is for an overland flow path and shall be a minimum of 15m wide and 4m high. This may be designed as an arcade.

6.3. Vehicle access

The location, type and design of vehicular access points for a development can have impacts on the streetscape, building design and function of the centre. It is important that vehicular access is located to ensure the maintenance of a safe pedestrian environment, viability and vitality of the centre.

Objectives

O1. Minimise the impact of vehicle access on streetscape amenity, pedestrian safety and circulation within the centre.

O2. Enable active frontages.

O3. Differentiate between primary and secondary roads and their uses.

O4. Integrate vehicular access and service areas into building design and streetscape character.

Development Controls

Note: For general vehicle access development controls, refer to Part C of this DCP.

C1. Driveways shall be provided from laneways (existing or proposed), private accessways and secondary streets (as indicated in Figure 2)

C2. Vehicular access in the Neil Street precinct shall comply with Figure 2.

6.4. Parking

On- site parking includes both underground (basement), surface (on grade) and above ground, and can include parking stations.

It is important that carparking does not visually dominate the streetscape or impact on stormwater management. Carparking that is well designed and located should make efficient use of the site, reduce its visual impact and enables the maintenance of active frontages.

Objectives

O1. Minimise car dependency for commuting and recreational transport use and to promote alternative means of transport such as public transport, bicycling and walking.

O2. Maintain a positive streetscape character by designing and treating carparking to reduce its visual impact.

O3. Ensure parking does not impact on the character and function of active frontages.

Development Controls

Note: For general parking development controls, refer to Part A and Part C of this DCP.

C1. On-site parking is to be accommodated underground wherever possible.

C2. On street parking within Neil Street shall be provided as indicated Section 5.

7. Design and Building Amenity

7.1. Laneway and Arcade Design

Site links in the form of laneways and arcades provide permeability within the centre for pedestrians and vehicular traffic which enhances movement, safety and streetscape vibrancy and functionality. It is important that the design of these links consider the safety and security of pedestrians and how they may contribute to the vibrancy of the centre.

Objectives

O1. Ensure the design of laneways and arcades provides for pedestrian safety and amenity.

O2. Assist in creating a vibrant centre through active frontages.

O3. Promote permeability in the redevelopment of large sites.

Development Controls

Note: For general laneway and arcade design development controls, refer to Part C of this DCP.

Laneway

C1. Laneways identified in Figure 9 shall have active ground floor frontages.

Arcades

C2. Arcades shall be provided in accordance with Figure 3.

7.2. Managing External Noise and Vibration

Buildings in close proximity to the railways need to consider the impact of external noise and vibration on development proposals.

Objectives

O1. Ensure consent is not grant to development on land affected by external noise, if, in the opinion of Council, will be affected by noise and vibration, unless the development will incorporate attenuation measure to the satisfaction of Council.

Development Controls

C1. Development proposals within 60m of the south western railway line and/or adjacent to Neil Street or Pitt Street must provide a report, to be submitted with the development application, demonstrating that the development will comply with the following criteria.

C2. The following Australian Standards are to be complied with:

- **i)** AS 1055-1997 Acoustics - Description and Measurement of Environmental Noise.
- **ii)** AS 1259-1990 Acoustics – Sound Level Meters Part 2 Integrating – Averaging.
- **iii)** AS 1633-1985 Acoustics - Glossary of Terms and Related Symbols.
- **iv)** AS 2107-2000 Acoustics - Recommended Design Sound Levels and Reverberation Times for Building Interiors.

C3. The report shall be prepared by an acoustic consultant having the technical eligibility criteria required for membership of the Association of Australian Acoustical Consultants (AAAC) and/ or grade membership of the Australian Acoustical Society (MAAS).

C4. Prior to the issues of an Occupation Certificate, a noise compliance report shall be submitted to the Principal Certifying Authority (PCA) confirming that the building/s comply with the noise criteria following. The report shall be prepared by an acoustic consultant, other than the consultant responsible for the preliminary/design report, having the technical eligibility criteria required for membership of the Association of Australian Acoustical Consultants (AAAC) and/ or grad membership of the Australian Acoustical Society (MAAS).

C5. Acoustic reports prepared under this Plan must be prepared in accordance with the specified methodology provided in the Appendix.

C6. Floor vibration levels in habitable rooms should comply with the criteria in British Standard BS6472: 1992 Evaluation of Human Exposure to Vibration in Buildings (1 Hz to 80 Hz). This is the vibration standard recommended by the Department of Infrastructure Planning and Natural Resources (DIPNR) and the Department of Environment and Conservation (DEC). It is similar to AS2670.2 – 1990 but includes additional guidance in relation to intermittent vibration such as that emitted by trains.

7.3. Awnings

The provision of awnings within a centre increases the usability of amenity of the footpath, encouraging active environments through greater pedestrian movement and activity. Awnings like building entries, provide a public presence and interface with the public domain contributing to the identity of an environment.

Objectives

O1. Ensure the amenity of pedestrians through weather protection.

O2. Maintain a consistent streetscape and provide visual interest through a continuous awning theme.

O3. Locate awnings to provide for the safety and security of pedestrians.

O4. Enable the provision of street tree planting and furniture location.

Development Controls

C1.

C2. Continuous awnings are required to be provided to all active street frontages (except laneways).

C3. Awnings on Merrylands road shall be 2.5m deep.

C4. Awnings are permitted on laneways where active frontages are required and shall be retractable and only used in hours of operation.

7.4. Adaptable Housing

Objectives

O1. Ensure the design of apartments meet the broadest range of occupants needs possible.

O2. Promote buildings that can accommodate whole or partial changes of use.

O3. Provide a diversity of apartments types, which cater for different household requirements now and in the future.

O4. To maintain equitable access to new housing by cultural and socio-economic groups.

Development Controls

C1. Provide a total of 20% of dwellings as adaptable housing by ensuring that:

i) a minimum of 10% of all apartments within a development comply with AS4299-1995 Adaptable House Class A.

ii) a minimum of 10% of all apartments within a development comply with AS4299-1995 Adaptable House Class C.

7.5. Corner buildings

Corner site buildings play an important role within a town centre in providing legibility, reinforcing the road layout and can assist in creating a visually interesting streetscape.

Objectives

O1. Promote a strong and legible streetscape character by ensuring corner sites are visually significant elements.

O2. Require buildings at visually significant locations are well designed and respond to the different characteristics of the streets the address.

O3. Reinforce and clarify spatial relationships and street hierarchy in the centre and accentuate the topography.

Development Controls

C1. Generally, Corner building shall be designed to:

i) Articulate street corners by massing and building articulation,

ii) to add variety and interest to the street,

iii) Present each frontage of a corner building as a main street frontage,

iv) reflect the architecture, hierarchy and characteristics of the streets they address, and

v) align and reflect the corner conditions.

C2. Corners identified in Figure 6 shall be emphasised through architectural design and materials.

8. Environmental

8.1. Flood and Stormwater Management

Much of the Merrylands centre is affected by the 1 in 100 year flood. The location, requirements and layouts of roads, infrastructure, open space and buildings within the Neil Street Precinct have been specifically designed in response to the site constraints in order to manage the impact of flooding.

Some roads within the centre are the overland flow paths and development along those streets will need to be designed to be flood compatible.

Merrylands centre was built along one of the major watercourses that drains towards A'Beckett Creek and much of the centre is subject to flooding. It is important that the design of development incorporates measures to manage the impact of development to natural waterways

Objectives

O1. Ensure appropriate flood management and protection of overland flow paths.

O2. Require buildings within the flood affected areas are designed to ensure minimal damage in the event of a flood.

O3. Balance the need for active frontages and flood mitigation from flood proofing and design.

O4. Ensure that redevelopment of the site can occur.

O5. Minimise stormwater run off.

O6. Control the quality and quantity of stormwater, and to reduce impacts on adjoining properties.

O7. Minimise the impacts of development and associated infrastructure on the health and amenity of natural waterways.

O8. Preserve existing topographic and natural features, including watercourses, creeks and wetlands.

Development Controls

Note: existing and post development flood contours are shown in Figures 10 and 11.

Commercial and Retail

C1. On street frontages to Merrylands Road, McFarlane Street and Pitt Street where it is not practical or desirable to achieve floor levels 500mm above the 100-year ARI floor levels, alternative flood management measures (such as flood proofing) must be undertaken.

Neil Street Precinct

C2. Management of the redevelopment of the Neil Street Precinct must be undertaken in a whole-of-site approach. Site amalgamation and resubdivision under this DCP is required to manage redirection of the floodway.

C3. Building footprints are to be placed to allow best movement of flood waters (eg. 30m separation between buildings on the southern end of New Road (1) north)

C4. Provide a 40m floodway through Neil Street Precinct, comprising roads, parks, swales and a natural creek system.

Stormwater

C5. The peak/volume impact of stormwater on infrastructure is to be reduced by detaining/ retarding it on site. Design solutions may include:

- **i)** minimising impervious areas by using pervious or open pavement materials
- **ii)** retaining runoff from roofs and balconies in water features as part of landscape design or for reuse or activities such as toilet flushing, car washing and garden watering
- **iii)** landscape design incorporating appropriate vegetation
- **iv)** minimising formal drainage systems (pipes) with vegetated flowpaths (grass swales),
- **v)** infiltration or biofiltration trenches and subsoil collection systems in saline areas
- **vi)** water pollution control ponds or constructed wetlands on larger developments
- **vii)** Developments shall optimise the amount of deep soil zones within the site, in accordance with Figure 4.

C6. Stormwater quality shall be maintained through the use of the following

- **i)** Litter or gross pollutant traps to capture leaves, sediment and litter should be used,
- **ii)** sediment filters, traps or basins for hard surfaces,
- **iii)** treatment of stormwater collected in sediment traps on soils containing dispersive clays.

C7. Where sites are next to the rail corridor, adequately dispose of or manage drainage from the development such that it is not distributed into the rail corridor unless prior approval has been obtained from the State Rail Authority.

Merrylands Centre

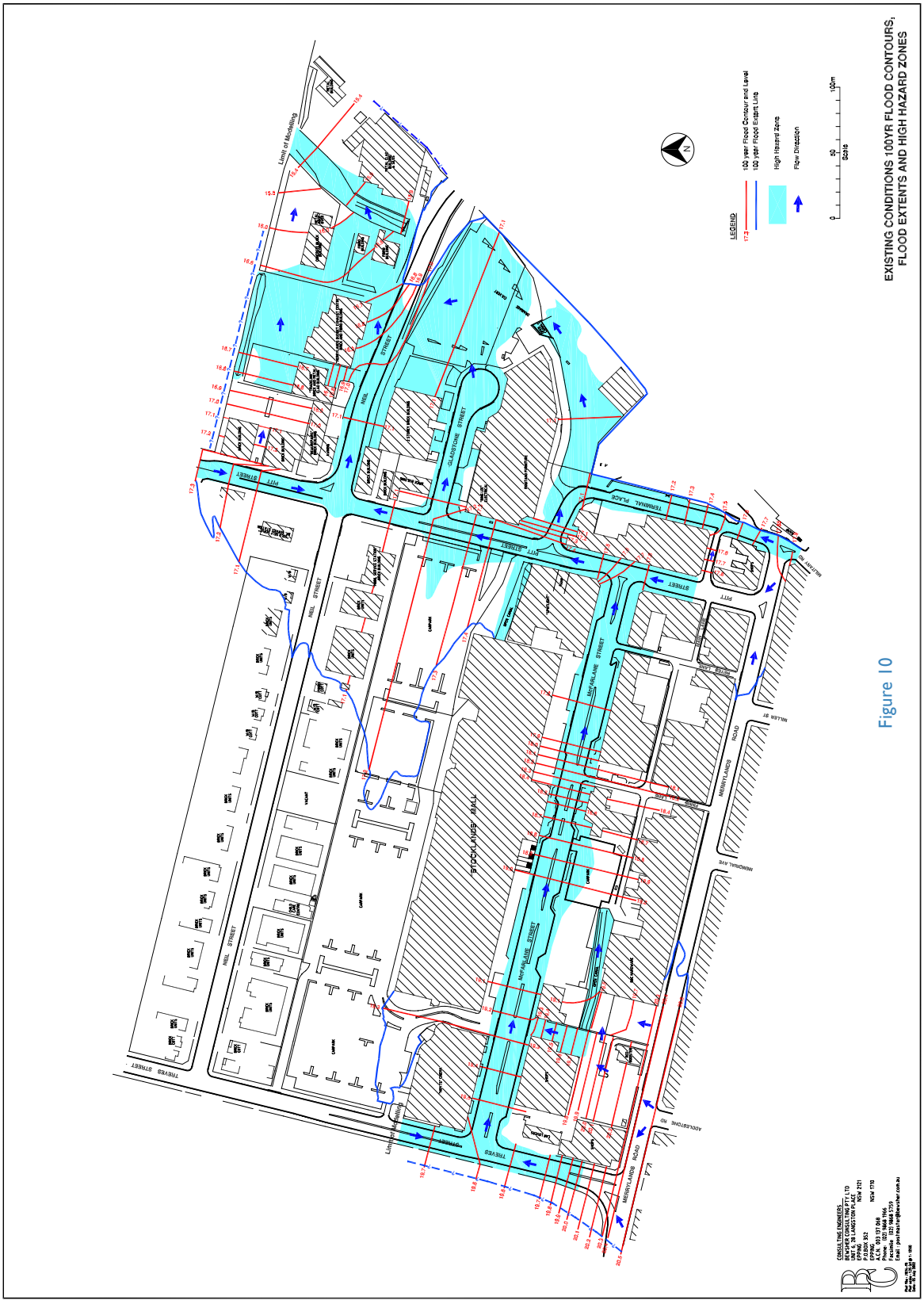


Figure 10

Merrylands Centre

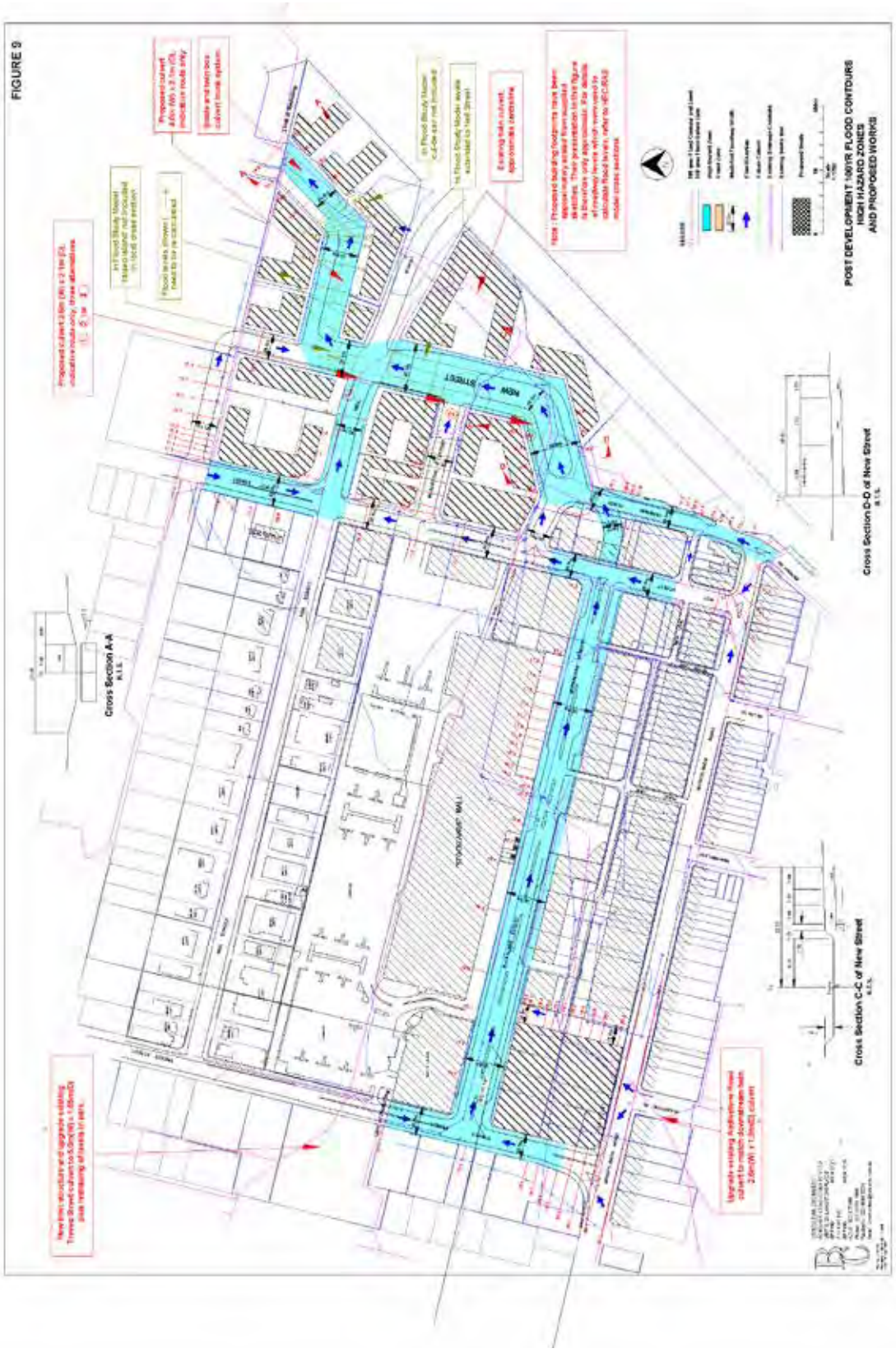


Figure 11

9. General

8.1. Public art

Objectives

O1. Provide art works which are integrated into broader development and planning of Merrylands Centre.

O2. Avoid stand alone public art projects that fail to address the locality and its culture.

Development Controls

C1. Public Art is encouraged to be provided within the centre, in accordance with Council's Public Art Policy 2012-2015.

C2. Public Art provided shall develop the cultural identity of the community and reflect the culture of the community.

C3. Artworks shall be integrated into the design of buildings and the landscape.

C4. Within the Neil Street Precinct, the following thematic areas are to be considered in the public art/design:

- Industrial heritage of the locality including the grain mills, brick works and railway,
- A'Becketts Creek and the natural environment.

8.2. Interim development

Through the process of implementing this plan it is expected that development applications associated with existing uses will continue to be received. Acceptable design outcomes of the application for minor development, must comply with the vision and objectives of the DCP.

Objectives

O1. Enable ongoing development works in the centre that are associated with existing uses, without compromising the implementation of the longer term vision and objectives as outline in this DCP.

O2. Permit a reasonable amount of interim development while maintaining the viability of implementing this plan as an attractive future option.

O3. Ensure any development works provides a positive design outcomes that contributes to the urban character of the centre.

Development Controls

C1. All minor development associated with existing buildings including but not limited to alteration and additions, change of use, outdoor dining, subdivision and signage must not restrict or prohibit an adjoining landowner from developing their site in accordance with this DCP.

C2. Development is to ensure activation of the streetscape and high urban design outcomes.

C3. Alterations and additions must not exceed 60m^2 of additional floor space on to or associated with an existing building. Only 1 application for this addition, per lot, is permissible, as from the date of adoption of this DCP.

Part N

Transitway Station Precinct Controls

Holroyd Development Control Plan 2013

Contents

Transitway

Introduction

This Part of Holroyd Development Control Plan 2013 provides a framework that will guide future development along the Liverpool to Parramatta Transitway and in particular, the Mays Hill, Finlayson and Sherwood Precincts.

Where this Plan applies

This Part of DCP 2013 applies to all development within the Transitway Precincts of Mays Hill, Finlayson and Sherwood as shown in Figures 1-3.

Relationship to other parts

Part N of Holroyd DCP 2013 shall be read in conjunction with the following Parts of Holroyd DCP 2013, which contain Objectives and Development Controls that relate to development in this Part:

Part A - General Controls

Part B - Residential Controls

Part C - Business, Shop Top Housing and Mixed Use Development Controls

Part E - Public Participation

Part F - Advertising and signage

Part H - Heritage and Conservation Controls

Part J - Child Care Centre Controls

Part R - Definitions

Figure 1- Mays Hill Transitway Precinct

Figure 2- Finlayson Transitway Precinct

Figure 3- Sherwood Transitway Precinct

1. Mays Hill Transitway Precinct

Desired Future Character Statement

The desired future character for Mays Hill is an active, urban area which makes full use of its proximity to public transport and services, as well the Parramatta Central Business District.

A mix of uses and good pedestrian access will encourage a fuller utilisation of the interface along the Great Western Highway. Taller buildings along the highway will include retail and commercial uses at the ground level, near the Transitway station, to promote an active and safe public domain. Residential development above will offer convenient access to the Transitway station and precinct. A new laneway between Burnett Street and Robilliard Street will improve permeability, and allow for rear lane access.

Away from the highway, a transition between higher and lower density dwellings will occur. The surrounding streets will be more domestic in scale that easily accesses the shops and services of Mays Hill and the extensive open space. The opportunity for social interaction, provided by buildings directly addressing streets, will promote a sense of community.

Existing character, where desirable, will be kept, but a greater range of housing choice will be provided through the construction of medium density dwellings. Well designed buildings will contribute to the public domain. Site consolidation will allow more usable open space to be incorporated into new developments.

Objectives

O1. To create an active urban area with a wide range of services and mixed uses in close proximity to public transport by:

- mix of uses and good pedestrian access along the interface of the Great Western Highway; and
- allowing taller buildings along the highway that include retail and commercial uses at ground level; and
- creating a sense of community through retaining the domestic scale in the areas adjacent to the highway; and
- consolidating sites to allow for more usable open space.

O2. To ensure development responds to:

- Site opportunities and constraints; and
- The need for concentrated activity, building height and building mass on the highway, while retaining a suburban feel to the adjacent blocks; and
- The need for high quality building and design.

O3. To ensure buildings in the Mays Hill Transitway Station Precinct, regardless of its use or type, are of a quality design, such that the design:

- Responds and contributes to its context being the key natural and built features of the area; and
- Provides an appropriate scale in terms of the bulk and height that suits the scale of the street and the surrounding buildings; and
- Achieves an appropriate built form for the site and the building's purpose, in terms of building alignments, proportions, building type and the manipulation of building elements; and

- Has a density appropriate for the site and its context, in terms of floor space yields (or numbers of units or residents); and
- Makes efficient use of natural resources, energy and water through the building's full life cycle, including construction; and
- Recognise that together landscape and buildings operate as an integrated and sustainable system, resulting in greater aesthetic quality and amenity for both occupants and the adjoining public domain; and
- Provides amenity through the physical, spatial and environmental quality of the development; and
- Optimises safety and security, both internal to the development and for the public domain; and
- Responds to the social context and needs for the local community in terms of lifestyles, affordability, and access to social facilities; and
- Provides quality aesthetics that
  - Require an appropriate composition of building elements, textures, materials and colours; and
  - Reflect the use, internal design and structure of the development.
- Permits appropriate access to the development that doesn't compromise the safety or disrupt the transitway network.

O4. Promote the principles of ecologically sustainable development.

O5. To ensure flexible floor plates are provided to allow for mixed uses at ground floor level fronting primary streets.

O6. Maintain retail, commercial and community activity at street and ground floor level to deliver an active enterprise corridor and encourage commercial office space or other suitable non-residential uses at the first floor level of development.

1.1. Site Consolidation and Frontage

Objectives

O1. To ensure all sites provide the required minimum frontage to adequately provide for basement car parking;

O2. To ensure all sites achieve the required minimum width to allow for a site configuration that permits a consistent character and landscaped open space to the rear of sites;

O3. To ensure any site amalgamation pattern does not restrict the development opportunity of any adjoining site or the ability of adjoining sites to provide basement carparking or rear open space;

O4. To ensure future redevelopment results in quality streetscapes, amenity, and appropriate passive surveillance, landscape and open space.

O5. To require a more continuous building form along the Great Western Highway.

O6. To ensure vehicular access for properties facing the Great Western Highway is provided from secondary streets or laneways.

Development Controls

C1. Amalgamation of lots in accordance with Figure 4 (a) and (b) is required for redevelopment.

C2. Land locking of adjoining sites is not permitted. Properties shall be amalgamated to ensure the minimum frontage is obtainable without reducing the developability of adjacent properties.

C3. Notwithstanding C1, the minimum lot frontage for all development fronting the Great Western Highway shall be 45 metres.

Note: Minimum frontage requirements are located in Parts B and C of this DCP.

C4. In instances where amalgamation cannot be achieved, the following information must be submitted with any development application:

- Two written valuations indicating the value of the remaining sites that were to be developed in conjunction with the applicants properties. These are to be undertaken by two independent valuers registered with the Australian Valuers Institute, and
- Evidence that a reasonable offer has been made to the owners(s) of the affected sites to purchase and valuation reports.

C5. Alternative consolidation patterns may be considered by Council if it can be demonstrated that development controls can be satisfied on the land and adjoining properties.

C6. Where amalgamation (as required) is not achieved, the applicants must show that the remaining sites, which are not included in the consolidation, will still be able to achieve the development outcome prescribed in this DCP, including achieving the required vehicular access, basement parking and built form.

Note:

- Potential value can include, (but is not limited to) the land locked site developed jointly with adjoining properties, or on its own, under Holroyd LEP and this plan.
- A reasonable offer shall be a fair market value, and include for all expenses that would be incurred by the owner in the sale of the land locked site.
- Council will accept as documentary evidence a copy of a written offer delivered by registered mail to the affected owner(s) and dated no more than 3 months prior to the date of lodgment of the development application.

Figure 4(a)- Lot amalgamation plan - north

Figure 4(b)-Lot amalgamation plan - south

1.2. Private Accessway, Laneways and Vehicular Access

Objectives

O1. To ensure buildings fronting the Great Western Highway have vehicular access from the rear or side of the property to improve vehicular and pedestrian traffic flow, pedestrian safety, site functionality and reduce impacts on the wider network.

O2. To ensure secondary vehicular access is created, where necessary, to mitigate amenity and access constraints currently affecting or likely to affect the Mays Hill Transitway Precinct.

O3. To ensure all developments are able to obtain the required vehicular access and future developability of sites is not restricted.

O4. To ensure sites utilise existing access ways from the rear of the property for vehicular access and parking.

O5. To mitigate any impacts of vehicular traffic on residences and the adjoining precinct.

O6. To minimise the visual impact of vehicle entrances to basement car parking through good design and use of site slope and side setbacks, where appropriate.

O7. To allow improved circulation space for pedestrians and future residents within the precinct and ensure the creation of clear and direct pedestrian connections.

Development Controls

C1. Vehicular access to properties fronting the Great Western Highway and those within the B6 zone on Burnett Street and Robilliard Street must be provided from the rear or side, via laneways or secondary roads.

C2. Vehicular entry points shall be located away from intersections.

C3. Vehicular access from the Great Western Highway is not permitted from properties identified on Figure 5 and access must be provided from the rear or side via laneways or secondary roads.

C4. An 8 metre connecting laneway is required in accordance with Figure 6 for the redevelopment of properties bounded by the Great Western Highway, Burnett Street and Robilliard Street.

C5. A 6 metre wide vehicular accessway shall be provided from Good Street in accordance with Figure 7.

C6. A pedestrian link shall be provided from Joyner Street that connects with the vehicular access from Good Street in accordance with Figure 7.

C7. A pedestrian link shall be provided between Telfer Place and the Great Western Highway in accordance with Figure 7a.

C8. Laneways shall be treated as shared spaces to provide unimpeded access from apartments to common facilities and open space.

C9. Refer to Part B and Part C this DCP to ensure that any relevant objectives and controls for vehicular access are complied with.

Figure 5 - Properties where vehicular access is not permitted from the Great Western Highway or Burnett Street

Figure 6- Proposed Laneway

Figure 7 - Proposed vehicular accessway and pedestrian link

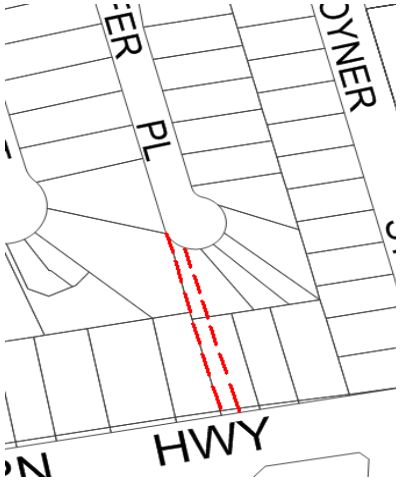


Figure 7a - Proposed pedestrian link

1.3. Building Height

Objectives

O1. To require an appropriate scale relationship between building heights and street width.

O2. To ensure the appropriate management of overshadowing, access to sunlight and privacy.

O3. To enable flexibility of uses by implementing higher floor to ceiling heights within buildings for the ground and first floors.

O4. To reduce the visual impact of buildings on the public domain.

O5. To allow activation of the street edge on primary roads.

Development Controls

C1. The maximum height for development within the Mays Hill Transitway Precinct is detailed within the Holroyd Local Environmental Plan 2013, as a written statement and associated maps.

C2. The maximum building storey limits are detailed in Figures 8 and 9.

C3. Street wall heights, setbacks and minimum floor to ceiling heights are referenced in Parts B and C of this DCP.

Figure 8- Building Heights- North

Figure 9- Building Heights- South

1.4. Building Setbacks

Objectives

O1. To create a clear threshold by providing a transition between public and private space.

O2. To establish the desired spatial proportions of the street.

O3. To ensure a continuous built edge within commercial and mixed use development for activation of the street edge is achieved.

O4. To ensure visual and acoustic privacy for residential development is enabled

O5. To ensure a landscaped setback character for residential development is retained.

O6. To ensure setbacks that respond appropriately to the building separation requirements are achieved.

Development Controls

C1. Setbacks shall be in accordance with Figures 10 & 11.

Note: Road widening requirements detailed in Section 1.5 of this Part may apply in certain locations.

C2. A 4 metre setback is required for properties fronting the Great Western Highway between Joyner Street and Good Street to allow for mixed use development to occur and sufficient space for landscaping.

C3. The residential component of developments fronting the Great Western Highway between Burnett Street and Robilliard Street shall have a setback of 1 metre for all levels above the first floor.

C4. Buildings facing the Great Western Highway are to be built to the boundary of adjoining properties to form a continuous street edge.

Note: Side and rear setbacks and building separation, unless indicated otherwise in Figure 10 & 11, are to be in accordance with setbacks indicated in Part B or Part C of this plan.

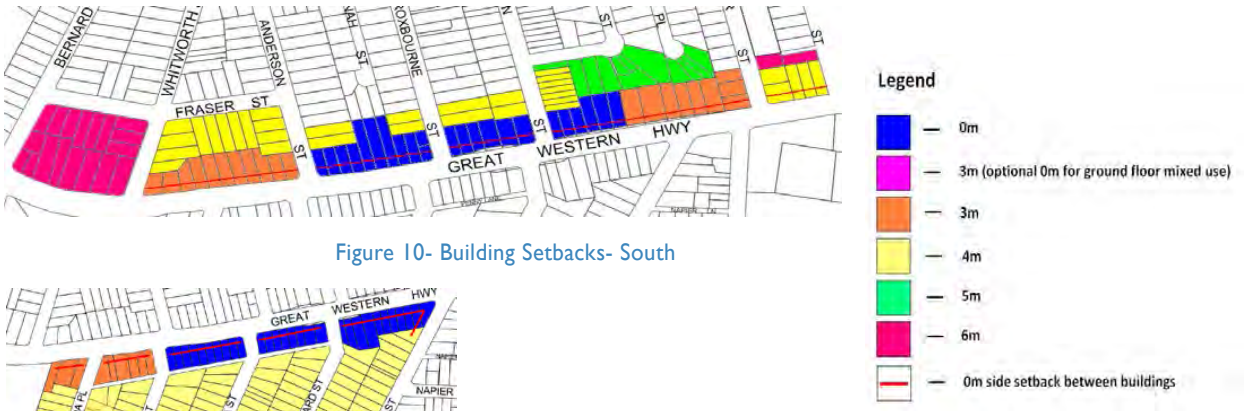


Figure 10- Building Setbacks- South

Figure 11- Building Setbacks- North

1.5 Site Design and Appearance

Objectives

O1. To require development in Good Street to be orientated across the amalgamated sites.

O2. To ensure building design incorporates the use design solutions suitable to the location.

O3. To ensure the articulation of buildings creates a desirable street presentation.

Development Controls

C1. Developments shall be oriented to front boundaries.

C2. Development on properties 84-88 Great Western Highway shall incorporate high quality, innovative and sustainable design solutions to emphasise and represent their gateway location.

C3. Vertical articulation and a break in the building facade is required above the fourth storey for buildings exceeding 25 metres in length.

1.6 Road Widening

Objectives

O1. To ensure a minimum width of 5.5 metres from the kerb to the property boundary is reserved for the purpose of pedestrian facilities.

O2. To enure an adequate amount of land is identified for the purpose of future road widening.

O3. To ensure adequate land is provide for the provision of safe pedestrian and cycling facilities.

O4. To achieve a more consistent carriageway width along the Great Western Highway.

O5. To provide wider carriageways and footpaths to cater for the increase in vehicular and pedestrian traffic.

Development Controls

C1. Road widening is required along both sides of the Great Western Highway to result in a footpath width of 5.5 metres from the kerb to the property boundary as indicated in Figure 12.

C2. Properties located behind the Transitway stops shall have a 4 metre separation between the rear of the bus shelter and the building line to allow for the continuation of the shared pedestrian/ cycle footpath.

Note: The 5.5 metre wide setback shall allow for a shared footpath consisting of the following dimensions:

- A 1.5 metre verge from the kerb
- A 2.5 metre shared path
- A 1.5 metre distance from the shared path to the building line

Note: The amount of land required to meet the minimum 5.5 metre reserve is variable and will depend on each individual property's existing setback.

Figure 12 - Properties subject to the 5.5 metre footpath widening reserve

2. Finlayson Transitway Station Precinct

Desired Future Character Statement

Finlayson station will be a better integrated part of the precinct as higher density residential development occurs in close proximity to the station. The pedestrian experience will be improved through increased ground floor activity on the Highway and a sense of connectivity between the two parts of the precinct created through consistent setbacks and streetscaping.

The precinct will continue to serve neighbourhood needs and passing trade captured by the existing highway uses. The existing commercial area will be expanded, creating an activity zone that includes the Transitway station. A variety of uses at ground level will create a safe and animated environment. Taller buildings will be placed to take advantage of a topography which will minimise their impact. Lower buildings will provide a transition between the precinct and adjoining low rise dwellings and heritage areas.

Site consolidation will allow ample communal open space to be offered to residents. Visitors and residents will enjoy a pedestrian network that is pleasant convenient while access to nearby parks will be improved.

Objectives

O1. To focus new development around the existing commercial precinct of the Finlayson Transitway Station, that shall consist of:

- Where permissible, retail and commercial uses, at ground floor fronting the Great Western Highway, and
- Appropriate residential development around the commercial core, and
- Facilitating appropriate scale and size of development.

O2. Any proposed development in the Finlayson Transitway Precinct responds to:

- Site opportunities and constraints, and
- The need for high quality building design

O3. Any proposed building in the Finlayson Transitway Station Precinct, regardless of its use or type, being of a quality design, such that the design:

- Responds and contributes to its context, being the key natural and built features of the area, and
- Provides an appropriate scale in terms of the bulk and height that suits the scale of the street and the surrounding buildings, and
- Achieves an appropriate built form for the site and the building's purpose, in terms of building alignments, proportions, building type and the manipulation of building elements, and
- Has a density appropriate for the site and its context, in terms of floor space yields (or numbers of units or residents, and
- Makes efficient use of natural resources, energy and water throughout the building's full life cycle, including construction, and
- Recognises that together landscape and buildings operate as an integrated and sustainable system, resulting in greater aesthetic quality and amenity for both occupants and the adjoining public domain, and
- Provides amenity through the physical, spatial and environmental quality of the development, and

- Optimises safety and security, both internal to the development and for the public domain, and
- Responds to the social context and needs of the local community in terms of lifestyles, affordability, and access to social facilities, and
- Provides quality aesthetics that:
- Require an appropriate composition of building elements, textures, materials and colours, and
- Reflect the use, internal design and structure of the development.
- All development within the Finlayson Transitway Station Precinct shall be undertaken in a way that promotes the principles of ecologically sustainable development.

O4. To ensure any development adjoining a heritage item does not adversely impact upon the heritage item and/or heritage conservation area.

O5. All development within the Finlayson Transitway Station Precinct shall be undertaken in a way that promotes the principles of ecologically sustainable development.

O6. Maintain retail, commercial and community activity at street and ground floor level to deliver an active enterprise corridor and encourage commercial office space or other suitable non-residential uses at the first floor level of development.

O7. To encourage mixed use development along the enterprise corridor and local business centre.

2.1. Site consolidation

Objectives

O1. To ensure all sites achieve the required minimum width to adequately provide for basement car parking;

O2. To ensure all sites achieve the required minimum width to allow for a site configuration that permits a consistent landscaped open space to the rear of sites;

O3. To ensure any site amalgamation pattern does not restrict the development opportunity of any adjoining site or the ability of adjoining sites to provide basement carparking or rear open space;

O4. To encourage a more continuous building form;

Development Controls

C1. Amalgamation of lots in accordance with Figure 13 is required for redevelopment.

C2. The minimum lot frontage for all development in Finlayson shall be 30 metres.

C3. In instances where amalgamation cannot be achieved, the following information must be submitted with any development application:

- Two written valuations indicating the value of the remaining sites that were to be developed in conjunction with the applicants properties. These are to be undertaken by two independent valuers registered with the Australian Valuers Institute, and;

- Evidence that a reasonable offer has been made to the owners(s) of the affected sites to purchase and valuation reports.

C4. Alternative consolidation patterns may be considered by Council if it can be demonstrated that development controls can be satisfied on the land and adjoining properties.

C5. Where amalgamation (as required) is not achieved, the applicants must show that the remaining sites, which are not included in the consolidation, will still be able to achieve the development outcome prescribed in this DCP, including achieving the required vehicular access, basement parking and built form.

C6. Sites must not be left such that they are physically unable to develop in accordance with the prescribed built form outcomes outlined in this DCP.

C7. Properties not identified in Figure 13 shall redevelop in accordance with the development controls detailed in Part C of this DCP.

Note:

- Potential value can include, (but is not limited to) the land locked site developed jointly with adjoining properties, or on its own, under Holroyd LEP and this plan.
- A reasonable offer shall be a fair market value, and include for all expenses that would be incurred by the owner in the sale of the land locked site.
- Council will accept as documentary evidence a copy of a written offer delivered by registered mail to the affected owner(s) and dated no more than 3 months prior to the date of lodgment of the development application.

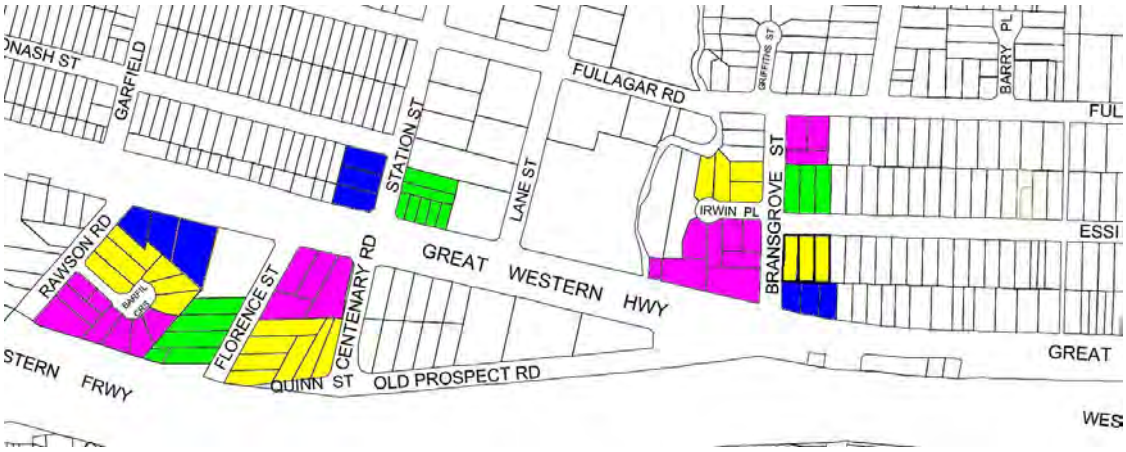


Figure 13- Lot Amalgamation Plan

2.2. Private Accessway, Land Dedication and Vehicular Entries

Objectives

O1. To require buildings fronting primary roads to have vehicular access from the rear or side of the property.

O2. To ensure sites utilise existing access ways from the rear of the property for vehicular access and parking.

O3. To create secondary vehicular access where necessary to mitigate amenity and access constraints.

O4. To create clear and direct pedestrian connections.

O5. To allow improved circulation space for pedestrians and future residents within the precinct.

Development Controls

C1. A 12 metre connecting laneway between Rawson Road and Florence Street is required in accordance with Figure 14.

C2. A 15 metre connecting laneway between Florence Street and Quinn Street is required in accordance with Figure 14.

C3. A pedestrian link is required between Chelmsford Road and Centenary Road as identified in Figure 14a.

C4. Where buildings front the Great Western Highway and Centenary Road, vehicular access must be provided from the rear or side, via laneways or secondary roads.

C5. Refer to Part B and Part C of Holroyd Development Control Plan 2013 to ensure that any relevant objectives and controls for vehicular access are complied with.

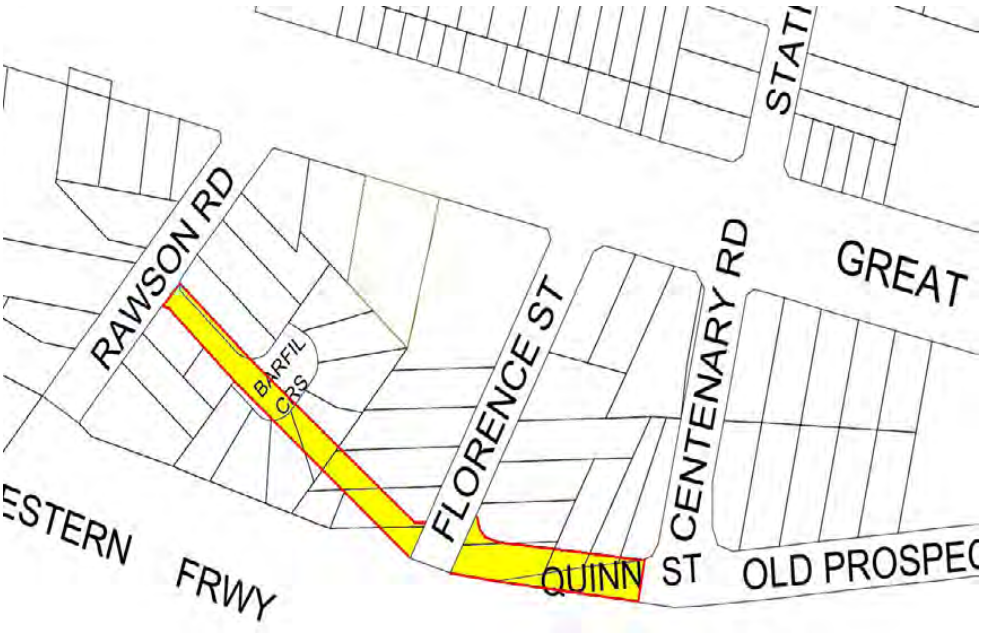


Figure 14- Proposed Laneways

Figure 14a- Proposed pedestrian link

2.3. Building Height

Objectives

O1. To require an appropriate scale relationship between building heights and street width.

O2. To ensure the appropriate management of overshadowing, access to sunlight and privacy.

O3. To enable flexibility of uses by implementing higher floor to ceiling heights within buildings for the ground and first floors.

O4. To reduce the visual impact of buildings on the public domain.

O5. To allow activation of the street edge on primary roads.

Development Controls

C1. The maximum height for development within the Finlayson Transitway Precinct is detailed within the Holroyd Local Environmental Plan 2013, as a written statement and associated maps.

C2. The maximum building storey limits are detailed in Figures 15 and 16.

C3. Street wall height, setbacks and minimum floor to ceiling heights are referenced in Parts B and C of this DCP.

Figure 15- Building Heights-East

Figure 16 - Building Heights - South

2.4. Building Setbacks

Objectives

O1. To create a clear threshold by providing a transition between public and private space.

O2. To establish the desired spatial proportions of the street.

O3. To require a continuous built edge within commercial and mixed use development for activation of the street edge.

O4. To enable visual and acoustic privacy for residential development.

O5. To require setbacks which appropriately respond to the building separation requirements.

O6. To retain a landscaped setback character for residential development.

Development Controls

C1. Setbacks shall be in accordance with Figures 17 and 18.

C2. Development along the Great Western Highway between:

- South - Rawson Road and Centenary Road
- South - Centenary Road, Old Prospect Road and Great Western Highway
- North - Land Street and Bransgrove Street
- North - Intersection of Station Street and Great Western Highway (east and west); shall be built to the boundary to form a continuous street edge.

Note: Front, side and rear setbacks, unless indicated otherwise in Figures 17 and 18 are to be in accordance with setbacks indicated in Part B or Part C of this plan.

Figure 17- Setbacks- North

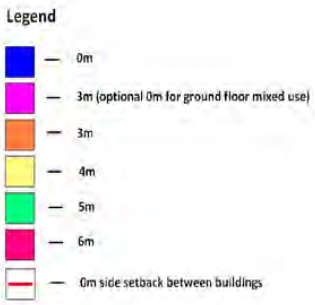


Figure 18- Building Setbacks-South

3. Sherwood Transitway Station Precinct

Desired Future Character Statement

Sherwood will become a compact mixed use centre. It will retain the feel of a neighbourhood, but higher density residential development will increase housing choice and maximise the use of the transitway precinct and station. Site consolidation and redevelopment will rationalise land use and define the precinct.

Higher residential densities will be centred around the Transitway station. More consistent setbacks and more attractive built form will define the street edges and increase residential amenity.

New laneways will increase permeability for pedestrians. The compact form of Sherwood will encourage walking. Services will be available in close proximity to the Transitway station, convenient for time-poor commuters.

Early planning for a supermarket will encourage its integration into the area. "Sleeving" the supermarket and other large plate facilities will promote activity around it, creating a safe and interesting environment for pedestrians.

Objectives

O1. To create an active and vibrant mixed use, transit oriented village by:

- Allowing active retail uses to front Sherwood Road, and
- Where permitted, providing the opportunity for appropriate commercial activity, and
- Prioritising pedestrians throughout the business core of the precinct, and
- Facilitating appropriate scale and size of development.

O2. Improvement of vehicular and pedestrian traffic flow in the precinct by:

- Restricting vehicular egress and ingress to buildings on Sherwood Road and Merrylands Road, and
- Where necessary, the creation of new street connections, and
- The creation of clear and direct pedestrian through site links in the business core of the Precinct, and
- Enabling clear and direct pedestrian accessibility to the Sherwood Transitway station.

O3. Any proposed development responds to:

- Site opportunities and constraints, and
- The prominence of the intersection of Sherwood and Merrylands Roads, and
- The need for high quality building design.

O4. Any proposed building in the Sherwood Transitway Station Precinct, regardless of its use or type, being of a quality design, such that the design:

- Responds and contributes to its context, being the key natural and built features of the area, and
- Provides an appropriate scale in terms of the bulk and height that suits the scale of the street and the surrounding buildings, and
- Achieves an appropriate built form for the site and the buildings purpose, in terms of building alignments, proportions, building type and the manipulation of building elements, and
- Has a density appropriate for the site and its context, in terms of floor space yields (or numbers of units or residents), and
- Makes efficient use of natural resources, energy and water throughout the building's full life

cycle, including construction, and

- Recognises that together landscape and buildings operate as an integrated and sustainable system, resulting in greater aesthetic quality and amenity for both occupants and the adjoining public domain, and
- Provides amenity through the physical, spatial and environmental quality of the development, and
- Optimises safety and security, both internal to the development and for the public domain, and
- Responds to the social context and needs of the local community in terms of lifestyles, affordability, and access to social facilities, and
- Provides quality aesthetics that:
- Require an appropriate composition of building elements, textures, materials and colours, and
- Reflect the use, internal design and structure of the development

O5. All development within the Sherwood Transitway Station Precinct shall be undertaken in a way that promotes the principles of ecologically sustainable development.

O6. Maintain retail, commercial and community activity at street and ground floor level to deliver an active enterprise corridor and encourage commercial office space or other suitable non-residential uses at the first floor level of development

3.1. Site Consolidation

Objectives

O1. To ensure all sites provide the required minimum frontage to adequately provide for basement car parking;

O2. To ensure all sites achieve the required minimum width to allow for a site configuration that permits a consistent landscaped open space to the rear of the site;

O3. To ensure any site amalgamation pattern does not restrict the development opportunity of any adjoining site or the ability of adjoining sites to provide basement carparking or rear open space;

O4. To establish fine grain shopfronts along primary retail streets.

Development Controls

C1. Amalgamation of lots in accordance with Figure 19 is required for redevelopment

C2. The minimum lot frontage for all development in the Sherwood Precinct shall be 30 metres.

C3. Where amalgamation cannot be achieved, the following information must be submitted with any development application:

- Two written valuations indicating the value of the remaining sites that were to be
- properties. There are to be undertaken by two independent valuers registered with the Australian Institute of Values, and;
- Evidence that a reasonable offer has been made to the owner(s) of the affected sites to purchase and valuation reports.

C4. Where amalgamation (as required) is not achieved, the applicants must show that the remaining sites, which are not included in the consolidation, will still be able to achieve the development outcome prescribed in this part of Holroyd DCP 2013, including achieving the required vehicular access, basement parking and built form.

C5. Sites must not be left such that they are physically unable to develop in accordance with the prescribed built form outcomes outlined in this DCP.

Note:

- Potential value can include, (but is not limited to) the land locked site developed jointly with adjoining properties, or on its own, under Holroyd LEP and this plan.
- A reasonable offer shall be a fair market value, and include for all expenses that would be incurred by the owner in the sale of the land locked site.
- Council will accept as documentary evidence a copy of a written offer delivered by registered mail to the affected owner(s) and dated no more than 3 months prior to the date of lodgment of the development application.

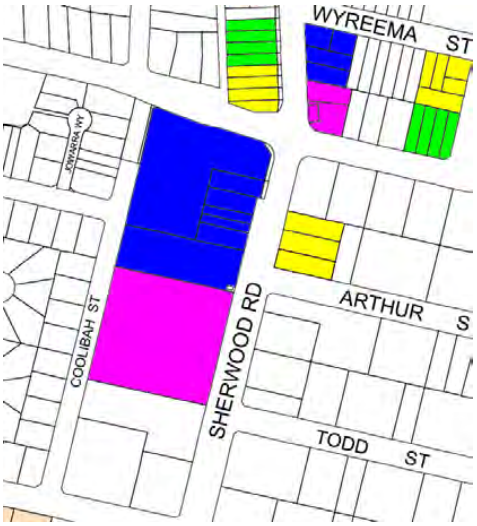


Figure 19- Lot Amalgamation Plan

3.2. Private access ways, vehicular entries and land dedication

Objectives

O1. To require buildings fronting primary roads to locate vehicular access at the rear of the property.

O2. To ensure sites utilise existing access ways from the rear of the property for vehicular access and parking.

O3. To mitigate any impacts of vehicular traffic on residences and the adjoining precinct.

O4. To allow improved circulation space for pedestrians and future residents within the precinct.

O5. To ensure pedestrian connections have sufficient width to allow for outdoor dining in commercial areas.

Development Controls

C1. Where possible, buildings fronting Sherwood, Centenary or Merrylands Roads, must be provide vehicular access from the rear or side, via laneways or secondary roads.

C2. Dedication of land at all corners of the intersection of Sherwood Road and Merrylands Road and Centenary Road for public domain improvements is required in accordance with Figure 20 for development.

C3. A 12 metre connecting laneway between Merrylands Road and Coolibah Street is required in accordance with Figure 20.

C4. Refer to Part B and Part C of Holroyd Development Control Plan 2013 to ensure that any relevant objectives and controls for vehicular access are complied with.

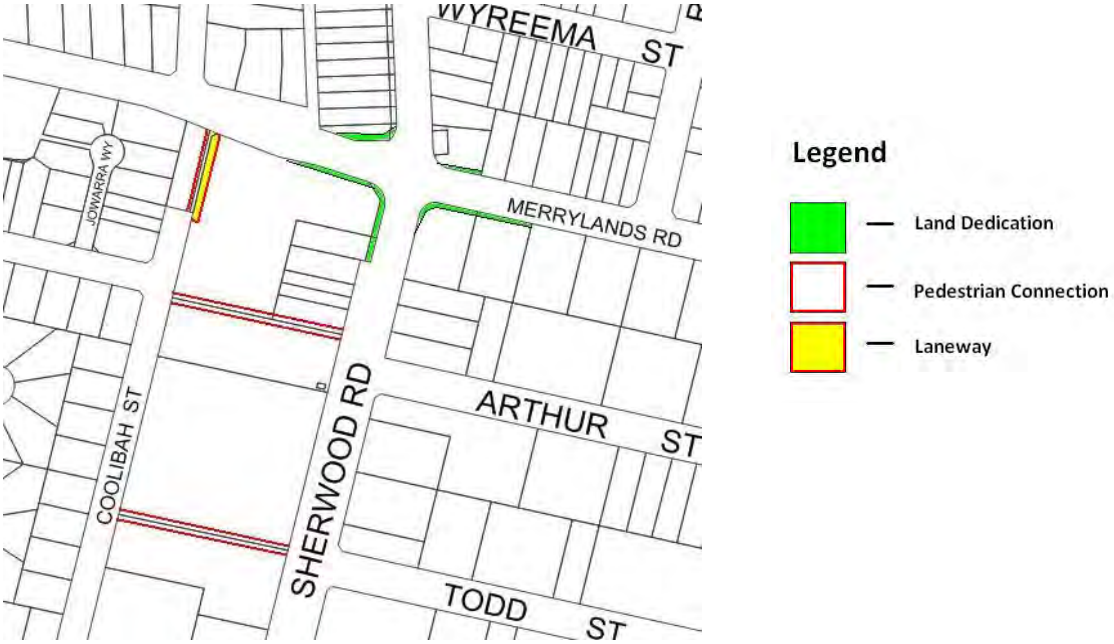


Figure 20- Proposed laneways and land dedications

3.3. Building Height

Objectives

O1. To ensure an appropriate scale relationship between building height and street width.

O2. To ensure the appropriate management of overshadowing, access to sunlight and privacy.

O3. To enable flexibility of uses by implementing higher floor to ceiling heights within buildings for the ground and first floors.

O4. To reduce the visual impact of buildings on the public domain.

O5. To allow activation of the street edge on primary road.

Development Controls

C1. The maximum height for development within the Sherwood Transitway Precinct is detailed within the Holroyd Local Environmental Plan 2013, as a written statement and associated maps.

C2. The maximum building storey limits are detailed in Figure 21.

C3. Street wall height, setbacks and minimum floor to ceiling heights are referenced in Parts B and C of this DCP.

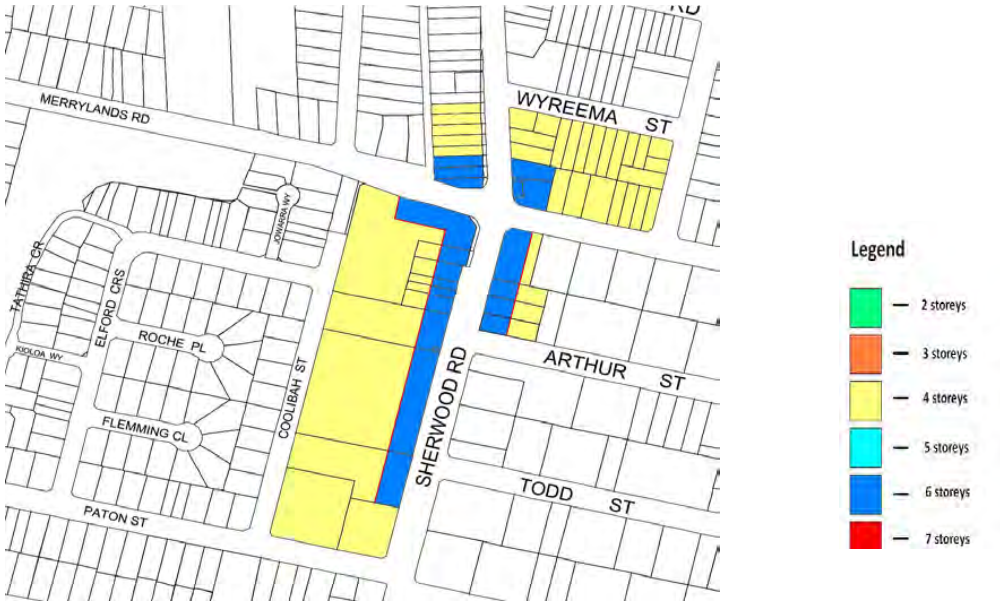


Figure 21- Building Heights

3.4. Building Setbacks and Separation

Objectives

O1. To create a clear threshold by providing a transition between public and private space.

O2. To establish the desired spatial proportions of the street.

O3. To require a continuous built edge within commercial and mixed use development for activation of the street edge.

O4. To retain a landscaped setback character for residential development.

O5. To require setbacks which appropriately respond to the building separation requirements.

Development Controls

C1. Setbacks shall be in accordance with Figure 22.

C2. Development along Sherwood Road is to be built to the boundary of adjoining properties to form a continuous street edge.

Note: Side setbacks, unless indicated otherwise in Figure 22 are to be in accordance with setbacks indicated in Part B or Part C of this plan.

Figure 22- Setbacks

Part O

Guildford Pipehead Precinct

Holroyd Development Control Plan 2013

Guildford Pipehead

Contents

Guildford Pipehead

Introduction

Land covered by this Part

This part applies to the land shown on Map 1 and known as the Guildford Pipehead Precinct.

Relationship to other Parts of this DCP.

Part O of Holroyd DCP 2013 shall be read in conjunction with the following Parts of Holroyd DCP 2013, which contain objectives and development controls that may relate to development in this part:

Part B - Residential Development

Part C -Commercial, Shop top housing and Mixed use Development

Part E - Public Particpation

Part F - Advertising and Signage

Part G - Places of Public Worship

Part H - Heritage and Conservation

Part I - Child Care Centres

Part R - Definitions

Guildford Pipehead

Objectives

O1. Facilitate the appropriate reuse of lands within the Guildford Pipehead Precinct that is surplus to current Government needs.

O2. Conserve and enhance the heritage significance of the Guildford Pipehead Precinct.

O3. Protect and conserve the natural heritage features of the Precinct and allow historic interpretation of the Guildford Pipehead Precinct.

O4. Only permit development that is reflective and sympathetic to the historic nature of the Guildford Pipehead Precinct and the character of the area surrounding it.

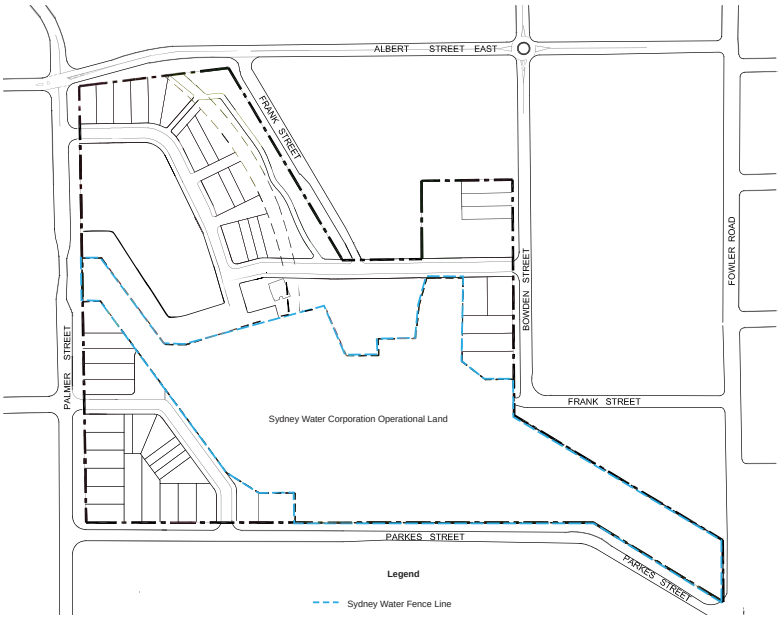
O5. Ensure that development on the perimeter of the precinct is compatible in character and scale with the surrounding residential area.

O6. Mitigate the impact of the change in land use with respect to the security needs of the operational Pipehead site.

O7. Provide for the conservation of and public access to:

i) Land with significant natural heritage or conservation values;

ii) That part of the Lower Prospect Canal outside the operational Pipehead site.



Map 1: Guildford Pipehead Precinct.

Guildford Pipehead

Sub-Precincts

C1. For the purposes of this Part of the DCP, the Guildford Pipehead Precinct is divided into the three sub-precincts, as indicated on Map 2, whose character is described below.

Sub-Precinct A

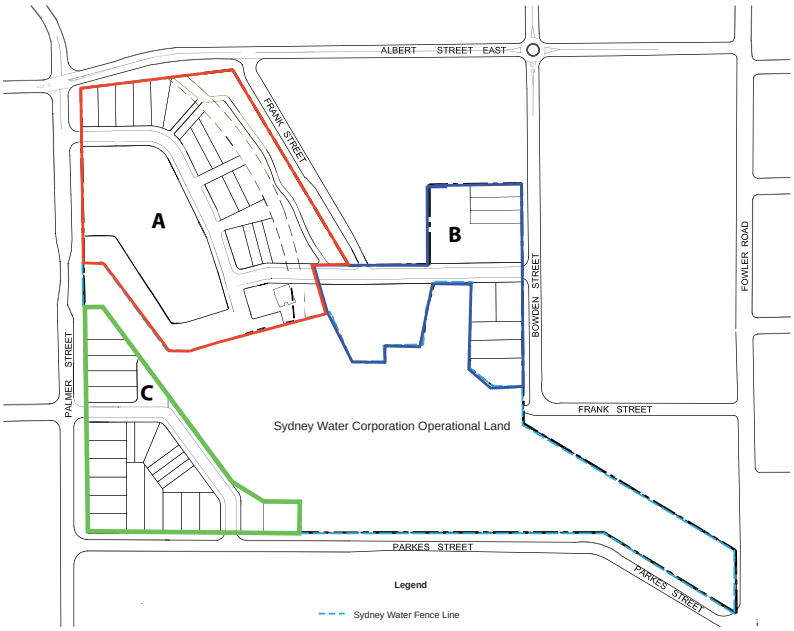
- Having an approximate area of 24,011m^2.
- Bounded by Palmer, Albert and Frank Street.
- Includes State heritage listed canal and significant heritage landscape plantings.
- Land is generally flat, with several steep embankments.
- Contains existing industrial sheds, from sites former use.
- Provides vistas to Prospect Hill, Blue Mountains and Holsworthy.
- Partial interface with low density, detached dwellings.
- Sub-Precinct A allows permeable views to Sydney Water site.

Sub-Precinct B

- Approximate area of 17,842m^2.
- Frontage to Bowden Street.
- Contains significant plantings, predominant woodland character.
- Existing cycleway access is located within Sub-Precinct.
- Contains a number of steep slopes.

Sub-Precinct C

- Approximate area of 13,600m^2.
- Located at the intersection of Palmer and Parkes Streets.
- Separated from SWC land by existing pipeline.
- Land is generally flat, although sloping along Parkes Street.
- Interface with existing low density, detached dwellings.



Map 2: Sub-Precincts

Guildford Pipehead

1. Urban Design

Objectives

O1. To provide passive surveillance to the Sydney Water operational land through road and lot layout to allow visual connectivity and security.

O2. Interpret key historic themes and heritage values of the site through urban design and built form.

O3. To conserve existing significant vegetation.

O4. To allow the provision of a network of well located and usable open spaces.

O5. To provide a range of housing types, that integrate with the existing built interface and landscape features.

Development Controls

C1. Create an east/ west link through the site to provide physical and visual connectivity.

C2. Create connections with the established residential area of Guildford West.

C3. Maximise pedestrian access and visual connectivity to the existing canal.

C4. Integrate new housing with housing forms in the existing area.

C5. Locate higher density housing types having regard for topography and significant visual corridors of the precinct.

C6. Facilitate pedestrian and vehicular access that allows connectivity within precinct.

C7. Design development to retain, as far as possible, the natural heritage features of the precinct.

C8. Maintain the landscape character of the precinct.

Guildford Pipehead

2. Lot Structure

Objectives

O1. To integrate new development with established development within the Guildford West area.

O2. To ensure all lots have a street address and enforce the street edge.

O3. To allow visual connectivity into and within the precinct.

O4. To create lot structures to ensure development maintains significant visual corridors.

O5. To ensure sustainable development through lot orientation.

O6. To ensure active surveillance of all public spaces.

Development Controls

C1. All lots shall have a primary frontage addressing a street.

C2. No battleaxe lots are to be created within the precinct.

Note: Refer to Map 6.

Sub-Precinct A

C3. Lots located north of New Road 1 in Sub-Precinct A shall have a primary frontage to New Road 1 and a secondary frontage to Albert Street East.

C4. Lots located between New Road 1 and the Lower Canal in Sub-Precinct A shall have a primary frontage to New Road 1 or New Road 4.

Sub-Precinct B

C5. Lots in Sub-Precinct B shall have frontage to Bowden Street.

C6. Where possible, lots in Sub-Precinct B shall have a secondary frontage to New Road 1.

C7. Internal lots shall have frontage to New Road 1.

Sub-Precinct C

C8. Lots in Sub-Precinct C shall have frontage to either Palmer or Parkes Streets, or New Road 2.

C9. Lots Sub-Precinct C may have a secondary frontage to New Road 2.

3. Built Form

Objectives

O1. To ensure that building heights have regard for the heritage values of the Precinct, the topography and significant visual corridors of the Precinct and the character of the surrounding residential area.

O2. To ensure development is setback from internal and external roads and the Lower Canal so that the open appearance of the precinct is maintained.

O3. To allow row housing and zero-lot-line detached houses to be erected within the Precinct.

O4. To maintain existing views to, from and through the precinct.

O5. To ensure that the built form of the Precinct responds to existing vegetation and heritage items, including those on the Sydney Water operational land, and the surrounding built environment.

Development Controls

Building Orientation and Articulation

C1. All buildings shall address the relevant lots primary frontage to an existing or new road (or both) with appropriate articulation to provide interest to the public domain.

Building Height

Note: The maximum permissible height (in metres) is detailed within Holroyd Local Environmental Plan 2013, as a written statement and associated maps.

C2. The maximum height of buildings, in storeys, within the Guildford Pipehead Precinct shall be:

Building type	No. Storeys
Detached and Attached Housing	2
Multi dwelling housing	2
Residential Flat building	4

C3. Notwithstanding C1, Council may permit 3-storey multi dwelling housing:

- Within Sub-Precinct A, south and west of New Road 1; and
- Within Sub-Precinct B, south of New Road 1 immediately east of the Community Park

Setbacks

C4. Buildings within Sub-Precinct A shall be setback from streets, side and rear boundaries in accordance with the requirements of Part B of this DCP but with the following exceptions (as shown on Map 3):

- 15 metres from Palmer Street, between the Sydney Water operational land and New Road 1;
- 5 metres from the Lower Canal.

C5. Buildings within Sub-Precincts B and C shall be setback from streets, side and rear boundaries in accordance with the requirements of Part B of the DCP, except where specified under C4 above.

C6. Despite the requirements of Part B of the DCP, except where the relevant lot boundary is also the boundary of the Guildford Pipehead Precinct:

- Row houses forming part of multi dwelling housing may be constructed with no setback to a side lot boundary; and
- Detached houses on lots less than 450m^2 may be constructed on one lot boundary.

View Corridors

C7. The view corridors identified on Map 3 shall be a minimum of 10 metres in width and be free of all buildings and structures, except:

- Access ramps;
- barbeques;
- children's play equipment;
- clothes lines and hoists;
- driveways, paths and paving;
- fences less than 1.8 metres in height;
- on-site detention tanks and basins below finished ground level;
- rainwater tanks below finished ground level;
- water features and ponds.

C8. Landscaping within the view corridors shall not include species greater than 1.8 metres in height at maturity.

Building Form & Materials

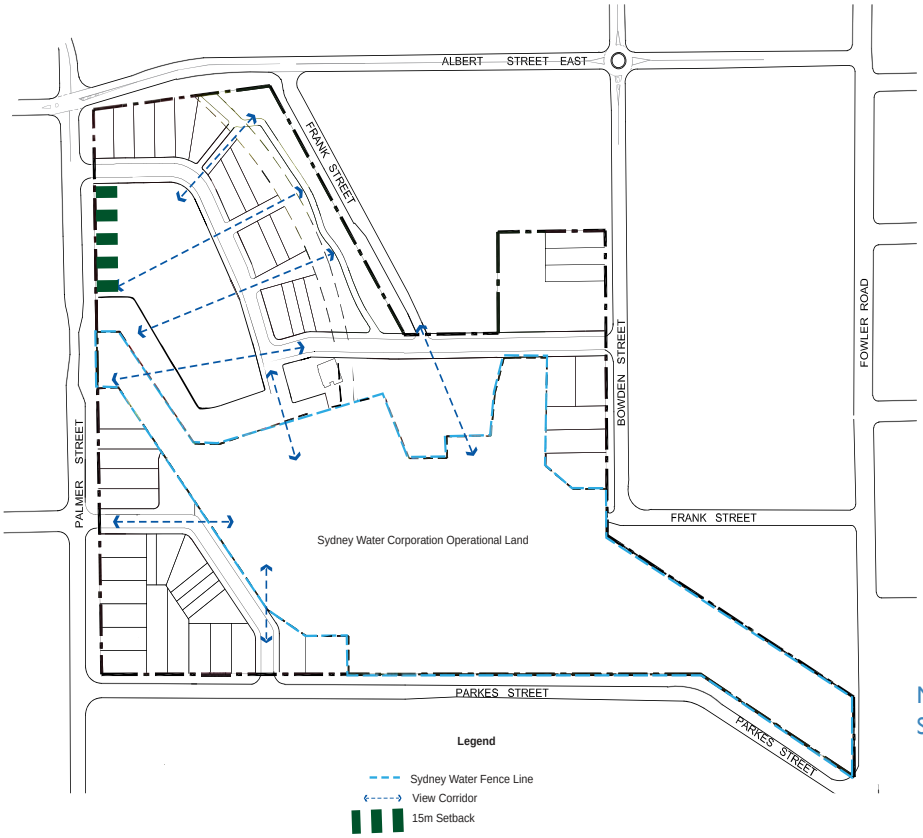
C9. Buildings shall respond to existing vegetation and heritage items, including those on the Sydney Water operational land, and the surrounding built environment through the use of:

- Dark tones of brick sympathetic to the dark tones of the existing landscape;
- Light tones for metal roofs;
- Low pitched roofs and generous eaves; and
- Natural or painted timber detail to complement the dark shades of existing vegetation.

C10. Apartment buildings are to incorporate:

- articulated facades to add character to the public domain and streetscape; and

Guildford Pipehead



Map 3: View Corridors and Setbacks

- split face block structure or panels including the use of metal sheeting elements to reflect the former industrial heritage of the site.

C11. Gable and hipped roofs are to have a pitch of 20 – 30 degrees, to match that of existing Building 25, while skillion roofs are to have a pitch of 10 degrees.

Sub-Precinct A

C12. Housing within Sub-Precinct A should include a mixture of residential flat buildings, multi dwelling housing, attached housing and detached housing on small lots.

Sub-Precinct B

C13. Housing within Sub-Precinct B should include a mixture of residential flat buildings, multi dwelling housing, attached housing and detached houses.

Sub-Precinct C

C14. Housing within Sub-Precinct C should include a mixture of multi dwelling housing, attached housing and detached houses.

4. Landscape and Open Space

Objectives

O1. To conserve existing significant vegetation within the precinct.

O2. To enhance the appearance and amenity of the proposed development by sensitively integrating architecture and landscape through effective site planning and landscape design.

O3. To retain and enhance the landscaped amenity of the precinct.

O4. To provide areas of landscaped open space for a new residential community.

O5. To integrate proposed open spaces with the surrounding landscape, open spaces and streets.

O6. To consolidate stands of various species forming part of the Cumberland Plain Woodland endangered ecological vegetation community within the proposed open space areas.

O7. To ensure any proposed fencing does not detract from the visual amenity and landscape character of the site, and is sympathetic to the built form of the precinct.

O8. The streetscape character shall reinforce and enhance the road hierarchy.

O9. To incorporate crime prevention through design principles in landscape and open space design.

O10. To ensure that the streetscape character and tree species reflect the precincts natural character and landforms while accommodating the function needs of pedestrian, cycle and vehicular movements along each of the roads.

Development Controls

C1. A variety of open spaces shall be provided. A number of areas have been identified by Council as suitable and are indicated on Map 4:

- Canal Park;
- Community Reserve; and
- Woodland Reserve.

C2. Landscape plans shall be prepare for each proposed open spaces, providing the following character and facilities for each:

- Canal Park – passive and active recreation, including a children's playground and a cycleway connecting the existing Lower Canal Cycleway with Bowden Street;
- Community Reserve – passive recreation, including picnic and BBQ facilities;
- Woodland Reserve – passive recreation and native vegetation conservation.

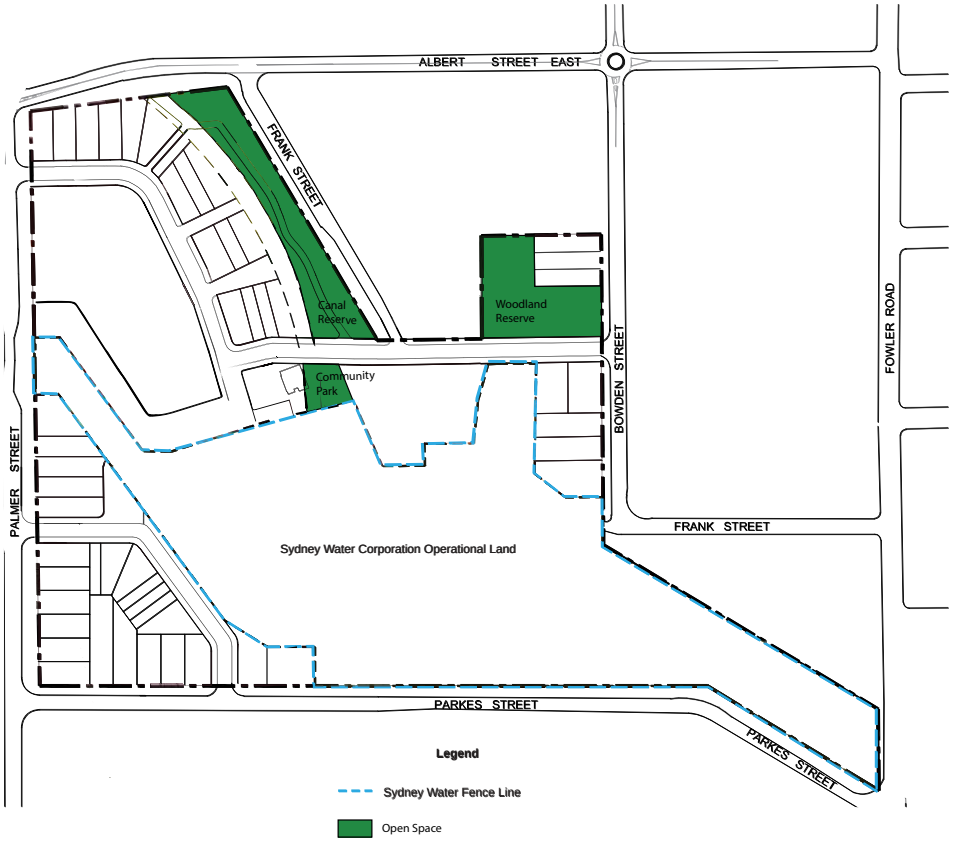
C3. The creation of a Heritage Square for passive recreation, including picnic and BBQ facilities is encouraged. Refer to Section 6.

C4. Trees identified as high and moderate significance indicated on Map 5 must be retained.

C5. All other trees should be incorporated into site planning.

C6. All tree species shall be in keeping with Councils native tree list and be low water, low maintenance and suitable for use in urban environmental. Planting shall build upon the existing landscaped character of the precinct, and not be in direct conflict with existing historical plantings.

Guildford Pipehead



Map 4: Open Spaces.

Map 5: Trees.

Guildford Pipehead

C7. Street trees shall be located in accordance with those indicated on Map 5.

C8. Appropriate street tree species to be planted shall be in accordance with the table below.

Appropriate street tree species		
Street	**Species**	**Common name**
New Road 1 New Road 2	Angophora floribunda	Roughed Barked Apple
	Brachychiton acerifolius	Illawarra Flame Tree
	Waterhousea floribunda	Weeping Lilly Pilly
Other roads and accessways	Corymbia ficifolia 'Summer Red'	Red Flowering Gum
	Jacaranda mimosifolia	Jacaranda
	Melaleuca linariifolia	Snow in Summer
	Tristaniopius laurina	Water Gum

5. Transport and Access

Objectives

O1. To provide pedestrian, cycle and vehicle connections to create permeable site.

O2. To draw on existing infrastructure, far as possible, by incorporating existing entry points into the road design of the precinct.

Development Controls

C1. The road structure within the precinct should be provided as shown on map G#.6.

C2. Roads shall be constructed to the following specifications:

New Road 1

- 15m road reserve,
- 8m carriageway, including provision for parking on one side,
- 2.5m shared path on one side where cycleway is located
- 1.5m footpath on one side, and
- grass verges on both sides; (2m or 1.5m where cycleway is located)

New Road 2

- 15m Road reserve,
- 8m carriageway, including provision for parking on one side,
- 1.5m footpath on one side, and
- Grass verges on both sides (3.5m or 2m where footpath is located)

New Road 3

- 15m road reserve,
- 8m carriageway, including provision for parking on one side and
- 1.5m footpath on one side, and
- Grass verges on both sides (3.5m or 2m where footpath is located)

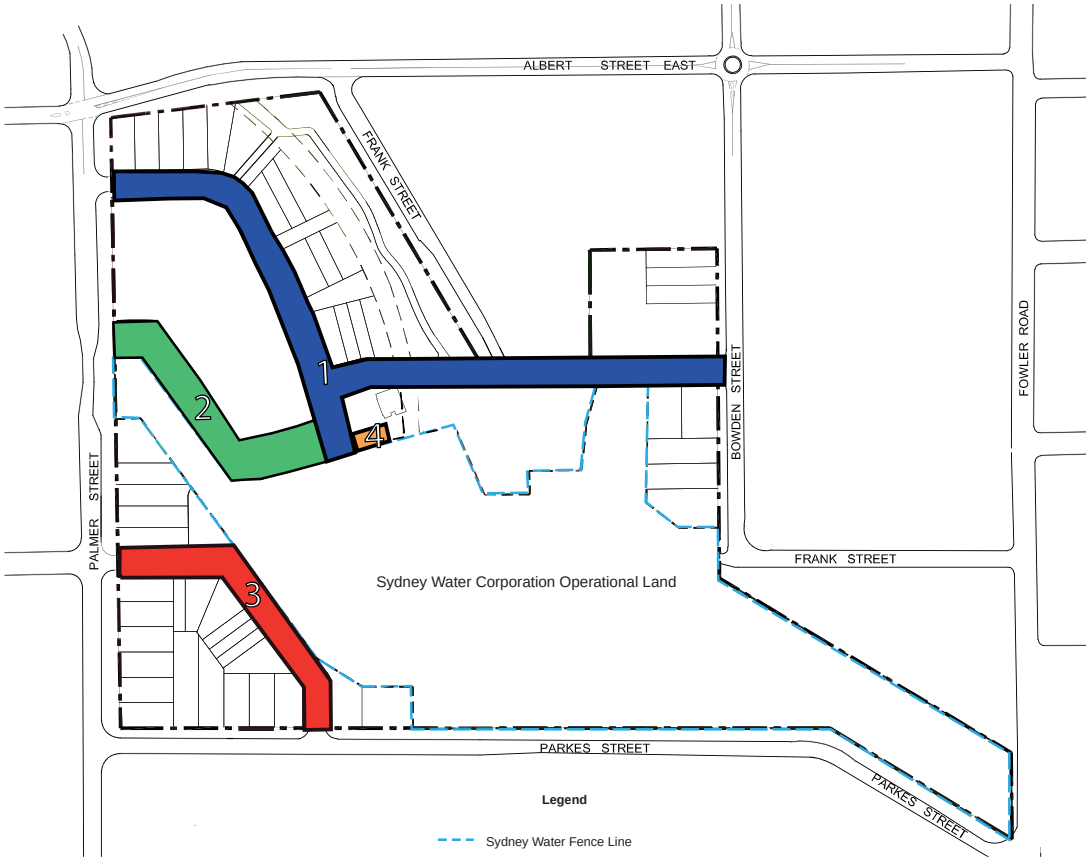
New Road 4

- 6m carriageway, and
- Grass verges on both sides (to match New Road 2)

C3. For the purposes of Sydney Water operational requirements, new roads 2, 4 and the southern component of new road 1 shall be designed and constructed to a standard suitable to carry the loading of a 130 tonne crane.

C4. Suitable crash prevention barriers be included in the design of New road 2 and 4 to ensure that vehicles cannot impact on Sydney Water Operational Infrastructure.

Guildford Pipehead



Map 6:Road Structure

C5. Development in Sub-Precinct A shall not have vehicular access from Palmer Street or Albert Street East.

C6. Development located between New Road 1 and the Lower Canal shall not have vehicular access from New Road 1.

C7. Vehicular access to lots located between New Road 1 and the Lower Canal may be provided through a shared private accessway located within a view corridor shown on map 4.

6. Heritage

Objectives

O1. To acknowledge the historically significant role the precinct and the existing Sydney Water site combined played in delivering Sydney's water supply.

O2. To provide visual continuity across the site so there are vistas into the Sydney Water site from the surplus land.

O3. Maximise public access through the site as well as adjacent to the Sydney Water boundary so that the Sydney Water function is readily apparent.

O4. To retain existing structures within the precinct to provide a connection with the character of the former use of the site.

O5. To interpret the history of the site through the retention of structures and moveable heritage items located in the precinct.

O6. To ensure the upper canal is a distinct landscape element of the site.

O7. To retain significant landscape vegetation, to allow interpretation of the site and landscape continuity between the precinct and the Sydney Water site.

Development Controls

C1. Development shall be sited to maintain significant view corridors between the precinct and the established residential area, as identified on Map 4.

C2. Roads and residential development shall be located to maximise views into the operational Sydney Water site.

C3. Moveable items located in the precinct, that contribute to the story of the site and the history of water supply in Sydney should be retained and incorporated into the landscape as sculptural elements.

C4. Existing landscape vegetation, identified as significant heritage landscape elements are to be retained in order to provide interpretation of the site and continuity between the precinct and the Sydney Water site.

Note: Map 5 details significant landscape vegetation to be retained.

C5. Public interpretation strategy for the lower canal and pipehead site shall be developed and implemented during redevelopment of the site.

C6. Development in the precinct shall be designed to follow and not disrupt the topography of the landscape.

C7. Black palisade fencing shall be erected between the residential and operational lands within the precinct.

Adaptive reuse of Building 25 structure

Note: Building 25 was originally built as a storage depot for the construction of the Warragamba Dam and relocated to Guildford.

Guildford Pipehead

C8. Part of the structure of building 25 shall be retained in order to:

- provide a significant visual landmark element that recognises the former use of the site;
- visually connect the residential lands with the continuing operational Sydney Water site; and
- interpret the former use of the Pipehead site.

C9. Any part of the structure of building 25 retained within the proposed Heritage Square may be used for general recreation or social purposes and may retain a part of the roof sheeting for sun shading.

C10. The roof character of new buildings shall integrate with, and not effect the character of the precinct.

Note: It is recommended that gable and hipped roofs are to have a pitch of 20 – 30 degrees, to match that of existing Building 25, while skillion roofs are to have a pitch of 10 degrees.

Sub-Precinct A

C11. Housing within Sub-Precinct A should include a mixture of residential flat buildings, multi dwelling housing, attached housing and detached housing on small lots.

Sub-Precinct B

C12. Housing within Sub-Precinct B should include a mixture of residential flat buildings, multi dwelling housing, attached housing and detached houses.

Sub-Precinct C

C13. Housing within Sub-Precinct C should include a mixture of multi dwelling housing, attached housing and detached houses.

Part P

Pemulwuy Residential Controls

Holroyd Development Control Plan 2013

Pemulwuy Residential

Contents

Pemulwuy Residential

Introduction

Land Covered by this Part

Land to which this Part applies includes land identified as land within the residential precinct of Pemulwuy as shown in Figures 1 and 2.

Relationship to Other Plans

Part P of Holroyd DCP 2013 shall be read in conjunction with the following Parts of Holroyd DCP 2013, which contain Objectives and Development controls that relate to development in this Part:

Part A – General Controls

Part E - Public Participation

Part F – Advertising and Signage Controls

Part G - Places of Public Worship Controls

Part H – Heritage and Conservation Controls

Part I – Child Care Centre Controls

Part R – Definitions

Pemulwuy Residential

Figure 1: Pemulwuy North Sub precinct

Figure 2: Pemulwuy South Sub Precinct

Pemulwuy Residential

1. Objectives and Vision for Pemulwuy

The vision for Pemulwuy is for a high quality public domain, incorporating the natural characteristics, ecology and heritage of the site. Sustainable development principles underlie the proposed urban outcome. While most of these objectives apply at the scale of precinct and subdivision planning, many can be applied also at the lot scale.

Objectives

O1. To ensure that development within the Pemulwuy Residential Precinct is primarily used for residential purposes and associated facilities.

O2. To provide for a range of housing types, including secondary dwellings, dual occupancies, attached dwellings, semi-detached dwellings and multi dwelling housing, in areas well served by public transport and near local shops.

O3. To allow people to carry out a reasonable range of activities from their homes while maintaining neighbourhood amenity.

O4. To allow for a variety of small scale local non-residential uses that primarily serve local residents and are compatible with the character of the living area.

O5. To allow home occupations where such activities are unlikely to adversely affect the living environment of neighbours.

O6. To prohibit development that is of an offensive, hazardous, noisy, intrusive or environmentally inappropriate nature.

O7. To allow for local open space that is accessible and well located, that promotes the use and enjoyment of local open space for both residents and the workforce, that may include elements of the natural environment, and that provides for active and passive recreation.

2. Public Open Space

2.1. Public Domain Open Space Strategy

Objectives

O1. To develop a strong and high quality network of public open spaces that includes town squares, parks and streets.

O2. To develop a public domain that links the Pemulwuy community together through open space corridors.

O3. To design the public domain at a scale that encourages pedestrian use, and is well addressed by surrounding development.

O4. To provide areas of high amenity for the local community to focus upon and use.

O5. To design the public domain within the site (comprising parks, riparian and drainage corridors, water bodies, paths, cycleways and streets) to create a unique setting and exemplar for development throughout Pemulwuy.

O6. To ensure that the design of these facilities achieves longevity of the service life of the assets, and ease of maintenance of the public domain and open space areas and the improvements located in them.

O7. To reinforce within the mixed-use centre near the Driftway Drive / Butu Wargun Drive intersection civic, cultural and recreational facilities supported by workplaces, shops and a variety of housing types.

O8. To consider the Biodiversity Management Measures.

Development Controls

C1. Locate parks to achieve views from and towards Prospect Hill.

C2. Locate parks for the amenity of the residents and to be easily accessed.

C3. Design parks for the site appropriate to their place and role.

C4. Design open spaces which:

a) are generally edged by streets. Where this does not occur, the public/private interface shall be suitably delineated;

b) are within an easy 5 minute walk from most residences;

c) are well distributed and part of a public domain network;

d) provide a distinctive focus for local neighbourhoods;

e) allow for a range of passive recreational activities;

f) are part of a hierarchical public domain network of parks and streets which interpret points of difference within the site, related to topography, site features, orientation, and aspect; and

g) may be reinforced with associated community facilities.

C5. Landscape open space areas using anti graffiti treatment and materials, including wall treatment to masonry surfaces.

C6. Design the Greystanes Creek Woodland Park and the Northern Bushland Park to provide access for Council's maintenance equipment through the provision of appropriate access points.

2.2. Trees and Ecological Habitats

Objectives

O1. To create neighbourhood identity using indigenous tree species.

O2. To enhance and maintain biodiversity by complementing other conservation initiatives.

O3. To use locally indigenous plant species, including threatened and regionally significant species, in drainage areas, streetscapes and open spaces.

O4. To conserve threatened species populations and their habitats.

O5. To create fauna movement corridors within the site and link to external ecological resources (where practicable allowing for other site uses).

O6. To reduce water and fertiliser demand.

O7. To maintain tree hazard at acceptable levels.

O8. To create an environmental corridor along Greystanes Creek.

O9. To retain and add to existing trees on Prospect Hill, consistent with the Prospect Hill Conservation Management Plan, thereby forming large stands of trees to provide a visual buffer to development when viewed from the top of Prospect Hill.

Development Controls

C1. Manage trees in accordance with Part A of this DCP.

C2. Ensure that the tree network and structure will provide a coherent wildlife corridor throughout the site from adjacent sites.

C3. Retain existing healthy trees unless there are clearly justifiable reasons for their removal and alternatives have been considered (see Part A – Protection of Existing Trees).

C4. Retain where possible existing trees consist with Figure 5 (Pemulwuy South) and Figure 6 (Pemulwuy north).), subject to future detailed design. With regard to the latter and in the interest of the development generally, retain as many trees as possible under the direction of a qualified arborist.

C5. Retain where possible trees located in areas depicted as public open space, especially where species from the Cumberland Plain Woodland and Sydney Coastal River Flat Forrest suite of species are to be preserved and augmented. For example, stands or groups of trees are located predominantly around the existing creek line, and are to be retained as part of the riparian zone adjacent to the creek where possible.

C6. Wherever possible, to use correct genotypes and collect seed from the local trees. This applies throughout the public domain. In some locations, exotic species can be used for landscape accent and shade.

C7. Clear weeds and non-natives as part of a program to re-establish native plants.

C8. Retain and add to existing trees on Prospect Hill, consistent with the Prospect Hill Conservation Management Plan, thereby forming large stands of trees to provide a visual buffer to development when viewed from the top of Prospect Hill.

C9. Replace the predominant pine forestation of Pemulwuy with native planting.

C10. Preserve and protect any scarred tree located in Pemulwuy , in consultation with Aboriginal/ Archaeological advice.

C11. Ensure tree species selection is consistent with Figure 8 (Pemulwuy North) and Figure 22 (Pemulwuy South).

C12. Ensure that the hierarchy of street trees reflect the scale of the streets, design intent, safe usage of trees and building size.

C13. Retain scattered trees of landscape and ecological value in the private domain.

C14. Apply the following process for tree selection and establishment for the site, whichever is the lesser:

a) Select the most appropriate tree species based on the suitability of the site; in particular, species which are resilient to storm damage (given appropriate establishment and maintenance).

b) Ensure that tree plantings mature with the highest possible root and structural strength by appropriate plant selection, procurement, site preparation, establishment and maintenance.

c) Design the public domain to incorporate sufficient space to allow for tree establishment, where proposed. This includes the provision for the development of deep structural roots.

C15. Manage retained native trees within the public domain by integrating periodic hazard assessment (undertaken by a qualified arborist) with the implementation of appropriate arboricultural treatments to maintain tree hazard at acceptable levels. Ensure frequency of hazard assessments is 12 monthly or at a time when significant changes in the use of the site are proposed, whichever the lesser.

C16. Apply the following process for tree removal from the site:

a) Where possible, trees that may need to be removed are to be transplanted in the core riparian zone or outer protection zone of the Greystanes Creek Corridor.

b) In addition, trees to be removed are those that fall within proposed road corridors, within or close to building foot prints or those identified as structurally unsound, dangerous or inappropriate for retention as outlined in the arborist report. The total extent of these additional trees to be removed is to be determined as part of the design development phase of the project.

c) Confirm the final extent of trees to be removed by a qualified arborist. and

d) Ensure tree removal involves the complete removal from site of the tree and root system. Roots less than 50mm diameter may remain.

Pemulwuy Residential

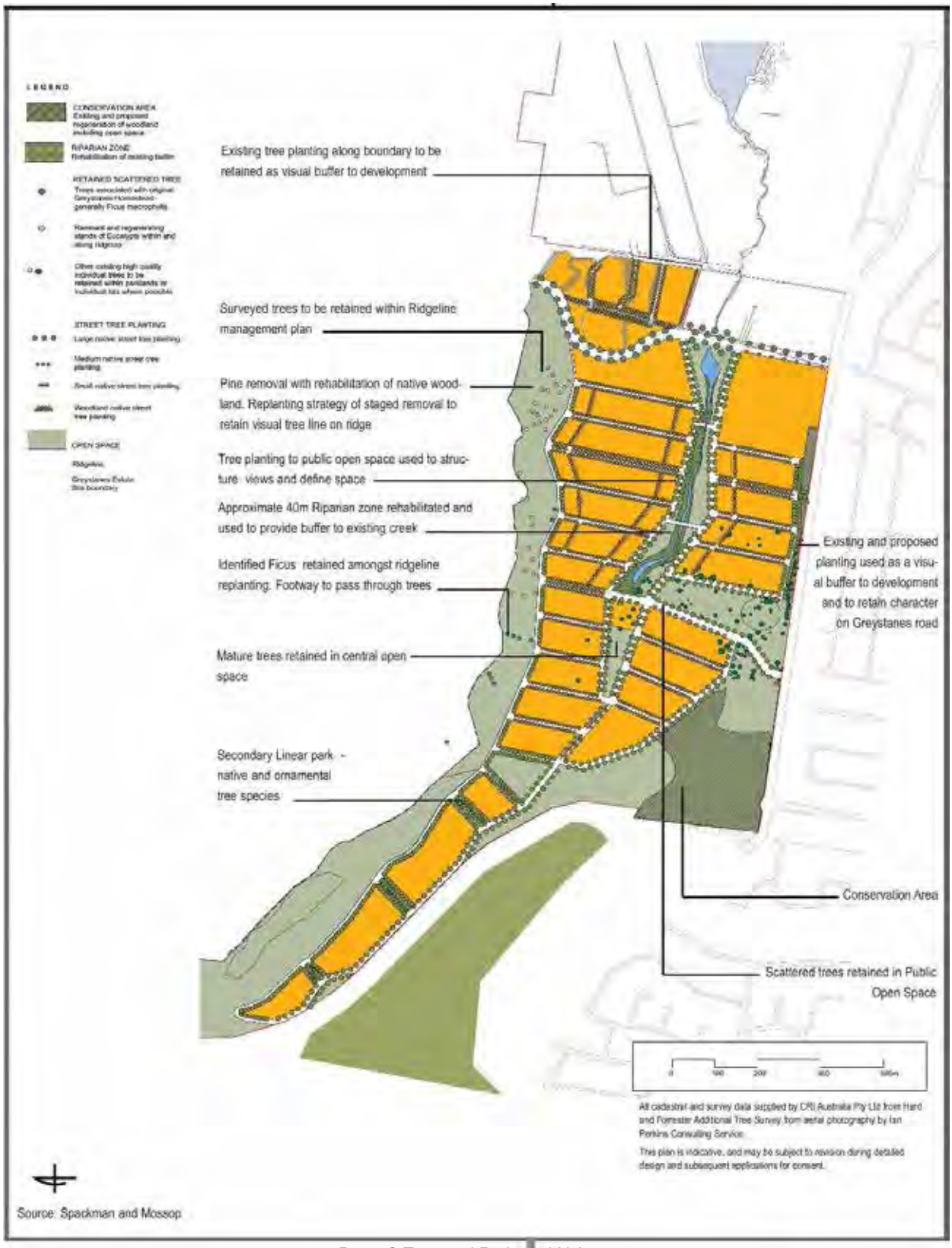


Figure 3: Trees and Ecological Habitat

Pemulwuy Residential

Figure 4: Proposed Vegetation Strategy

Pemulwuy Residential

Figure 5: Existing individual Tree Strategy

Pemulwuy Residential

Figure 6: Existing Vegetation/Tree Strategy

2.3. Public Open Spaces- Pemulwuy North

a) Greystanes Creek Woodland Park

Objectives

O1. To provide the Greystanes Creek Woodland Park as a linear Environmental Protection area, with some open space to protect and enhance the ecological riparian outcomes on the site.

O2. To service the community's recreational needs through provision of distinct areas.

O3. To locate the Woodland Park centrally and overlooked on both sides by houses to improve passive surveillance.

O4. To visually link the park clearly with the adjacent street system, enhanced by tree avenues and vistas to control views and enclose spaces.

O5. To enhance biodiversity and ecological processes on the site through the provision of a vegetated environmental protection zone.

Development Controls

C1. Greystanes Creek Woodland Park has been completed, and provides:

a) a vegetated riparian zone (consisting of a core riparian zone and an outer protection zone) in accordance with the agreement reached between Stockland and the Department of Planning (refer to Figure 7);

b) rehabilitation of the existing core environmental protection zone and outer protection zone and identified areas of Sydney Coastal River Flat Forest and Cumberland Plain Woodland;

c) a diversity of local native trees, shrubs and groundcover species in the core riparian zone, as detailed in the Vegetation Management Plan/Bushland Management Plan for the Greystanes Creek Woodland Park;

d) a coherent wildlife corridor linking surrounding open spaces and ecological habitat;

e) lighting at key points;

f) sedimentation ponding;

g) open amenity areas, such as a picnic area on the eastern side of the lake, seating and small areas of hard standing/paving;

h) unstructured recreation areas;

i) dedicated pedestrian/cycle paths, generally in the outer protection area; and

j) public art at appropriate locations and of an appropriate nature.

Pemulwuy Residential

Figure 7: Riparian Corridor Plan- Greystanes Creek Woodland Park

b) Prospect Hill State Heritage Registered area

The Prospect Hill State Heritage Registered area is listed on the NSW State Heritage Register and the Register of the National Estate. The area also includes land along the ridgeline south of Butu Wargun Drive, plus an identified curtilage.

The part of the SHR area south of Butu Wargun Drive, is addressed in the section on Prospect Hill under Public Open Space Precincts of Pemulwuy South.

Objectives

O1. To retain the open grass hill character as open space and preserve the distinctive ridgeline.

O2. To consult with local community groups to ensure that the future proposal reflects the historical relevance of the past.

O3. Because the topography of the ridgeline lends itself to prime viewing, to locate these within the pedestrian network, consistent with the Prospect Hill Heritage Landscape Study & Plan and the Prospect Hill Heritage Interpretation Plan.

Development Controls

C1. Ensure all development within Prospect Hill is informed by the following documents:

- Prospect Hill Conservation Management Plan (Conybeare Morrison; 2005)
- Prospect Hill Heritage Landscape Study & Plan (NSW Government Architect's Office; 2008)
- Prospect Hill Heritage Interpretation Plan (MUSEcape; 2009).

c) Village Green

"Village Green " is located adjacent to the north-west corner of Butu Wargun Drive and Driftway Drive, Pemulwuy. This location is central to the residential developments and community and retail facilities of Pemulwuy for optimum accessibility.

Objectives

O1. To provide landscape and heritage interpretation which protects and interprets the natural, Indigenous and cultural significance of the Prospect Hill SHR area.

O2. To open views in to the Greystanes Creek Woodland Park from the entry road, adding to the feeling of a well connected open space network.

O3. To provide a hub for activity, close to the village centre.

Development Controls

C1. Village Green has been completed, and provides:

a) a paved area for seating/meeting with an open pavilion structure;

b) shade coverage and a play area for toddlers and young children allowing for parental supervision;

c) amenity lighting at key points;

d) low profile fencing around some areas of the park;

e) a large area of flat maintained turf for informal and unstructured recreation (approximately half a playing field for informal ball games). The topography is graded

around the edges to define the recreation space and the interface with the road; and

f) public art at appropriate locations and of an appropriate nature.

d) Northern Bushland

The "Northern Bushland" area is located north of the detention basin within the identified potential dam break flood hazard zone. The area contains the creek and identified ecological communities/trees of varying quality. An opportunity arises to create public open space in the form of unstructured open space with an ecological feel. See the Objectives below for three distinct bushland character types required.

Objectives

O1. To retain and enhance the existing creek line as a natural system through a vegetated riparian zone.

O2. To service the community's passive recreational needs.

O3. To provide a safe recreational environment.

Development Controls

C1. Vegetate in accordance with the Vegetation Management Plan/Bushland Management Plan prepared for the Northern Bushland Park.

C2. In the vegetated riparian zone, provide a diversity of local native trees, shrubs and groundcover species.

C3. Retain existing trees, and regenerate by planting further native bushland species.

C4. Provide a 2.5-3.0m pedestrian/cycleway through the area. Locate the pathway to facilitate a rider experience of the range of habitat types and the sequence of open and enclosed spaces.

C5. Where practicable, provide pedestrian/cycle links to the north using existing culverts.

C6. Within the open space area, provide activity nodes for a playground, fitness equipment/ sculpture/ seating and for environmental interpretation.

C7. Regenerate areas of bushland to protect existing trees and provide a buffer zone to the M4.

C8. Provide limited open maintained grassland with pedestrian access in accordance with Figure 8.

C9. Provide adequate lighting at key points.

Note : Refer to Figure 8 for the agreed riparian corridor for the Northern Bushland Park and Figures 8-9 for indicative concept plans.

Figure 8: Concept plan for the Northern Bushland Park

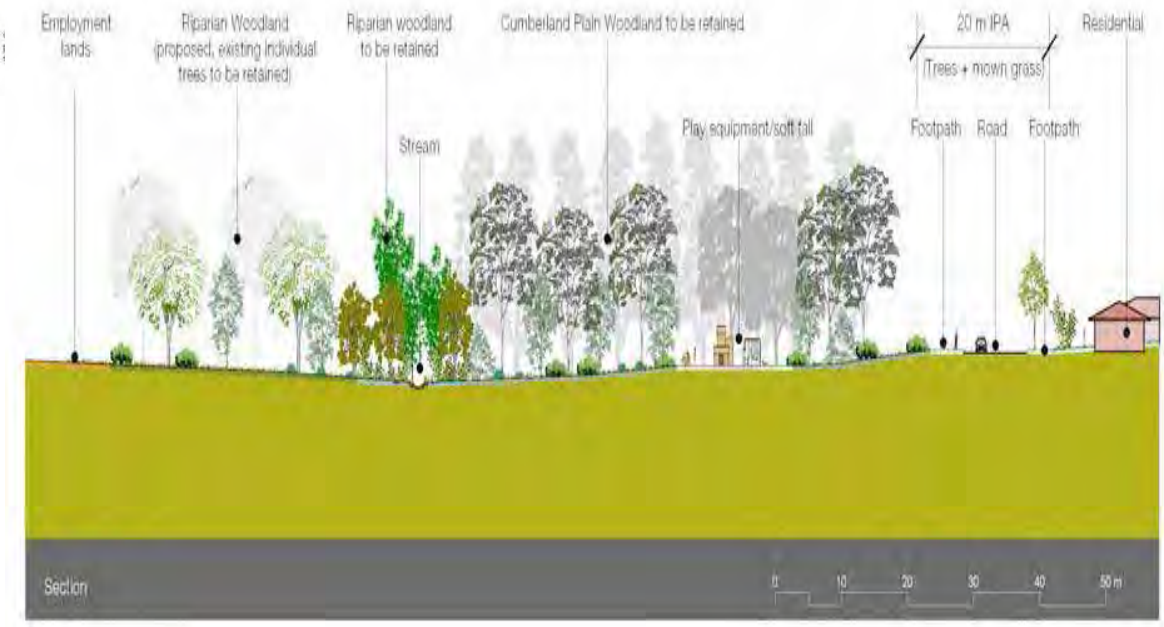


Figure 9: Concept Section A for the Northern Bushland Park

e) Lakeside Area

Objectives

O1. To provide visual amenity for residents of Pemulwuy.

O2. To enhance the existing flora and fauna species.

O3. To sensitively locate circulation and view points in order to minimise disturbance while providing the opportunity to observe and appreciate wildlife.

O4. To service the community's recreational needs.

O5. To provide a safe recreational environment.

Development Controls

C1. Create viewpoints overlooking the lake, linked by a cycle/pedestrian route around it.

C2. In the design of embankments and their surrounds, ensure safety around the water's edge. Fully investigate safety issues relating to the dam.

C3. Locate the cycle and pedestrian route along the top of the dam wall offering views up and down the creekline.

C4. Provide macrophyte zones for water quality treatment with baffling structures to direct flow.

C5. Provide adequate lighting at key points.

C6. Provide public art at appropriate locations of an appropriate nature.

Note: Refer to Figure 10 and 11 for an illustrative view and concept plan of the area.

Pemulwuy Residential

Figure 10: Perspective of Southwest area of the lakeside

Figure 11: Concept plan for the southwest area of the lakeside

f) Neighbourhood Pocket Parks (Pemulwuy North)

Objectives

O1. To provide unstructured open spaces.

O2. To provide key pedestrian nodal points and connections.

O3. To provide a safe recreational environment.

Development Controls

C1. Define park tree avenues with the main aspect being in an easterly direction.

C2. Plant shrubs and trees of an ornamental character with larger species providing shade.

C3. Where the park is fronted by a pedestrian footpath, clearly delineate the public/private domain through the use of front fences.

C4. Use front verandas or porches in adjacent development to encourage use and overlooking.

C5. Create opportunities for play settings and seating.

C6. Provide appropriate lighting.

C7. Consider public art as part of the overall design.

Note: Refer to Figures 12 and 13 for an illustrative view and concept plans.

Figure 12: Perspective of Neighbourhood Pocket Park

Pemulwuy Residential

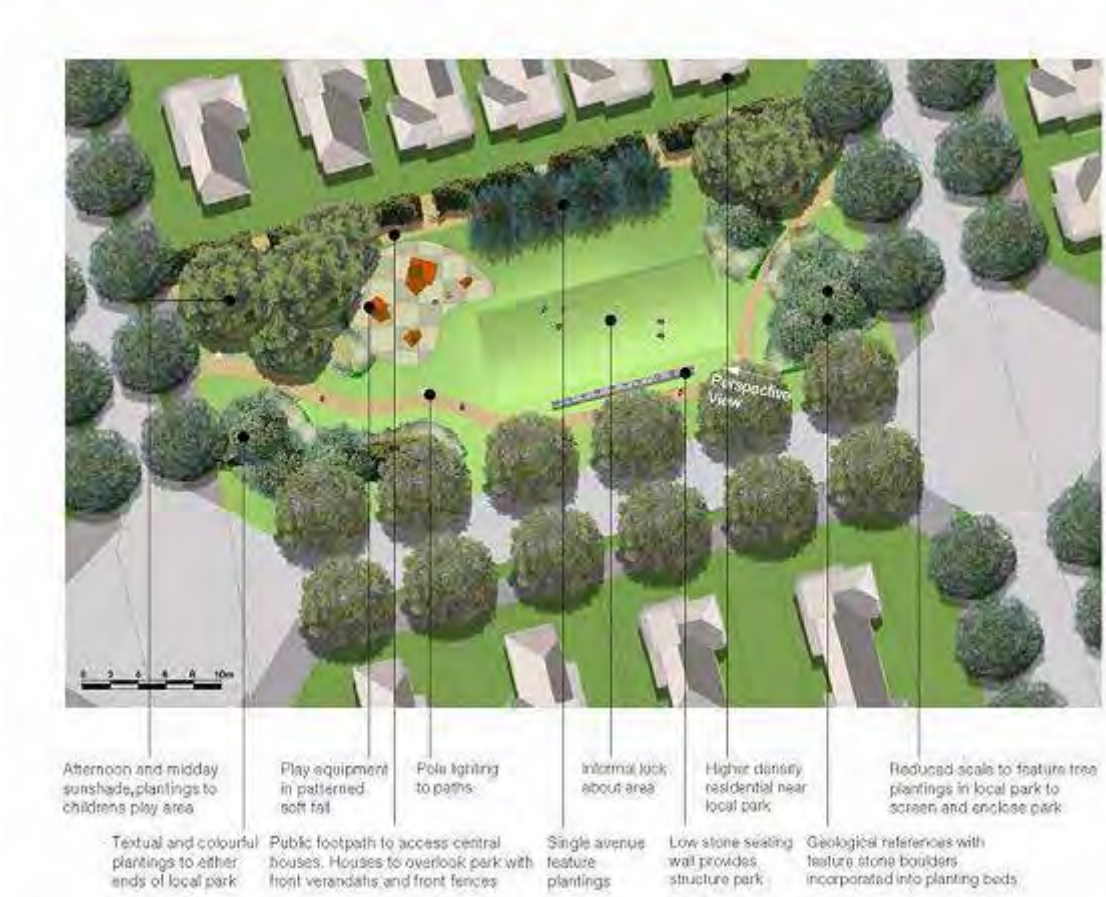


Figure 13: Concept plan of Neighbourhood Pocket Park

2.4. Public Open Spaces- Pemulwuy South

The Public Open Space Precincts of Pemulwuy south of Butu Wargun Drive (with a small exception in the north-west corner) are identified below in Figure 14.

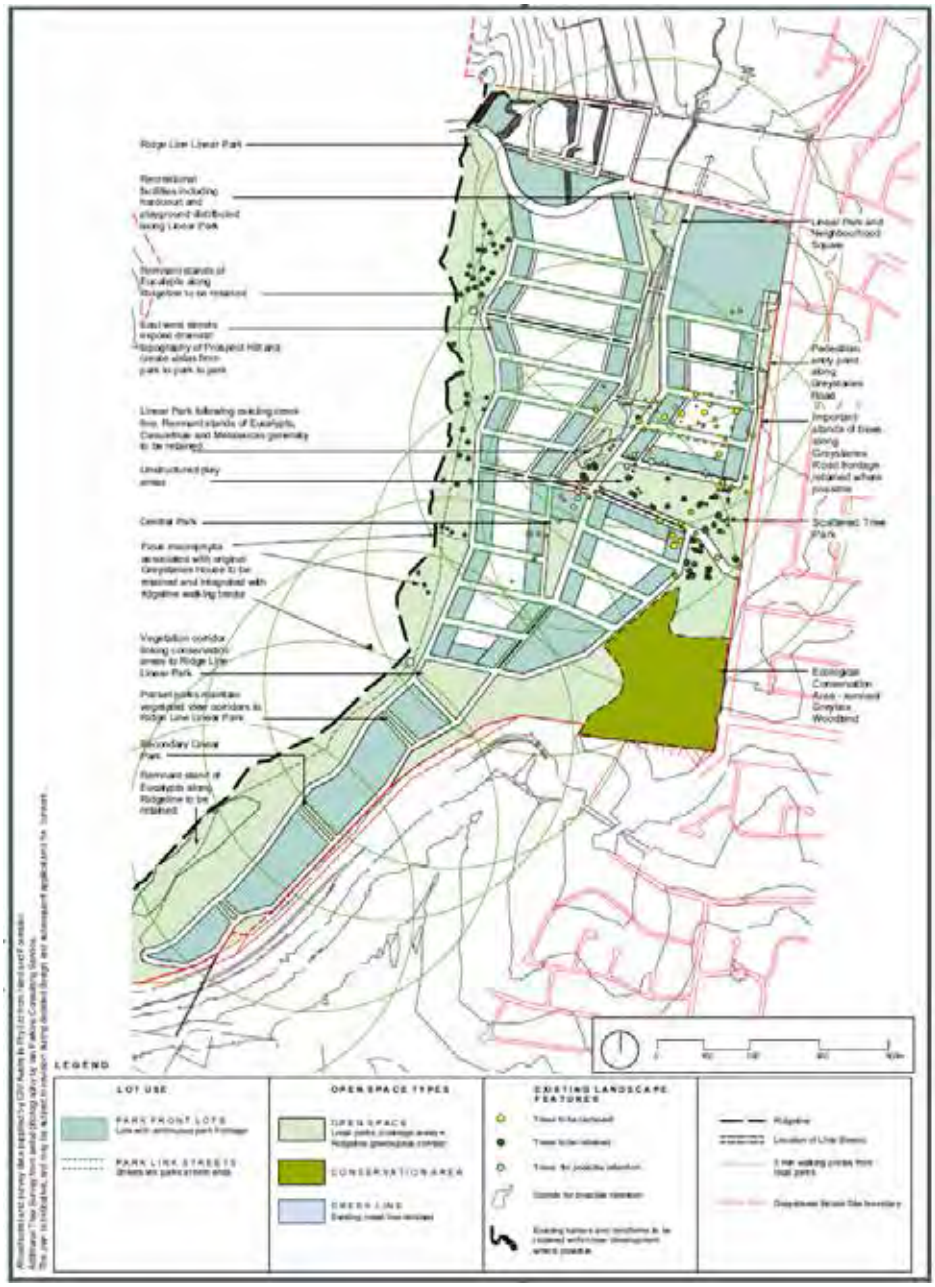


Figure 14: Open Space precincts of Pemulwuy South

a) Greystanes Creek Linear Park (south of Butu Wargun)

Objectives

O1. To service the communities' recreational needs by providing three distinct areas of varying size:

- A neighbourhood square;
- riparian buffer/open amenity; and
- structured recreation.

O2. To make strong visual links with the adjacent street system, enhanced by tree avenues and vistas to control views and enclose spaces.

Development Controls

C1. Within Nelson Square, provide for:

a) a paved area for seating/meeting;
b) external café seating;
c) ornamental tree and shrub planting;
d) historical installation/public art;
e) interactive edge to existing creek line;
f) development as a visual gateway into site from east/west link street;
g) shade coverage and play area for toddlers and young children allowing for parental supervision; and
h) lighting at key points.

C2. Ensure that the riparian buffer/open amenity zone dominates the secondary area, defining the extent of open space and creating a distinct character to the park by providing:

a) areas of open space for informal/passive recreation;
b) seating;
c) areas of hardstanding/paving;
d) connectivity through the internal area of the park to pedestrian/cycle links with the wider Estate;
e) rehabilitation of existing riparian buffer zone.

C3. For structured activity areas, provide two half-size multi-use hardcourts that are central to the overall layout of development. Use strategic buffer planting to reduce noise and visual disturbance to immediate residential areas.

b) Central Park

Development Controls

C1. In relation to the Linear Park, ensure that Central Park:

a) is a smaller scale suitable for passive recreation;
b) provides a space to service the mixed use buildings and bus stop;
c) has potential for external café restaurant seating;

d) provides a combination of paved areas, maintained grass and ornamental planting to create a character of small scale; and

e) contains high quality eucalyptus trees, that add a distinct character and are pivotal to the overall design of the central park.

c) Scattered Tree Park

Objectives

O1. To retain wherever possible the existing trees of ecological or landscape values in this area.

O2. To form a link between the creekline vegetation and the narrow strip of Cumberland Plain Woodland which borders Greystanes Road.

O3. To protect known sites of Aboriginal heritage.

O4. To provide an unstructured recreation facility for residents.

O5. To maintain and enhance strong links to Grey Box Reserve.

O6. Ensure that activities and uses of this park do not to impinge on Grey Box Reserve.

O7. Generally, to provide low-key picnic and recreation activities for in this park.

Development Controls

C1. Ensure that new vegetation is primarily Cumberland Plain species.

C2. Enclose the open space to the eastern end with areas of regenerated bushland.

C3. Plant and screen known aboriginal sites to protect their location.

C4. Provide continuous shared access from Linear Park through Scattered Tree Park to Grey Box Reserve.

d) Secondary Linear Parks

Objectives

O1. To locate secondary parks close to residences.

O2. To provide for unstructured activities.

O3. To create a pedestrian/cycle link from the Prospect Hill ridgeline to the north-south connector road.

O4. To provide visual amenity in the public domain.

Development Controls

C1. Locate secondary parks within five minutes walking distance of the immediate community.

C2. Define parks by tree avenues, with the main aspect being in an easterly direction. (Figure 15 shows a concept design for these parks and Figure 16 shows a section through the Secondary

Linear Park.)

C3. Enhance aspect by framing and opening up views in an easterly direction.

C4. Plant shrubs and trees of an ornamental character.

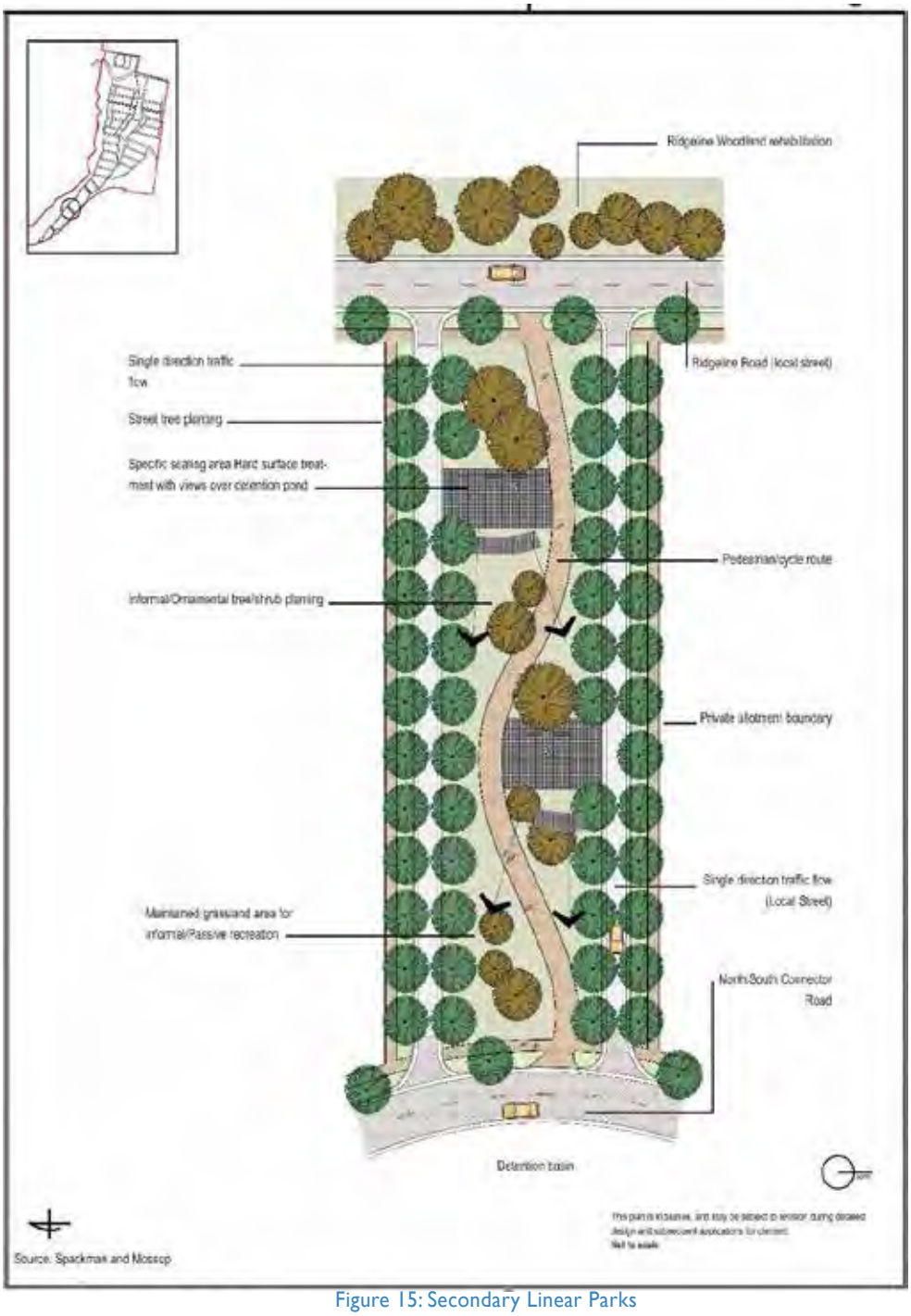


Figure 15: Secondary Linear Parks

e) Prospect Hill Park

The Prospect Hill State Heritage Registered area is listed on the NSW State Heritage Register and the Register of the National Estate. The area also includes land along the ridgeline south of Butu Wargun Drive, plus an identified curtilage.

The part of the SHR area north of Butu Wargun Drive, is addressed in the section on Prospect Hill under Public Open Space Precincts of Pemulwuy North.

Objectives

O1. To provide landscape and heritage interpretation which protects and interprets the natural, Indigenous and cultural significance of the Prospect Hill SHR area.

O2. To consult with local community groups to ensure that development reflects the historical relevance of the past.

O3. Because the topography of the ridgeline lends itself to prime viewing, to locate these within the pedestrian network, consistent with the Prospect Hill Heritage Landscape Study & Plan and the Prospect Hill Heritage.

Development Controls

C1. Ensure all development within Prospect Hill (Marrong Reserve) is to informed by the following documents:

- Prospect Hill Conservation Management Plan (Conybeare Morrison; 2005)
- Prospect Hill Heritage Landscape Study & Plan (NSW Government Architect's Office; 2008)
- Prospect Hill Heritage Interpretation Plan (MUSEcape; 2009).

Pemulwuy Residential

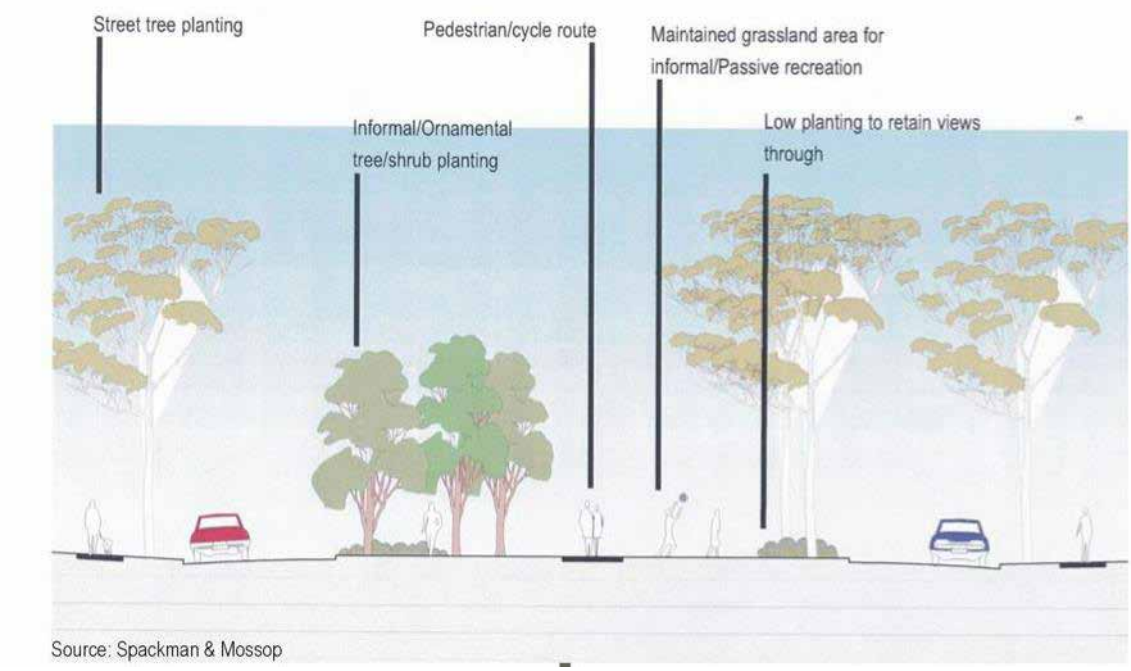


Figure 16:Section through secondary linear park

2.5. Wet Basins

Objectives

O1. To integrate water storage requirements within Pemulwuy South into a safe and natural setting.

O2. To design the wet basin and surrounding area as a feature within the landscape.

O3. To retain long distance views from the Secondary Linear Parks and promote casual surveillance.

O4. To be accessible for passive recreation only.

O5. To ensure safety is of prime importance.

Development Controls

C1. Control water levels to ensure safety is preserved.

C2. Secure deeper areas of the basins with a buffer of planting.

C3. Ensure that edge treatment of the Basins is natural, with riparian planting, shrubs and trees.

C4. Use local stone to set the pond into the existing topography.

C5. Keep vegetation to a minimum where it interferes with long distance views from the Secondary Linear Parks and casual surveillance.

Note: Figure 17 and 18 provides an illustrative layout to the wet basins in the Southern Residential Lands

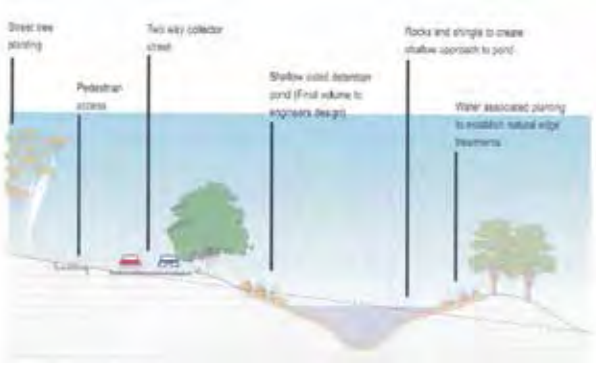


Figure 17: Section B-B through Wet Basin

Figure 18: Wet Basin Landscape Treatment

2.6. Grey Box Reserve

Objectives

O1. To conserve areas of high Potential Archaeological Deposits (PAD) and significant known artefacts or sites.

O2. To define the boundary of the bushland conservation area known as Grey Box Reserve.

O3. To incorporate areas of potential archaeological deposits and representative elements of the cultural landscape.

O4. To manage the impacts from recreation and access on the bushland ecology.

O5. To educate the local community in the pre-European history of the site.

Development Controls

C1. Retain the area on site that most closely reflects the pre-European cultural landscape. Refer to Figure 19.

C2. Limit recreational opportunities in the conservation area to passive activities.

C3. Prepare a plan of management detailing measures to appropriately manage the Aboriginal cultural heritage. This should be prepared in consultation with the local Aboriginal community, the National Parks and Wildlife Service (NPWS) and Council. An open artefact scatter representative of those identified elsewhere within the survey area, is shown in Figure 19 (Archaeological and Excavation Sites).

Note:

- Council will not consent to development within the area indicated by blue dashed line in Figure 19 below without the concurrence of the Heritage Office. Refer to the figure below. under Solar Access and Sun Shading for further Lot Orientation Principles
- Develop a suitable educational program in consultation with the local Aboriginal community, National Parks and Wildlife Service and Council.
- Ensure that interpretive signs and other educational material are general in nature and do not draw attention to any physical aspects of the Aboriginal cultural heritage. section through the wet basin.

Figure 19: Bushland Conservation Area (Grey Box reserve)

3. Subdivision

3.1. Geotechnical Considerations

Objectives

O1. To characterise site subsurface and geotechnical conditions based on test pit, borehole and laboratory data.

O2. To provide pavement thickness designs for the proposed road network. A range of subgrade conditions have been considered including the use of lime stabilised subgrade to control potential excessive insitu moisture at the time of construction and to improve subgrade strength and reduce pavement cover requirements.

O3. To provide guidance on earthworks requirements for proposed roads, residential lots and other civil works.

O4. To provide assessment of lot classifications in accordance with AS2870-1996 "Residential Slabs and Footings", together with recommendations on footings.

O5. To ensure that all designs for roads and pavements consider the impacts of soil salinity, soil sodicity, sulphate aggressive soils, dispersive soils and saline groundwater.

O6. To minimise disturbance to natural hydrological systems as a result of development, and to provide for appropriate management of land affecting the process of salinisation, or affected by salinity.

O7. To prevent damage to buildings and infrastructure caused by salinity.

Development Controls

C1. Develop road and pavement designs in accordance with the guidelines contained in the "Site Investigations for Urban Salinity", "Roads and Salinity" and "Building in a Saline Environment" (DIPNR, 2003).

C2. Design pavements on natural subgrades for CBR values in the expected range from about 2.5% to 4.5%, for which pavement thicknesses of about 300mm to 500mm would be required. Excessively wet natural subgrade may necessitate a further 250mm to 400mm thickness of subgrade replacement. Review engineering plans for each staged development and prepare a specific pavement design in accordance with Council's requirements.

C3. Design pavements on natural subgrade stabilised by the insitu addition of lime for a CBR value of 10%, for which pavements thickness of about 250mm to 300mm would be required. Provided lime stabilisation is carried out to a depth of about 300mm to 350mm, it is anticipated that the need for conventional subgrade replacement (of excessively wet subgrade) would be unlikely.

C4. Carry out earthworks for pavement construction, lot filling and other civil works in accordance with Council's specifications for Subdivisions and Development and/or AS3798-1996 "Guidelines on Earthworks for Commercial and Residential Developments". Compaction control for these works should also be in accordance with the above Standard.

C5. Assess AS2870 classifications for all lots and document findings in a report prepared by the

geotechnical consultant towards the completion of each staged development.

C6. Minimise the impact of the proposed development on local and regional salinity processes.

C7. Minimise the impact of salinity on the proposed development.

3.2. Block and Lot Structure

Objectives

O1. To design blocks and subdivisions that support and relate to the public domain.

O2. To efficiently utilise developable land.

O3. To provide for a diversity of housing choice.

O4. To minimise disturbance to natural hydrological systems as a result of development.

O5. To provide for appropriate management of land affecting the process of salinisation, or affected by salinity.

O6. To prevent damage to buildings and infrastructure caused by salinity.

O7. To design building blocks and lots to minimise cut and fill and retaining walls.

O8. To consider all relevant site constraints, including location of services, easements, available access, topography, privacy and solar orientation.

O9. To create a comfortable home, structure blocks to maximise the natural characteristics of an allotment. This includes taking into account:

- aspect,
- views,
- existing slope,
- trees,
- predominant breezes, orientating living rooms to the north, and
- drainage & flooding potential.

O10. To subdivide blocks to create a lot structure that anticipates the siting of dwelling types that support the public domain.

O11. To subdivide blocks to create a lot structure that anticipates the siting of dwelling types incorporating solar design principles.

O12. To increase the efficiency of dwellings and external spaces and minimise residual parcels.

O13. To maintain views to and from Prospect Hill.

Development Controls

C1. Design subdivision blocks which:

a) value and efficiently use urban land - do not create difficult residual spaces and awkward boundary conditions;

b) are capable of flexibility for future development involving re-subdivision or amalgamation;

c) actively seek to ensure retention of all existing trees wherever possible;

d) create a block structure that orientates streets to link public open spaces. For example, implement the principles shown in Figure 16 to accommodate pedestrian travel in the public domain, with urban street block dimensions generally within the following maximum dimensions :

- Length - less than 250 metres or,
- Depth - less than 80 metres deep or less than 40 metres deep in conjunction with little streets.

C2. Maximise the number of allotments in areas with the greatest amenity including those areas close to retail/community facilities, public transport and along park frontages.

C3. Maximise the number of allotments addressing streets in the southern part of each block to increase the number of dwellings with northerly aspect to rear living rooms and gardens. Refer Figure 21 below.

C4. Design lots which:

a) Have a generally orthogonal lot geometry to increase efficiency of dwellings and external spaces and minimise residual parcels;

b) Accommodate a variety of housing types to suit different household mixes and sizes;

c) reflect landscape features such as slope and waterways by addressing storm water run off, the opportunity for views and breezes and reduction in the height of retaining walls;

d) achieve dwelling units oriented for optimal solar access, including the use of eaves, window awnings and screens that contributes to a comfortable living environment;

e) maximise the number of allotments addressing streets to the south to increase the number of dwellings with northerly aspect to rear living rooms and gardens;

f) align the setback to the front of the dwelling with the facades of adjoining dwellings on the street.

g) create lots within the Pemulwuy South precinct in accordance with the Lot Size and Frontage Width ranges for each dwelling type as specified for the Pemulwuy South precinct.

C5. Design corner lots to address both street frontages.

C6. Maximise solar access with either east-west lots or north-south lots, with special attention to lots that are on the south side of the street;

C7. For East-West orientated Lots in particular:

a) Provide generally wider frontages to lots addressing the Prospect Hill to accommodate dwellings with modulated side setbacks and courtyards to maximise solar access.

b) Provide generally wider frontages to lots addressing streets to the north to accommodate passive solar design in future dwellings.

c) Provide uniform scale, height, setbacks and consistent architectural character to dwellings addressing open spaces to reinforce the public domain.

d) Create corner lots that accommodate secondary street setbacks and allow dwellings to reinforce their prominent position and address both primary and secondary street frontages.

e) Within the Pemulwuy South precinct, generally provide wider frontages to lots addressing

Greystanes Road and Hyland Park where the Estate meets existing suburban areas.

C8. For North-South orientated Lots in particular:

a) Coordinate cut and fill and finished levels between lots to provide equitable access to solar access and outlook.

b) Massing of dwellings should respond to existing site falls and topography.

c) Locate parking areas on the southern side of dwellings where possible.

d) Create corner lots with adequate dimensions that allow dwellings to accommodate secondary street setbacks, respond to both street frontage and mark important corners in the subdivision.

Notes:

- Applications for subdivision of land into less than 300m^2 lots parcels are Integrated Housing developments, and are subject to provisions set out in the following section on Coordinated Development and Integrated Housing Sites; and
- Topographically steep areas are generally considered sites for Coordinated Development and are subject to provisions set out in the following section on Coordinated Development and Integrated Housing Sites.
- Applications for Coordinated Development are subject to provisions set out in the following section on Coordinated Development and Integrated Housing Sites.

Pemulwuy Residential

Figure 20: Typical Subdivision

3.3. Cut and Fill at Subdivision

Objectives

O1. To minimise cut and fill.

O2. To coordinate cut and fill between all lots to provide equitable access to sunlight, outlook and privacy to all dwellings.

O3. To ensure unimpeded natural groundwater flow.

O4. To protect the geotechnical integrity of lots, including adjoining lots.

Development Controls

C1. On cross-sloped land, ensure side boundary cut and fill (and associated retaining wall) at subdivision stage is no greater than 900mm (Pemulwuy South).

C2. On front-to-back-sloped land, ensure rear boundary cut and fill (and associated retaining wall) at subdivision stage is no greater than 1.5m, to reduce front to back lot grades. No further rear boundary retaining walls are permitted (Pemulwuy South).

C3. Limit retaining walls in the front setback to 1m in height, or tiered in sections of no more than 1m with at least 0.5m width landscaped separation between wall tiers.

a) Coordinated Development and Integrated Housing Sites

Topographically steep areas indicated in Figures 21 & 22 are considered sites for Coordinated Development.

Integrated Housing developments are applications for subdivision of parcels of land into less than 300 m².

Objectives

O1. To ensure that the design of dwellings on steep sites, noise affected and small lots is carried out in an architecturally consistent and integrated manner.

O2. To ensure that the key focuses are a high quality streetscape, a strong neighbourhood character and residential amenity.

O3. To ensure that the built form responds to the topographical constraints, particularly the slope and orientation of each allotment.

O4. To ensure that new development provides appropriate residential amenity, particularly with respect to visual privacy, and the relationship between dwellings.

O5. To ensure that new development provides appropriate residential amenity, particularly with respect to solar gain to each allotment and the relationship between dwellings.

Note: Address these objectives during the subdivision application stage in particular.

Development Controls

C1. Design dwellings on Integrated Housing sites as a unified group of buildings with consistent alignments, articulation, material selection and architectural character.

C2. For Coordinated Developments, coordinate side boundary setbacks, building envelopes,

finished floor levels and cut and fill between all lots to provide equitable access to sunlight, outlook and privacy to all dwellings at the subdivision stage where possible.

C3. Where side and rear boundary retaining walls intersect, ensure that the maximum height difference between the lowest bottom of wall and highest top of wall is 2.4m.

C4. Council may consider variations to the controls within this DCP on Coordinated Development sites where applicants can demonstrate compliance with the objectives of the controls.

Lots with Cross Slopes

C5. The subdivision layout must incorporate wider lots on the steeper sections of the site.

C6. Narrower lots may be considered where it is proposed to subdivide the land as integrated development.

C7. Boundary cut or fill and retaining walls are to be constructed at subdivision stage no greater than 900mm , unless otherwise stated.

C8. Boundary retaining walls which extend beyond the front wall of the building must not be higher than 600mm (Pemulwuy South).

C9. Preliminary finished ground levels are to be constructed at subdivision stage.

Lots with Front to Back Slopes - Pemulwuy South

C10. Rear boundary cut or fill and retaining walls of maximum 1.5m in height are to be constructed at subdivision stage of the development to reduce front to back lot grades.

C11. No further rear boundary retaining walls are permitted. and

C12. Preliminary building pad levels shall be constructed at subdivision stage which provide for a minimum floor level split of 1m or as appropriate to facilitate split level house designs. See Section 4.2 - Elevated Sites (Steep Land) in Pemulwuy for requirements for cut and fill within building envelopes on front-to-back slopes.

Pemulwuy Residential

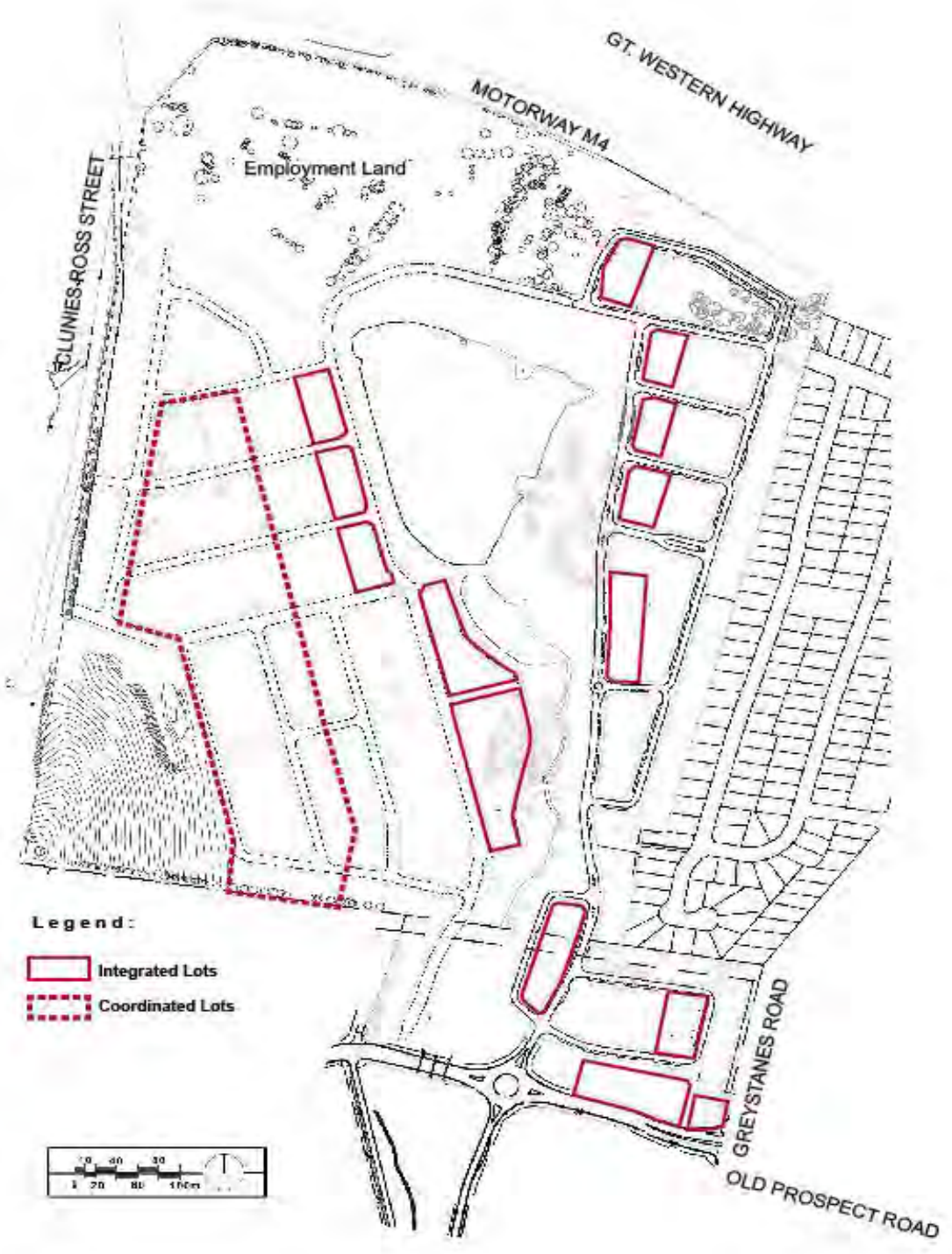


Figure 21: Integrated and Coordinated Sites in Pemulwuy North

Pemulwuy Residential

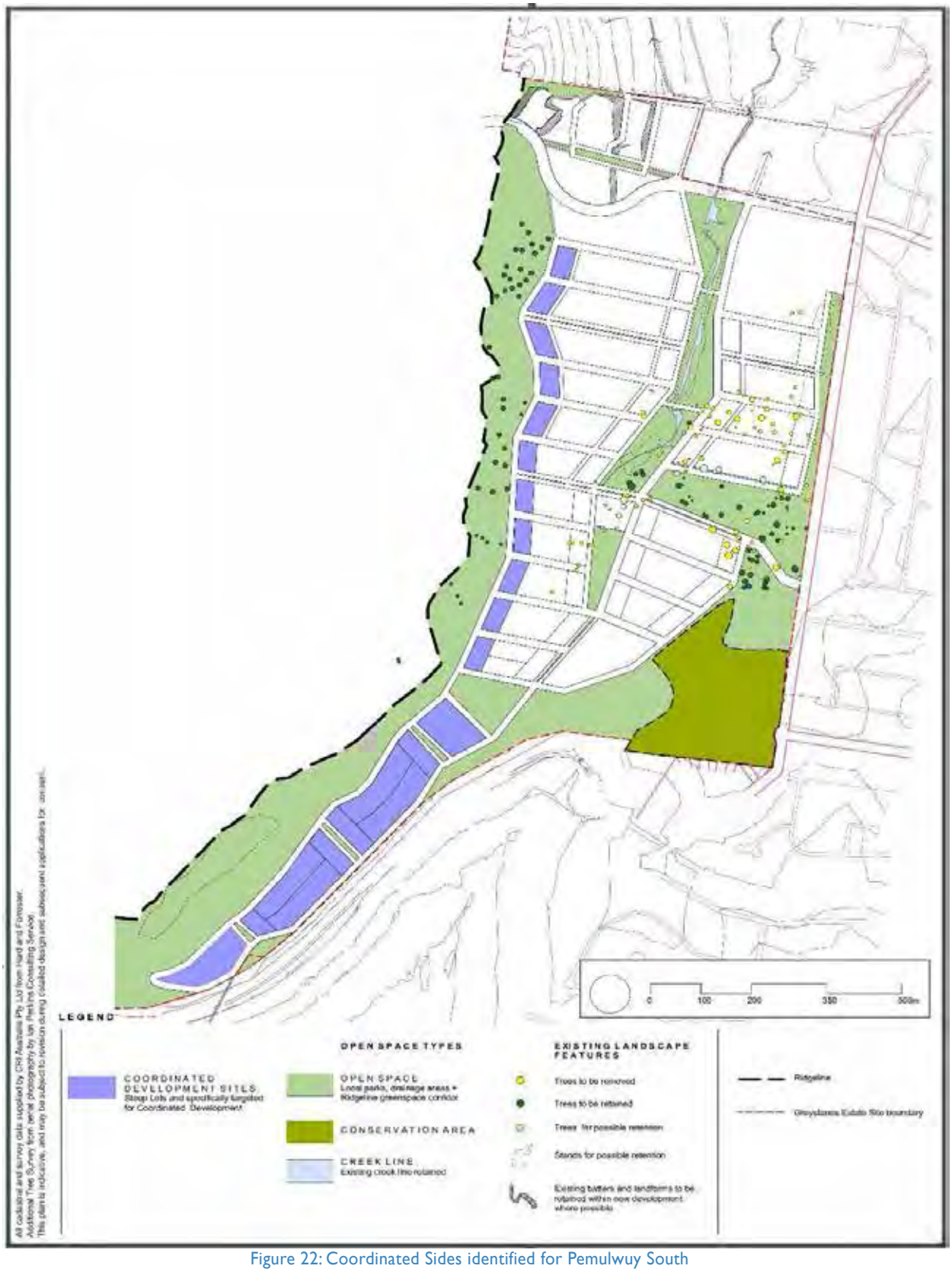


Figure 22: Coordinated Sides identified for Pemulwuy South

4. Building and Siting Requirements for Residential Development

4.1. Architectural Character

Objectives

O1. To interpret the subdivision pattern through building types.

O2. To minimise cut and fill and not impede natural groundwater flow.

O3. To reinforce the public domain, create attractive streetscapes with strongly defined parks and open spaces.

O4. To provide a high level of amenity for occupants.

O5. To maximise casual surveillance of dwellings from the street and of the street from the dwellings, to promote safer streets.

O6. To develop building types that minimise potential salinity problems.

O7. To provide for a variety of housing types and mix.

O8. To adopt a contemporary design form.

O9. To be responsive to the local climate, environment and lifestyle of western Sydney .

O10. To improve the outlook and surveillance of streets and open spaces .

O11. To develop a diverse range of housing styles of high quality, ranging from single lots to townhouses, integrated housing developments and apartments.

O12. To provide for a variety of occupants and ages, and provide a more sustainable life cycle model than conventional monocultural housing development.

Development Controls

C1. Provide a variety of building types and housing types throughout Pemulwuy in accordance with Figures 23 [Pemulwuy North] and 24 [Pemulwuy South].

C2. Accommodate a range of innovative dwelling types including single dwellings, home offices and home/work spaces.

C3. Design, model and articulate dwellings with a consistent relationship to the street and to each other.

C4. Design with a simplicity of building elements that create a contemporary façade. Avoid historical reproduction styles and/or mixtures of styles such as Federation, Edwardian, Colonial, Victorian and Georgian.

C5. Modulate side boundary setbacks and incorporate courtyards, atria, toplights and the like to maximise solar access to dwellings.

C6. Prefer elevated finished floor levels and entries, balconies and street elevations to improve outlook and surveillance of streets and open spaces.

C7. Design corner dwellings to reinforce their prominent location and address both primary and

Pemulwuy Residential

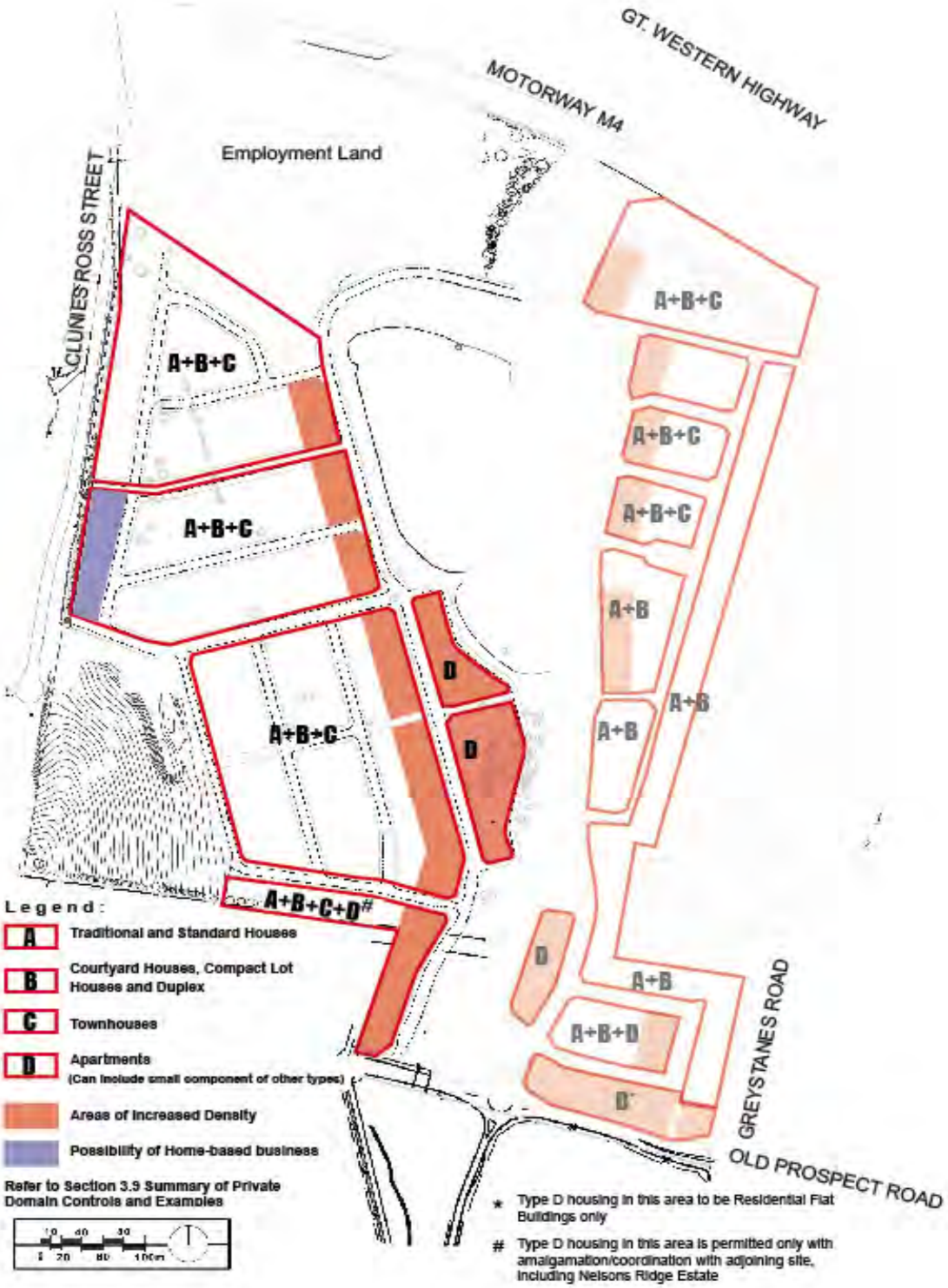


Figure 23: Housing types for Pemulwuy North

Pemulwuy Residential

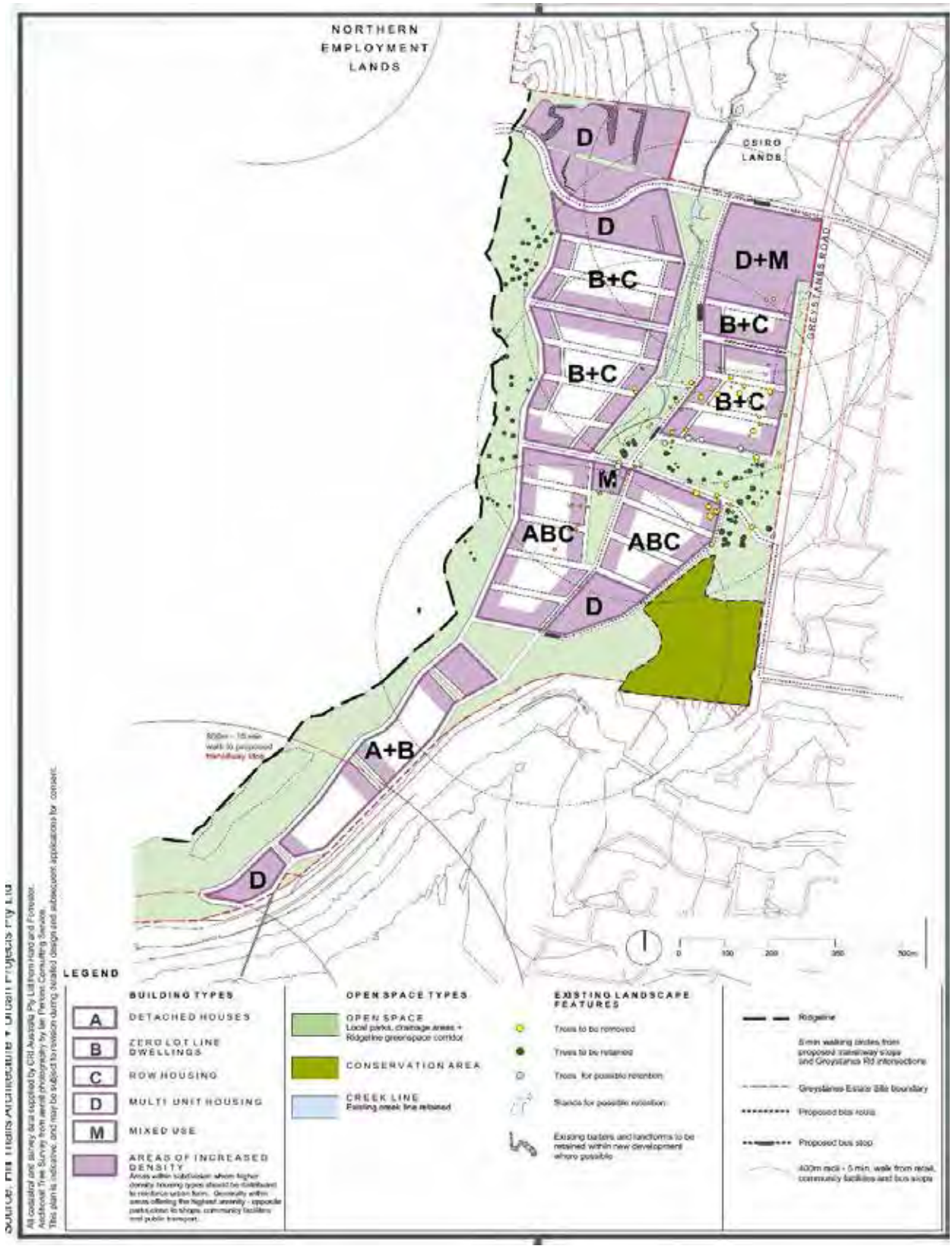


Figure 24: Housing types for Pemulwuy South

secondary street frontages.

C8. Ensure all dwelling entries are clearly visible from the street by day and night.

C9. Ensure a maximum 500mm cut and 500mm fill for allotments unless otherwise stated elsewhere.

4.2. Elevated Sites (Steep Land)

Refer to Figures 25 and 26.

Objectives

O1. To ensure that the built form responds to the topographical constraints, particularly the slope and orientation of each allotment.

O2. To ensure that new development provides appropriate residential amenity, particularly with respect to visual privacy, and the relationship between dwellings.

O3. To ensure that new development provides appropriate residential amenity, particularly with respect to solar gain to each allotment and the relationship between dwellings.

O4. To ensure dwelling designs allow acceptable driveway grades for vehicular access to garages.

O5. To minimise the bulk and scale of dwellings on steep slopes when viewed individually and collectively within and external to the site.

Development Controls

C1. The maximum height for a dwelling house (in metres) is detailed within Holroyd Local Environmental Plan 2013, as a written statement and associated maps.

C2. Dwelling designs must respond to the topography of the land through split level designs, unless privacy to adjacent properties can be maintained through alternative good design.

C3. Elevated entries should be no more than 1m above the natural ground level at a point 3m set back from the front boundary.

C4. The garage level is to be no greater than 500mm above or below natural ground level to help reduce driveway gradients.

C5. Ensure dwelling designs allow driveway grades for vehicular access to garages that comply with AS 2890.1.

C6. Retaining walls along on-street boundaries must be constructed of materials complementary to the home.

C7. Retaining walls must comply with the BCA.

C8. No cut or fill is to be placed in easements to drain storm water.

C9. Retaining walls constructed along side boundaries and protruding forward of the adjacent front building line must be tapered to meet the profile of the finished ground level.

C10. Where side and rear boundary retaining walls intersect, ensure that the maximum height difference between the lowest bottom of wall and highest top of wall is 2.4m (Pemulwuy

North).

C11. Brick walls are to be of salt proof construction. Dwelling design should consider: -

a) Existing ground levels;
b) Proposed cut and fill, and finished floor (FFL) and existing ground levels as indicated on the proposed site plan;
c) Existing sewer and drainage easements for stormwater and overland flows, and the impact any proposed retaining walls will have. Easements cannot be obstructed or built over.

C12. Development applications for elevated sites must include:

a) Top of wall (TOW) and bottom of wall (BOW) levels for retaining walls;
b) Full construction details of proposed walls including drainage, materials and finishes;
c) Connection into the stormwater system for behind-wall drainage lines and surface pits;
d) Proposed finished ground levels (FGL).

Lots with Cross Slopes

C13. Where lots have side cross slopes which exceed 3 degrees (5%), designs must respond to the slope of the land through split house designs (see examples in Figures 27 & 28).

C14. Maximum 500mm cut and 500mm fill within building envelope.

C15. Finished floor levels are to be no greater than 500mm above finished ground level. Where it can be demonstrated that a better design outcome can be achieved without compromising privacy, amenity and views into and out of the site, overshadowing and height controls , particularly relating to the bulk and scale of the dwelling, Council may consider relaxing the 500mm restriction up to a maximum of a 900mm total above the finished ground level.

C16. Garden retaining walls are not to exceed 700mm above finished ground level. Any remaining slope is to be graded out (Pemulwuy Nouth).

C17. Dwelling heights and designs are to ensure reasonable visual privacy to the down-slope side of the dwelling, by incorporating privacy measures to minimise potential overlooking.

C18. Garages are to be located on the lower (eastern) side of side cross-sloped lots, and access is to be provided in accordance with AS 2890.1 – Off Street Parking.

C19. Maximum height of side fencing is 1.5m. to reduce the overall wall/fence height (Pemulwuy South).

Lots with Front to Back Slopes

C20. Where front to back slopes are steep, i.e. above approximately 5 degrees (9%) , house designs must respond to the topography of the land through front-to-back full level split designs (Type 1 as shown in Figure 30).

C21. Where front to back slopes are moderate, ie. approximately between 3 degrees and 5 degrees (4.5% and 9%) , house designs are to respond to the topography of the land through split level designs (Type 2, refer to Figure 31).

C22. Maximum 700mm cut and 700mm fill for lots requiring a full-level split type 1 house design on lots with a front to back slope, to be contained within the building envelope;

C23. Finished floor levels are to be no greater than 500mm above finished ground level. Where

Pemulwuy Residential

Figure 25: Steep Land- Pemulwuy North

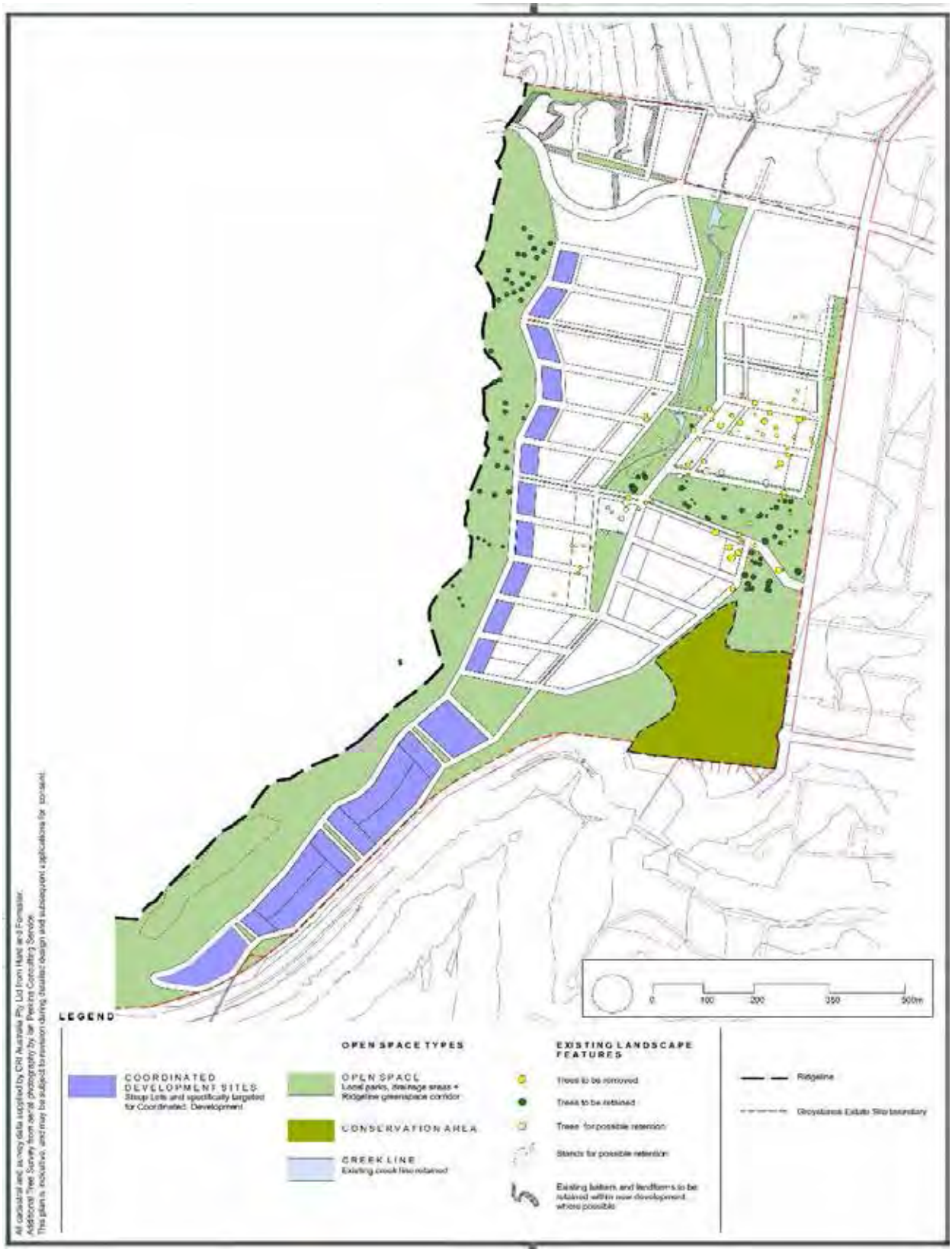


Figure 26: Steep Land- Pemulwuy South

it can be demonstrated that a better design outcome can be achieved without compromising privacy, amenity and views into and out of the site, particularly relating to the bulk and scale of the dwelling, the Council may consider relaxing the 500mm restriction up to a maximum of a further 400mm (i.e. no more than 900mm total above the finished ground level);

C24. Dwelling designs are to ensure reasonable visual privacy to the down-slope side of the dwelling, by incorporating privacy measures to minimise potential overlooking. See Section 4.9;

C25. Where rear boundary retaining walls constructed at subdivision exceed 1.2m in height (to a 0.5m maximum), the maximum height of any boundary fence shall be 1.5m;

C26. No further rear boundary retaining walls are permitted;

C27. Garden retaining walls are not to exceed 700mm above finished ground level. Any remaining slope is to be graded out;

C28. Driveway grades are to be in accordance with AS 2890.1.

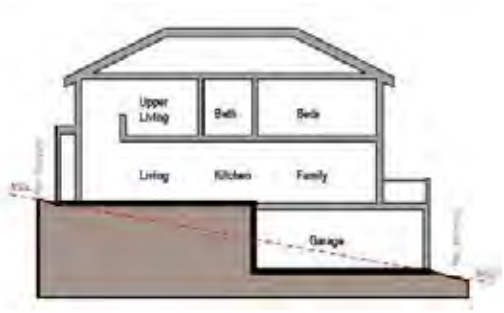


Figure 28:-Section- cross slope lot

Figure 30: Type 1Section through front to back slope lot

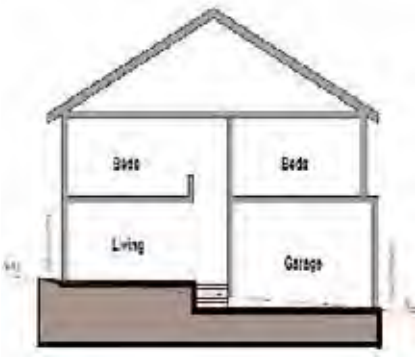


Figure 31: Type 2 Section front to back slope lot

Figure 27: Split level house designs for cross slopes

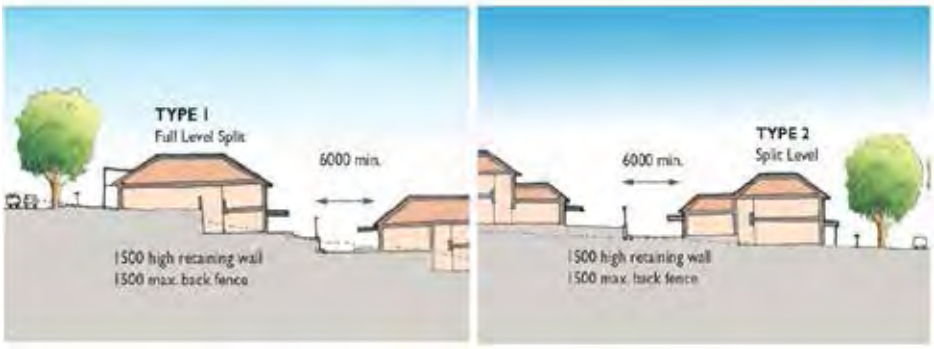


Figure 29: Front to back slope split level house design

4.3. Building to a Side Boundary

Objectives

O1. To protect the residential amenity of immediately adjoining properties.

O2. To provide efficient access along easements for the purpose of maintenance of the wall built to the boundary.

O3. To protect adjoining properties from soil instability or damp arising from adjacent properties.

O4. To design footings of the building built to the boundary to support and protect the building from damage in the event that disturbance or settlement occurs within the zone of influence.

O5. To avoid significant adverse impacts upon stormwater behaviour along maintenance easements.

O6. To avoid significant adverse impacts on stormwater drainage pipes along maintenance easements.

Development Controls

Boundary walls

C1. For allotments with single street access (including corner allotments), only the ground floor wall of a two storey building may be built on the boundary, and for a maximum length of 10m.

Set first floor walls and balconies in 1m from the property boundary (see Figure 32).

C2. For allotments with dual access (garage entry to the rear or double fronted lots) two storey walls may be built to the boundary where the building envelope permits.

Note: A corner allotment is classified as a single access allotment in this instance.

C3. On sloping land, ensure that the wall built to the boundary is located on the lower side of the lot.

C4. Ensure that the wall built on the boundary is finished to match the front of the house.

C5. Generally locate the garage against the side property boundary.

C6. Design the footings and finish of the wall built to the boundary to allow for the maximum cut/ fill on the adjoining allotment along the boundary. Ensure that the footings extend below their zone of influence, where they will affect the laying of services within excavation of the adjacent maintenance easement. If the adjoining dwelling has not yet completed construction, see Figure 34 - Detail A. If the adjacent house has completed construction, refer to Figure 35 -Detail B, showing the need for a retaining wall.

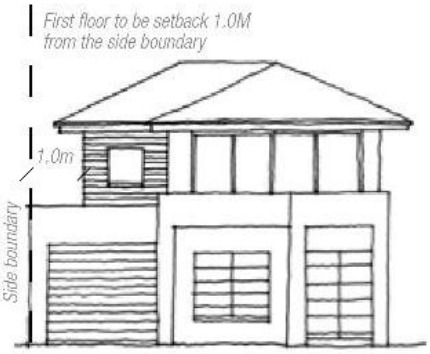


Figure 32: Side Setback

Note: Both figures assume a cut of 500mm, which may vary by up to

a further 400mm in each instance (max. side boundary wall cut/fill is 900mm). Note: There may be further variations where slope is extreme, but these are subject to privacy, neighbour amenity, overshadowing and height controls.

C7. All piers along the drainage easement boundary to have a minimum depth equal to the level of the invert of any potential or constructed stormwater pipe or culvert.

C8. Ensure that the drop-edge beam on the adjoining property is treated with a masonry surface treatment suitable to exposure to view.

Maintenance Easements

C9. Where a maintenance easement is created on a property adjacent to a wall built to the boundary, ensure that any retaining wall constructed within the easement. In particular, ensure a maintenance easement of minimum width 900mm.

C10. The following should be considered for maintenance easements:

- **a)** A maximum cut into the easement of 300mm;
- **b)** Any retaining wall within the easement has a maximum height of 300mm plus 300mm of post below ground, consistent with Figure 36 below;
- **c)** A minimum post width of 200mm;
- **d)** A minimum distance between the retaining wall and any built structure on the property of 600mm, to allow maintenance access;
- **e)** In the event of fill in the maintenance easement being placed against a wall built to the boundary on the adjacent property, ensure that the fill does not interrupt the effective discharge of moisture from weep-holes in that wall;
- **f)** Landscape planters placed in the maintenance easement should not interfere with access to the wall, and to stormwater flow where appropriate.
- **g)** A drainage pipe between the retaining wall and property line to avoid significant adverse impacts upon stormwater behaviour;
- **h)** A maximum timber paling fence height of 1.8m, comprising a 300mm retaining wall and 1.5m timber fence.

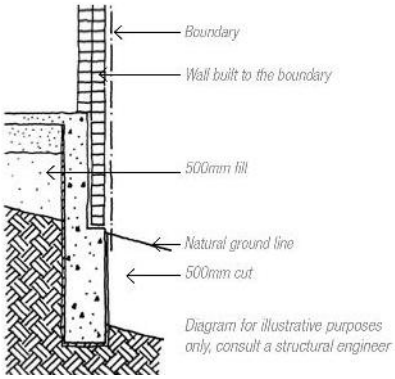


Figure 33: Drop edge beam detail A

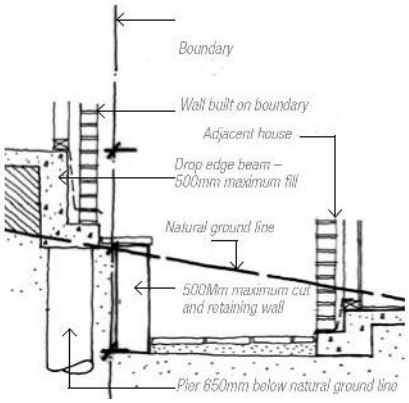


Figure 34: Drop edge beam Detail B

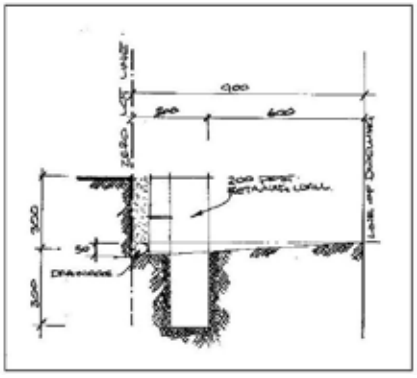


Figure 35: Retaining walls within maintenance easement

4.4. Building Articulation and Street Address

Objectives

O1. To develop a relationship between buildings and the street through entries, porches, verandahs, balconies, bay windows and the like.

O2. To ensure entries to all houses are clearly visible from the street.

O3. To promote the safety and security of streets and parks through entry points, windows, doors and balconies in the front façade.

O4. To provide elements and features on those parts of the dwelling seen from the street to articulate the building as well as contribute to attractive and safer streets and parks.

Development Control

C1. Develop the architectural character of buildings with appropriate solar protection elements, expressed door and window openings, and the like.

C2. Design buildings which incorporate articulation to the built form and do not rely on "add on" structures to break up the façade.

C3. Accommodate a range of roof forms in order to provide variety and reduce the bulk and scale of the streetscape.

C4. Design dwellings to incorporate variety in materials, colours and finishes to external elevations.

C5. A minimum 2m x 2m build free zone in the front setback area is required for a mandatory native tree in the front garden.

C6. Articulation elements are required in the design of your home. These elements may protrude 1.5m into the 3m setback, without encroaching on the 2 x 2 metre garden bed.

C7. Articulation elements must be lightweight in design and of an open nature. For example: pergolas, not solid roofs are permitted over balconies in the front setback area. Balustrades to balconies should be open and not solid.

C8. Where roofs are proposed to first floor balconies at the street elevation they must be set back a minimum 3m from the front boundary.

C9. On a corner allotment, articulation elements are also required to the secondary street. They may protrude up to 500mm into the side setback.

C10. For side elevations / facades on corner lots; the maximum run of un-broken wall length is 12m. A step of 480mm in the wall must otherwise be designed (Pemulwuy North)

C11. Consider active street frontage, defined as one or a combination of:

- Clearly defined and accentuated building entrances;
- Building articulation through modulation in the façade, incorporating elements such as blade walls, chimneys, entries, balconies, verandahs, porches, loggias, bay windows, screens, awnings and feature walls with a combination of materials and colours;
- Building designs which provide passive/active surveillance through providing living areas to the street frontage;

- shop front café or restaurant; and
- commercial and residential lobbies if accompanied by an entrance .

C12. Ensure garages and carports must not dominate the street frontage. Garages are to be a recessive element and shall be located a minimum distance of 1 m behind the front wall of the dwelling (excluding any projecting elements).

C13. Ensure carports and garages facing a public street or accessway are no more than 6 metres or 50% of the frontage width, whichever is the lesser (Pemulwuy North).

C14. Individual entries are to be provided to 50% of ground floor dwellings within residential flat buildings.

C15. Address and activate all streets with street frontages that promote surveillance. The design and layout of any car courts should improve safety through short distances with good sight lines and the use of a mews dwelling above the garages in some places to increase potential for passive surveillance.

C16. Provide a path leading from the street to the front door that is physically separated from the driveway.

C17. Ensure access between a dwelling and street frontage is unobscured and direct.

C18. Finished floor levels of the porch/verandah for front to back slope lots in Pemulwuy North should be at the same level to the footpath. When the finished floor level of the porch/ verandah is lower than the footpath, it must not exceed 600mm from the footpath RL.

C19. Elevated front entries should be no more than 1m above the natural ground level.

C20. Open types of security screening maybe used on windows facing the street. Block out security shutters are not permissible on front elevations.

4.5. Setbacks

Note: Further to the general Setback controls below, certain specific setback requirements apply just to the Pemulwuy North or South sub-precincts. See Sections 5 (North) or 6 (South), and Section 5.3 Development Adjacent to Employment Lands (in particular the former CSIRO Employment Land).

Objectives

C1. To provide setbacks to reinforce the vegetated character of the public domain with front gardens.

C2. To establish continuous gardens in deep soil planting in the centre of blocks to increase the amenity of private blocks.

C3. To ensure no loss of amenity by neighbours.

Development Controls

The setback controls for Pemulwuy North and South vary slightly, and are therefore addressed under their specific precincts below (Sections 5 and 6), and summarised here. In all instances of building to a side boundary, the length and height of walls on the boundary ensure no loss of amenity by neighbours. Sections 4.5 to 4.7 also aim to control setbacks.

	Pemulwuy North	Pemulwuy South
Front of building	3m - 4·5m (depending on vicinity of riparian public open space - see Fig. 54)	3m
Front garage	5.5m	5.5m
Front porch / verandah	1/3rd into front setback, but unroofed.	
Rear setback	1 storey = 6m. 2 storey = 8m. If rear garage (as below) = 3m from garage to dwelling.	A. North-South Lots: * Lot depth max. 35m = 6m. * Lot depth >35m = 8m. B. East-West Lots: * Little Streets = 3m from garage to dwelling. * Other streets = 4.5m.
Rear garage	0m, (via a "shared vehicular access")	0m, if via a "Little street" or "shared vehicular access" (not a public street)
Side setback	Type A detached dwelling = 0.9m to both. Type B dual occ./courtyard = 0.9m + 0m. Type C townhouse/rowhouse = 0m to both. Type D Apartments = 3m	Type A detached dwelling + courtyard = 0.9m to both. Type B dual occ. only = 0.9m + 0m. Type C low density townhouse/rowhouse = 0m to both. Type D Apartments + higher density townhouses = 3m
Secondary street frontage	1.5m+	4m (from Part B Residential Controls)

4.6. Solar Access and Sun Shading

Objectives

O1. To achieve a northerly orientation and midwinter solar access to main indoor living spaces and primary private open spaces.

O2. To provide sun protection on glazing with appropriate orientation.

Development Controls

C1. Windows of north facing/orientated habitable rooms of dwellings are to receive a minimum of 4 hours of direct sunlight between 8.00am and 4.00pm on 22 June.

C2. New development must not result in windows to north facing living areas of neighbouring dwellings receiving less than 4 hours direct sunlight between 8.00 am and 4.00 pm 22 June.

C3. Private open space is to achieve at least 3 hours of direct sunlight between 9am and 3pm in on 22 June for 50% of the required private open space.

Note: Relaxation of these controls may be permissible on Coordinated Development and Integrated Housing Sites where a development application for subdivision demonstrates that solar access has been maximised through integration of built form controls.

C4. Where relaxation of these controls has occurred, design initiatives that maximise natural light into dwellings are to be incorporated. For example, through wider frontages, courtyard housing, and material selection.

C5. On north facing facades, minimise summer solar access and maximise winter solar access. To achieve this, consider measures such as external horizontal shading, eaves, awnings, balconies, pergolas with appropriate planting and the like.

C6. On east and west facing facades, minimise summer solar access and maximise winter solar access. To achieve this, consider measures such as external adjustable vertical shading, sliding screens and adjustable louvers and the like.

C7. The design of dwellings shall generally be consistent with the Lot Orientation Principles in Figure 36 and Solar Orientation Principles in Figure 37 in order to achieve optimum solar access.

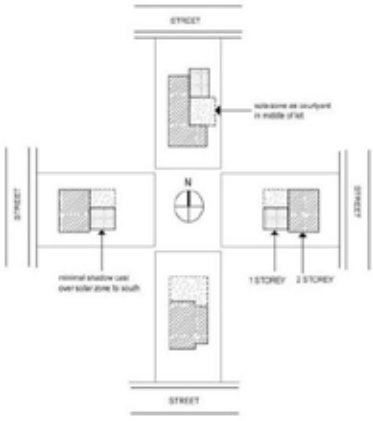


Figure 36: Solar access by lot orientation

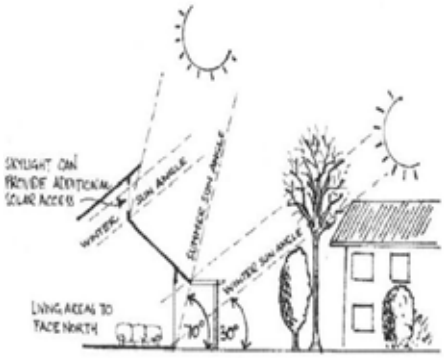


Figure 37: Solar access

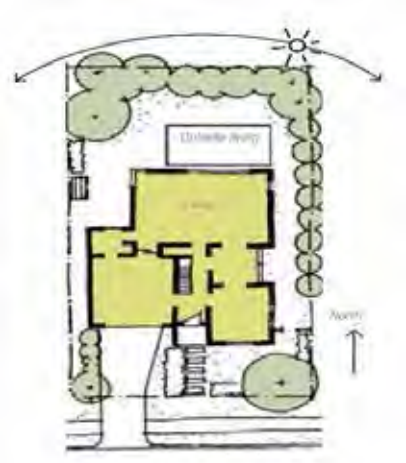


Figure 38: Solar access to Private open space

4.7. External Private Open Space

Objectives

O1. To provide useable private open space related to the needs of residents for leisure, recreation, outdoor entertaining and service functions.

O2. To soften the appearance and integrate the homes and fencing.

O3. To provide screening for privacy, and shade during the summer months.

O4. To complement street tree and parkland planting.

O5. To ensure continuation of green corridors from conservation areas through the riparian corridor and up onto Prospect Hill.

O6. To protect and enhance locally indigenous biodiversity.

O7. To reduce the impact of soil loss on adjoining properties.

Development Controls

C1. Provide useable private open space, directly accessible from living and/or dining areas to each dwelling.

Type A, B and C dwellings are required to provide an area equivalent to 20% for Pemulwuy South and 30% for Pemulwuy North of the total site area as a pervious (soft) surface.

C2. Type D dwellings (and Type M in the case of Pemulwuy South) are required to provide an area equivalent to 20 % of the total site area as external private open space, at ground level or in the form of a balcony.

C3. Private open space is to achieve at least 3 hours of direct sunlight between 9am and 3pm on 22 June for 50% of the required private open space. Refer to Figure 38.

Private Open Space Elements

C4. All private open space (excluding balconies) is to have a minimum dimension of 3 metres which is to be accessible from living or dining areas, and be suitable for outdoor living.

C5. Balconies are to have a minimum dimension of 2.4 metres where they are accessible from living or dining areas. In such cases, they can be used in the private open space calculation. This dimension may be reduced to 1.8 metres where functionality can be demonstrated;

C6. Balconies should be located to provide active street frontages.

C7. All existing trees shall be retained unless it can be demonstrated that this can not be incorporated into the design.

C8. Private open space elements accessible from other habitable rooms and secondary living spaces are to have a minimum dimension of 1.2 metres. (Pemulwuy North).

Hard and Soft Landscaped Area

C9. A minimum of 20% for Pemulwuy South and 30% for Pemulwuy North of the total site area shall remain as a pervious (soft) surface, unless otherwise noted on Figures 39 and 40.

Where impervious areas exceed 80% for Pemulwuy South and 70 % for Pemulwuy North of the total site area, Council will require an on-site detention system.

Note: These figures may be affected by the future provision of community detention basins. Changes are at the discretion of Council's engineering staff.

C10. No more then 45% of the front setback area shall be paved or sealed (inclusive of driveway). Where a double garage is proposed, this may increase to no more than 50% of the front setback.

C11. Front and rear setback areas are to be landscaped in accordance with the setback requirements provided in Section 4.3 (Setbacks) and Figures 40 and 41. The area to be landscaped may incorporate garden beds, soft landscaping, paved areas, paths, swimming pools and driveways.

C12. The planting proposal for the front setback should utilise plants with varying heights with the overall objective being to reduce the impact of the development on the streetscape. Planting should comprise of all 3 canopy levels, i.e. upper and lower canopies, and groundcovers.

C13. A native tree is required to the front and rear of each proposed dwelling, with a mature height at least equivalent to the height of the proposed dwelling. Minimum pot size 75 Litres.

Note: in the case of a dual occupancy this means 1 tree to the front and rear of each unit.

C14. The entire front yard/setback of all new dwellings in Pemulwuy is to be planted out with only native plant species, at least 20% of which are to be locally indigenous to the Holroyd LGA (see Council's Species List).

Note: The use of indigenous species or low water use species within a portion of the open space is required for certification under the new BASIX regulation from 1 July 2004. Visit www.basix.nsw.gov.au for more information.

C15. Plant predominantly native landscaping to the front and rear of each allotment to enhance the natural environment. The limited use of exotic species is permitted in the rear yard only.

C16. Planting in the front and rear setbacks should include additional plantings to provide both privacy and screening to adjoining residents as well as softening of retaining walls, and fencing.

C17. Type D and M dwellings are required to distribute this landscaped area as a combination of private and communal open space to provide privacy between dwellings, useable outdoor spaces and gardens.

C18. Provide a minimum 500mm setback (in the form of a landscape strip/garden bed) between the driveway and side boundary. It is required that this area be planted with suitable native plant species.

Note: take into consideration the possible accommodation of a retaining wall where cut and/or fill has occurred on sloping lots. Where there is a zero lot alignment, the 500mm setback may include both the landscape strip/garden bed and retaining wall where bed width is maximised to a minimum 270mm for planting.

C19. The driveway and pedestrian access path shall be separated by a landscape strip/garden bed.

C20. When constructing brick or masonry garden and retaining walls, water features, paving or other hardscape elements, select brick & mortar or masonry that is suitable for saline soils. For example, appropriate footings and linings should contain concrete Type C and 32MPa.

Landscape Documentation

Accompany all applications with a fully documented landscape concept plan consistent with that required in Part A, Section 7- Landscaping, Tree Protection, Cut & Fill, and Biodiversity, prepared by a qualified Landscape Architect. The Council approved landscape plan is the plan to be used by the company, or owner, constructing the landscape works. As such it is important the plan provides enough details to enable construction. Likewise, an Implementation Report and Maintenance Report are required. See Council's website under "Pemulwuy – Building and Siting Requirements - Private Open Space - Documentation" for all built form development applications within Pemulwuy.

Pemulwuy Residential

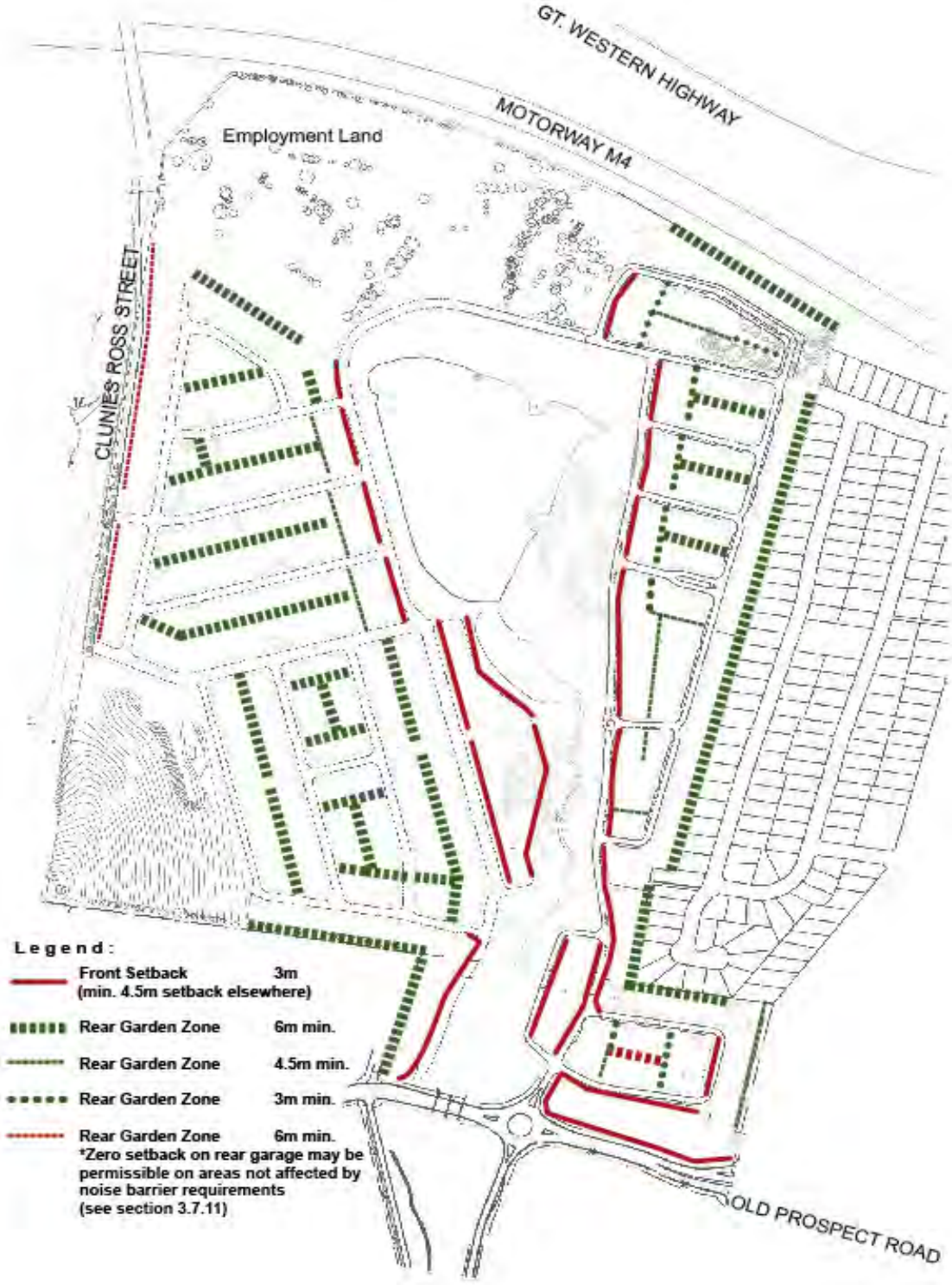


Figure 39: Private Open Space- Pemulwuy North

Pemulwuy Residential

Figure 40: Private Open Space- Pemulwuy South

4.8. Plant Selection

Objectives

O1. To ensure a high standard of environmental quality of individual developments.

O2. To produce the highest landscape value for the local character.

O3. To provide a mix of native/endemic vegetation to promote low water use and encourage native wildlife into the area.

O4. To protect visual privacy through plant selection.

O5. To regulate micro-climate through plant selection.

O6. To manage the land to minimise groundwater salinity.

O7. To mitigate any adverse effects of the proposed development on the species, populations or ecological communities.

Development Controls

C1. The front setback area is to consist entirely of native plant species with at least 30% of the proposed species being local to the Holroyd Area. A list of native species suitable for Holroyd City Council area is provided on the following table.

C2. A suitable native tree shall be provided to both the front and rear setback.

C3. Screen planting should be provided along all side and rear boundaries to the private open space area (Pemulwuy North).

C4. Exotic species are permitted in rear yards only.

C5. Landscaping should provide a visual screen and contribute to summer shading and winter sun penetration.

C6. Species of plants shall be chosen to minimise water use.

C7. The selection of the type of plant should be based on:

- The purpose of the plant. If planting on the northern side of the house, deciduous (loses its leaves) trees and plants should be considered to provide summer shade and allow winter sun to get through;
- The ultimate height and spread above and below ground of the plants in relation to adjacent buildings, services and other plants and the scale of the location.

C8. Council requires the use of Buffalo turf species including 'Sir Walter' in the front yard and encourages its use in the rear yard within all residential lots. Specify in landscape plans that existing turf to the nature strip is replaced at completion of construction works with 'Sir Walter'.

C9. Pemulwuy is affected by existing saline and sodic soils, as described in Section 10.6 of this Part of the DCP. Therefore, favour gardens which do not require a lot of watering, and avoid species that are sensitive to the above soil types.

Note: A table of trees, shrubs and ground covers specific to Pemulwuy but can be found on Council's website under Pemulwuy. This list can be read in conjunction with a broader list of native trees and shrubs suitable to the Holroyd Local Government Area, also found on Council's website.

4.9. Privacy

Objectives

O1. To ensure visual and acoustic privacy for residential development, both within a development

O2. and between a development and its neighbours.

O3. To ensure an acoustic environment suitable for residential uses.

O4. To ensure that the siting and design of development minimises the impacts of noise transmission between properties.

Development Controls

Visual Privacy

C1. Dwellings are to maximise visual privacy through consideration of the layout of internal rooms and external living spaces, design of openings, screens, walls and choice of materials.

C2. Protect privacy and encourage integrated outdoor living spaces by orienting primary openings in living areas to the street and/or rear gardens.

C3. Upper storey windows (excluding stairwells), and balconies (within 6 meters of the rear boundary) facing a side or rear boundary must incorporate privacy measures.

C4. Achieve privacy in the design of housing by providing the following separations to all openings (windows, doors or balconies) between rooms in multi-unit dwellings and between openings facing the rear boundary of single dwellings at ground level:

a) 6 metres between non-habitable rooms;

b) 9 metres between a habitable and non habitable room;

c) 9 metres between a habitable room and a balcony; and

d) 12 metres between habitable rooms.

C5. Where possible, openings should be off set to reduce setbacks, and in addition, screening and other treatments may be considered in reducing separation distance whilst maintaining adequate visual privacy.

C6. Minimise privacy conflicts through:

- careful consideration of the layout of internal rooms and external livings spaces,
- design of openings,
- 1.5m minimum sill height,
- fixed and obscure glass to 1.5m above first floor finished floor level with clear glass permitted above,
- screens,
- blade walls,
- external fixed privacy screen,
- choice of materials.

C7. Within apartments, townhouses and Mixed Use Development containing Residential, such as Aged Housing, Apartments integrated with Retail / Commercial or Community Facilities, and

Residential Flat Buildings, windows are to be offset from windows in an adjacent development to limit views. Alternatively, sill heights of 1.5 metres above finished floor level are to be provided.

C8. Bathroom or ensuite windows fronting the street must incorporate privacy measures.

C9. Elevated ground floor levels to the rear or side of the property, including the main built form, terraces, decks and balconies that exceed 500mm above natural ground level must incorporate privacy measures to minimise potential overlooking.

C10. Landscape screening at the rear of terraces, decks and balconies may be acceptable in some situations.

C11. Upper floor windows or balconies within 6 metres of the rear boundary must incorporate privacy measures.

Acoustic Privacy

C12. Dwellings are to maximise acoustic privacy through consideration of the layout of internal rooms and external living spaces, design of openings, screens, walls and choice of materials;

C13. The design of buildings should minimise the opportunity for sound transition through the building structure and should protect noise sensitive areas such as bedrooms;

Note : Additional documentation may be required to be submitted with a Development Application to demonstrate that the privacy of adjacent properties will not be compromised.

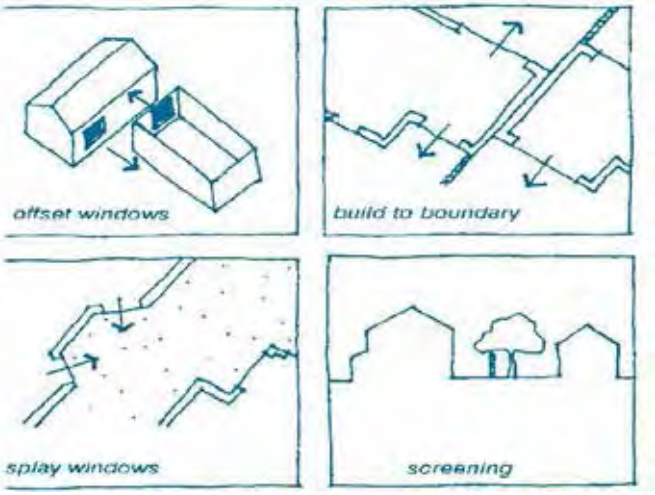


Figure 41B: Achieving acoustic and visual Privacy

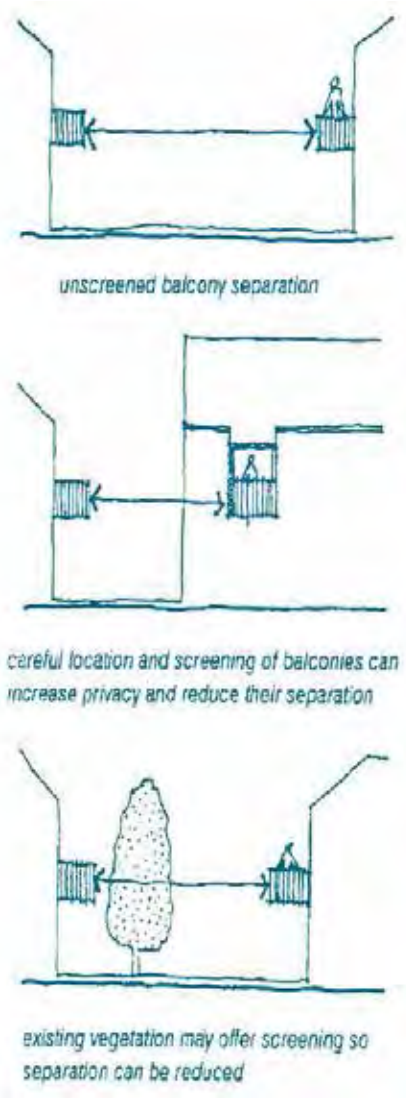


Figure 41A: Achieving acoustic and Visual Privacy

4.10. Clunies Ross Street Residential Frontage

Objectives

O1. To minimise the impact of noise from the existing employment sites to proposed residential areas.

O2. To achieve external noise goals where feasible or reasonable.

O3. Where this is considered impractical, to achieve internal noise criteria by appropriate facade treatment.

Development Controls

C1. A noise barrier ranging from 4.0 to 4.5m in height is to be erected along the western site boundary between the employment lands and the Clunies Ross Street access road to control noise to the ground floor of future dwellings (refer to Figure 43);

C2. To control sleep arousal to second storey bedrooms, additional attenuation measures are required. These should consist of, but are not limited to:

a) Improved glazing to windows and the provision of air conditioning to allow windows to be kept closed during night time periods; and/or

b) Locating bedrooms on the eastern side of the house away from the noise source, with bathrooms, study, media rooms and the like on the western side of the house.

Note: The combination of attenuation measures to the built form is to be determined at Development Application stage

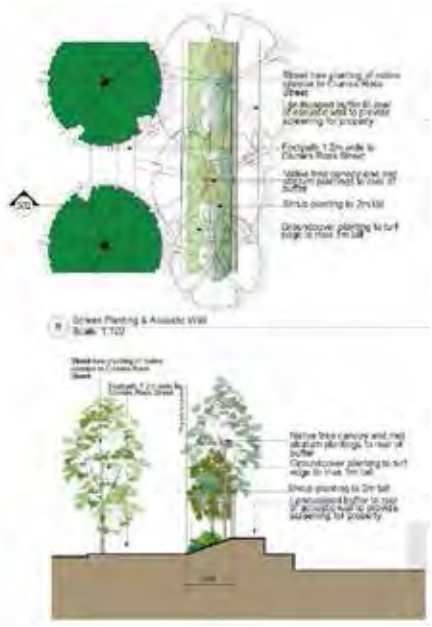


Figure 42: Extent of Acoustic Wall

Figure 43: Acoustic Wall

based on the advice of an acoustic consultant.

C3. Ensure that noise from employment related uses in Pemulwuy does not exceed stated criteria in Section 11.6 entitled Environmental Management – Noise & Vibration Management, when measured at the residential receiver.

C4. Ground floor bedrooms are to be setback a minimum of 10m from the acoustic barrier;

C5. Second storey bedrooms are to be setback a minimum of 14m from the acoustic barrier;

C6. A landscape buffer and mound of 3m in width consisting entirely of native species is to be provided in front of the acoustic barrier to ensure suitable aesthetic outcomes (refer to Figure 42 for landscape concept design)The landscaping design is to:

a) consisting of entirely native species;

b) screen the acoustic wall; and

c) minimise on-going maintenance requirements.

4.11. Roof Design

Objectives

O1. To design roofs to contribute to the variety and diversity of homes in a street.

O2. To design roofs to reflect a contemporary style.

Development Controls

C1. Provide from these acceptable styles: hipped, gable, skillion, flat roofs with parapets and curved roofs.

C2. Prefer that traditional roof forms, such as hipped and gable roofs, have a minimum pitch of 25 degrees (Pemulwuy South), or 22.5 degrees (Pemulwuy North).

C3. Prefer that skillion roofs have a pitch between 10 and 20 degrees (Pemulwuy South), or above 5 degrees (Pemulwuy North).

C4. Ensure that all roofs have a minimum of 450mm eaves or other shading devices such as awnings, louvres, pergolas or screens.

4.12. Materials and Colours

Objectives

O1. To use building mass or bulk/reflective insulation in wall and ceiling systems to encourage an improved thermal performance.

O2. To use building materials and building techniques that will minimise salinity problems.

O3. To use external materials and colours that reflect the contemporary nature of Pemulwuy.

Development Controls

C1. Ensure a predominantly masonry external finish. Face brick, render, bagged or a painted finish are acceptable.

C2. Use by preference bulk or reflective insulation in roof systems and fall arrest sarking to improve thermal performance.

C3. Provide a mix of materials and colours to create visual interest and variety in the streetscape.

C4. For the parts of the home seen from the street, ensure a combination of materials including but not limited to:

a) Feature stonework.

b) Light weight materials such as timber, feature panelling, plywood, pre-finished metal sheeting, etc.

C5. Use by preference building materials which minimise their impact on the environment. These materials can be from renewable resources, and are:

a) energy efficient,

b) durable,
c) low maintenance,
d) recycled or recyclable, and
e) non-polluting in use, manufacture and disposal.

C6. Natural colours, such as off whites, creams, browns and greys, are permitted as major external wall colours. The use of stronger accent colours is acceptable for highlighting building elements such as entry porticos, feature materials, etc.

C7. Roofing materials are to be selected from the following:

a) Low profile concrete or terracotta tiles;
b) Pre-finished and pre-coloured metal roofing.

C8. Multi -coloured tiled roofs are not permitted.

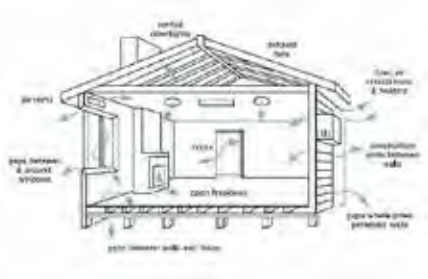


Figure 44: Emergy smart house

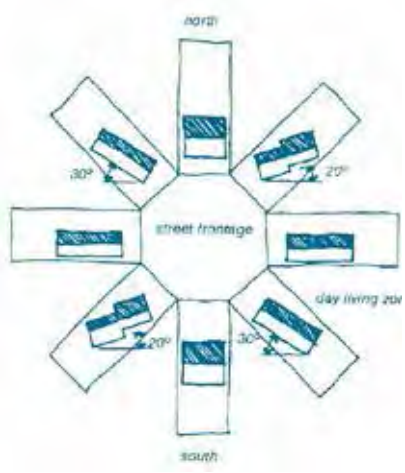


Figure 45: Lot orientation for good solar access

4.13. Water and Energy Efficiency

Objectives

O1. To design living and working environments that minimise energy and water use; and

O2. To use passive and active design initiatives to ensure comfortable living environments that respect the principles of ecologically sustainable development.

O3. To implement sustainable practices in water and energy efficiency .

O4. To minimise reliance on artificial heating and cooling , and maximise natural lighting.

O5. To minimise water usage.

Development Controls

C1. Ensure all new residential development complies with the requirements of the Building Sustainability Index (BASIX) for energy efficiency. Obtain BASIX Certification prior to the final design submission.

C2. Take advantage of northerly aspects.

C3. Achieve cross ventilation. To do so, windows are to be located to take advantage of prevailing winds in summer.

C4. Design floor layout to allow penetration of light to

rooms.

C5. Incorporate courtyards, light wells and atria to assist natural lighting and ventilation.

C6. Provide at least double orientation to all dwellings.

C7. Use building mass and/or building insulation to improve the climatic performance of buildings.

C8. Ensure all new residential development complies with the requirements of the Building Sustainability Index (BASIX) for water efficiency. Obtain BASIX Certification prior to the final design submission.

C9. Rainwater tanks are to be sited, and to be of a finish, that does not adversely impact on the amenity of future residents and/or adjoining properties in terms of bulk, scale, design, style, height and location.

4.14. Garages, Car Parking and Driveways

Objectives

O1. To contain the per capita growth in VKT (vehicle kilometres travelled) by achieving higher than normal public transport usage.

O2. To manage the supply of parking facilities in a manner that supports the use of existing and proposed public transport services.

O3. To encourage a reduction in the level of vehicular traffic by reducing parking requirements.

O4. Ensure adequate parking for various land uses which sustain the market viability of the development within Pemulwuy.

O5. To limit the impact of garages and driveways along streets, to maximise the street address of buildings and to emphasise pedestrian safety.

O6. To minimise the provision of on site parking, and to enhance the street activity of the neighbourhood.

O7. To seek a balance between satisfying a proportion of parking demand onsite, addressing car use reduction objectives and minimising the spread of parking into surrounding streets .

O8. To facilitate convenient and safe vehicular movement .

O9. To encourage efficient use of space .

Development Controls

On-Street Parking

C1. On street parking should be designed to be consistent with the design principles and dimensional requirements of Australian Standards AS2890 and AS1742.

C2. Provide on-street parking which is well-lit and offers casual surveillance for street security.

C3. Limit on-street parking to not compromise the streetscape character nor the active streetscape.

C4. Provide sufficient on-street parking so that garages and carports do not dominate the street

frontage.

Off-Street Parking

C5. Minmise off-street parking supply, having regard to:

- access to public transport (located within 400 metres);
- surveys of existing similar developments indicating a lower parking demand;
- land use synergies with surrounding land uses;
- complimentary/shared use of parking facilities;
- the ability to manage the use of on street parking.

C6. A minimum of one off-street parking space with at least one enclosed garage is to be provided on each allotment. Three car garages are not permitted.

C7. Off street parking shall be consistent with the design principles and dimensional requirements of Australian Standards AS 2890.1.

C8. Where possible, locate parking on the southern side of dwellings or on the down-slope side of sloping lot frontages.

Garages

C9. On allotments with direct access from the main street the garage is to be set back at least 5.5m from the property boundary.

C10. Garage doors are to be panel lift or panel glide.

C11. Garages should incorporate additional space for storage, such as recesses for bins and recycling.

C12. Parking may be provided in basements under building footprints. Naturally ventilated semi-basement car parks extending to 1.2 metres above adjacent ground level are preferred in any under-building parking.

C13. Prefer garage access from car courts (shared rear access) where it is available.

C14. The minimum aisle width of car courts shall be 6 metres adjoining the public road and where accessing parking. This can be reduced to allow for landscaping where vehicle turning movements are not compromised.

C15. The design of car courts and associated garages is to ensure that vehicles enter and exit in a forward direction.

C16. On site parking for Residential flat building developments is to be provided at a rate not more than:

a) 1 space per bed-sit, studio or one bedroom dwelling;
b) 1.25 spaces per two bedroom dwelling;
c) 1.5 spaces per dwelling with three or more bedrooms;
d) Visitor parking is to be provided at 0.25 spaces per dwelling and be provided in designated spaces.
e) Cycle parking spaces are required within parking areas for Residential flat buildings. For individual houses with 3 bedroom or more, storage spaces in the garage are preferred;
f) Provide a vehicle wash bay of permeable material construction.

Driveways

C17. Driveway crossings are to be between 3.0 and 5.0 metres wide at the front boundary for single garages and tandem garages.

C18. Driveway crossings of between 5.0 and 6.0 metres in width for double garages are permitted; however, at least 25% of the width of the allotment must be soft landscaping. Driveway levels and vehicle crossings from street to front boundary must be submitted and approved by Council.

C19. Driveway crossings must be plain concrete. Refer to Figure 48.

C20. Driveway materials from the garage to the front boundary include paving, coloured concrete, patterned or stencilled concrete. Plain concrete driveways and car tracks will not be approved.

C21. A pedestrian pathway is required from the front boundary to the entry of the dwelling, and must be separate from the driveway.

C22. A vehicle crossing application must be made to Council for proposed works within the nature strip.

C23. 500mm of planting is to be provided between the side boundary and the driveway.

4.15. Fencing

Development Controls

Note: Consider specific requirements for lots with sloping land.

Front fencing

C1. The front fence piers and base are to be constructed of rendered, bagged or face brickwork to match the style of the home, with a light weight see-through infill.

C2. Figure 48 shows the required dimensions of front fencing.

C3. Front fencing must return along the boundary to the front building facade .

C4. Fencing must step down to meet the slope of your allotment as shown in Figure 49.

C5. Front fencing can be used as a retaining feature.

C6. Maximum height of 1.2 metres from natural ground on the street side of the fence, except where slopes exceed 1:8.

Side and Rear Fencing

C7. The provision of side and rear fences is mandatory

Figure 48: Driveway crossover

C8. Side and rear fencing is to be 1.8m high lapped and capped timber fencing, or must be reduced to 1.5m high when built on top of a retaining wall. Colorbond fencing or similar is not permitted. Where the retaining wall exceeds 1.2m, the combined wall+fence should not exceed 2.4m.

Note: See Section 4.2 Elevated Sites (Steep Land) in Pemulwuy - Lots with Front to Back Slopes, for exceptions.

C9. The side fencing and gate is to finish on the wall built to the boundary or 1.0m behind the front of the home. No side fencing is to be forward of the building line (at which point it becomes "front fencing" - see above).

C10. Maximum height of 1.8 metres from natural ground on the street side of the fence.

C11. An additional 300mm on top of the required 1.8m high lapped and capped timber fencing may be required to minimise overlooking into adjacent homes. Refer to elevated site requirements.

Corner/Secondary Street Fencing

C12. The piers and base are to be constructed of rendered, bagged or face brickwork to match the style of the home and not to exceed 1.8m above the level of the adjacent footpath or verge.

C13. Stained or painted timber infill panels. Hebel or similar aerated concrete product may be used as a lightweight masonry option, particularly where nearby easements for services are on the lot.

C14. Figure 51 shows required dimensions of corner or secondary street fencing.

C15. On sloping land, the height of fencing must step to follow the slope of your allotment as shown in Figure 50 The low wall plinth must be no greater than 0.6m at the highest step.

C16. Fencing can be used as a retaining feature.

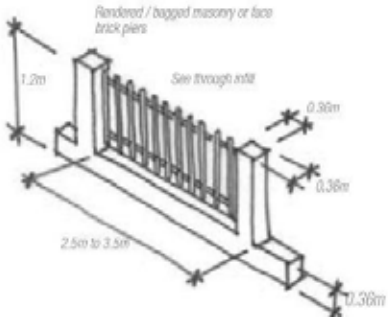


Figure 48: Front fence detail

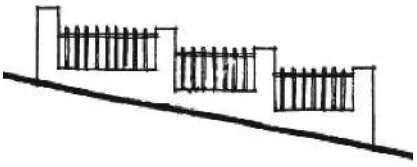


Figure 50: Sloping fence detail

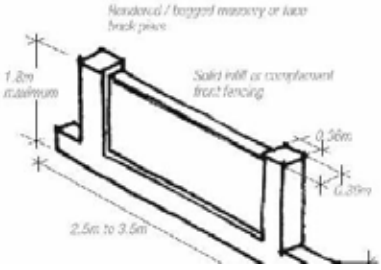


Figure 51: Corner allotment side fencing

Figure 52: Lakefront front boundary fencing

4.16. Adaptable and Affordable Housing

Objectives

O1. To ensure dwellings within Pemulwuy are capable of being adapted to accommodate the needs of people with limited mobility.

O2. To provide some private market affordable housing within Pemulwuy.

O3. To offer affordable housing that supports the needs of changing populations.

Development Controls

C1. Ensure that 20% of multi-unit housing, shop-top housing and mansion house apartments are compliant with Class C – Adaptable Housing Features as set out in Australian Standard AS4299.

C2. Ensure that 100% of aged housing is compliant with Class C – Adaptable Housing Features as set out in Australian Standard AS4299.

C3. Ensure that 100% of adaptable housing is compliant with Adaptable Housing Class A or B.

C4. Council to encourage some private market affordable housing products in an integrated manner (i.e. not in clusters but distributed throughout the larger site), particularly in the latter stages of the development.

4.17. Safety, Security and Lighting

Objectives

O1. To address the principles of Crime Prevention through Environmental Design (CPTED).

O2. To design with safety and security as a key concern.

O3. To provide public open spaces with a strong physical connection to housing so as to achieve a clear ownership of public space. It is recognised that well used and valued public open spaces reduce opportunities for crime and increase risk for potential offenders.

O4. To avoid the misapprehension that a public park is a private space.

Development Controls

C1. Edge open space areas with streets and housing, providing clear sight lines from private residences to public domain areas.

C2. Identify lots edging open spaces as suitable for increased densities, thereby maximising the number of dwellings which overlook open spaces. Incorporate passive open space surveillance into lot layout and design of residences, including balconies, porches, etc.

C3. Provide parking for open spaces along illuminated public streets edging parks rather than consolidating car parking within the parks themselves. This is designed to increase casual surveillance of parked vehicles and their occupants.

C4. Design parking areas at recreational locations to avoid loitering.

C5. Design public streets edging open spaces to provide safe, well lit pedestrian routes, eliminating the need to circulate across parks at night.

C6. Provide adequate lighting in recreational areas, parklands, cycleways, and pedestrian thoroughfares.

C7. Clearly articulate public spaces with public streets.

C8. Control vehicle access to public open space by the use of low fencing or bollards on accessways to the park edge. Avoid the use of high gates, fences and enclosures.

C9. Design street furniture and amenities to be vandal resistant, with walls treated with sacrificial coatings to deter and remove graffiti.

C10. Ensure landscaping maintains view corridors and clear sight lines.

C11. Locate bus stops in safe, well-lit locations with good surveillance.

C12. Adequately light entrances to buildings, with lighting that does not produce shadows.

C13. At building entrances, ensure clear sight lines are not be obscured by landscaping or other obstacles.

C14. Ensure all dwelling entries are clearly visible from the street by day and night.

C15. Design first floor uses to overlook the street and car parking areas.

C16. Ensure private landscaping does not provide opportunities for concealment e.g. along pathways or adjacent to service areas.

C17. Minimise the length of car courts accessing rear garages, with clear sight lines provided to/from the public road. In some places, mews dwellings above rear garages will increase the potential for passive surveillance. Provide sensor lighting mounted at appropriate locations within the car courts.

C18. Provide facilities at bus stop locations to encourage increased use and safety. Such facilities shall include:

- bus lay-bys and speed controls to protect pedestrians, depending on the particular road design, and
- shelters and seating for waiting passengers, display of timetable information and street lighting for security.

4.18. Bushfire Protection

Objectives

O1. To provide residential development with adequate protection from the potential bushfire hazard.

Development Controls

C1. Development must comply with Planning for Bushfire Protection (NSW Rural Fire Service: 2006) or subsequent amendments;

C2. In the case of the riparian corridor, provide an Outer Protection Area and Inner Protection Area in the form of fuel reduced zones and perimeter road.

4.19. Salinity

Objectives

O1. To minimise disturbance to natural hydrological systems as a result of development.

O2. To provide for appropriate management where urban development may affect the process of salinisation.

O3. To provide for appropriate management where the land is affected by groundwater salinity.

O4. To prevent damage to buildings and infrastructure caused by salinity.

Development Controls

C1. Consent must not be granted for development to which this clause applies unless the consent authority has considered:

a) the impact of the proposed development on local and regional salinity processes, and

b) the impact of salinity on the proposed development. In particular, that appropriate measures have been carried out to the Engineer's satisfaction, including:

ii) use of saline-resistant building materials;

iii) treatment of outer walls below ground; and

iv) drainage deviation.

4.20. Servicing

Objectives

O1. To minimise the impact of services on the public domain.

O2. To ensure efficient storage and collection of waste and quality design of facilities.

Development Controls

C1. Provide each dwelling with a secure external clothes drying area with access to sunlight and breezes, screened from the public domain.

C2. Locate adequate rubbish and recycling areas where they are convenient and accessible:

a) adjacent to access lanes or 'little streets' where they exist;
b) not forward of the prevalent built edge to the street; and
c) screened from the public domain

C3. Provision shall be made within all development for the convenient movement of bins to streets for collection.

C4. In addition to garages, the adequate storage of bulky goods in multi-unit housing is required at a rate of:

a) 7.5 cubic metres for a studio/one bedroom unit;
b) 10 cubic metres for a two bedroom unit; and
c) 12.5 cubic metres for units with three or more bedrooms.

C5. Antennae, satellite dishes, water tanks, service metres and solar heating should be sited to minimise their impact on the public domain.

4.21. Telecommunications

Objectives

O1. To ensure the capacity for advanced telecommunications systems within Pemulwuy.

Development Controls

C1. Demonstrate the provision of telecommunication infrastructure:

a) To all dwellings, community buildings and commercial premises;
b) That has the capacity to support multiple telecommunication services; high speed internet (including broadband), voice and data systems;
c) That can be duplicated and upgraded in a cost effective and timely manner; and
d) That is located underground.

4.22. Dwelling Types - Summary

An abbreviated form of the essential differences between Types A, B, C, D & M, compared between Pemulwuy North and Pemulwuy South.

	Pemulwuy North	Pemulwuy South
Side Setbacks Type D South *Aged Housing *Apartments *Townhouses *Residential Flat Buildings (RFBs)	Type A detached dwelling = 0.9m both. Type B dual occ./courtyard = 0.9m + 0m. Type C townhouse/rowhouse = 0m to both. Type D RFB/Mansion House Apartment = 3+m	Type A detached dwelling + courtyard = 0.9m to both. Type B dual occ. only = 0.9m + 0m. Type C low density townhouse/ rowhouse = 0m to both. Type D Apartment/RFB/Aged + higher density townhouses = 3+m Type M – Mixed Use Development (Residential)* = 3+m *Type M = Aged Housing; Apartments integrated with Retail / Commercial or Community Facilities; RFBs.
Lot size	Type A = 400 - 600m^2 Type B = 300 - 500m^2 Type C = 200 - 300 m^2 Type D = 100 - 250m^2 Type D Mansion House Apartment = 80 - 150 m^2 (total lot 1350m^2)	Type A = 300 - 600m^2 Type B = 250 - 400m^2 Type C = 200 - 300m^2 Type D = 100 - 250m^2 Type M Mixed Use (Res) = 100 - 250m^2
Frontage	Type A = 15 - 20m Type B = 10 - 14m Type C = 6 - 9m Type D Mansion House Apartment = 30m	Type A = 9 - 16m Type B = 6 - 12m Type C = 6 - 9m
Min. "Landscaped area" (Soft/ pervious) as % of site area	Type A = 30% Type B = 30% Type C = 30% Type D = 20%	Type A = 20% Type B = 20% Type C = 20% Types D/M = 20%
Front Setbacks	3m - 4.5m (depending on vicinity of riparian public open space)	3m
Rear setback	1 storey = 6m. 2 storey = 8m. If rear garage (as below) = 3m from garage to dwelling.	North-South Lots: * Lot depth max. 35m = 6m. * Lot depth >35m = 8m. East-West Lots: * Little Streets access = 3m from garage to dwelling. * Other streets = 4.5m.

5. Subprecinct Controls – Pemulwuy North

The following controls apply specifically to the Pemulwuy precinct predominantly to the north of Butu Wargun as identified in figure 1

5.1. Height Limits

Objectives

O1. To achieve building heights and forms that respect the streetscape and heritage values of Prospect Hill, and that assist in establishing an attractive streetscape.

Development Controls

Note: The maximum height for a dwelling house (in metres) is detailed within Holroyd Local Environmental Plan 2013, as a written statement and associated maps.

C1. Height limits (expressed as storeys) are stipulated on Figure 53 and should be read in conjunction with the Height of Building map associated with Holroyd Local Environmental Plan 2013.

C2. External wall height controls relate to site falls of up to 1 in 8. For sites steeper than 1 in 8 relaxation of these controls may be permissible. See Fencing in Section 4.14.

C3. The building elevation facing the street is to be a minimum of two storeys unless designated as a 'single storey permitted development'.

Single Storey Zone:

C4. Buildings are limited to single storey height, with a maximum external wall height of 4.0 metres, with roof terraces or attic rooms permitted;

C5. Maximum building height is to be 6 metres.

Part One/Two Storey Zone:

For part one/two storey sites adjacent to Prospect Hill:

C6. The maximum external wall height is 4 metres at the front and 6.5 metres at the rear;

C7. The maximum building height is 9 metres and is not to exceed RL 79.

C8. Maximum building height may be permitted only where it can be demonstrated that the views into and within the site relating to the height, bulk, and scale of the dwelling are not compromised.

Two Storey Zone:

C9. Two storey height limit, with a maximum external wall height of 6.5 metres;

C10. Maximum building height is to be 9 metres;

C11. On sites with slopes greater than 1:8, maximum external wall height may be increased to 7.5 metres and building height to 10 metres dependant on scale, bulk, privacy and overshadowing issues;

Pemulwuy Residential

Three Storey Zone:

C12. Three storey height limit, with a maximum external wall height of 10 metres.

C13. Maximum building height is to be 12.5 metres.

C14. Three storey development is a minimum and maximum for the zone fronting the east/west link road adjacent to the village centre.

Note: The minimum floor to ceiling height of a dwelling is controlled by Part B of this DCP.

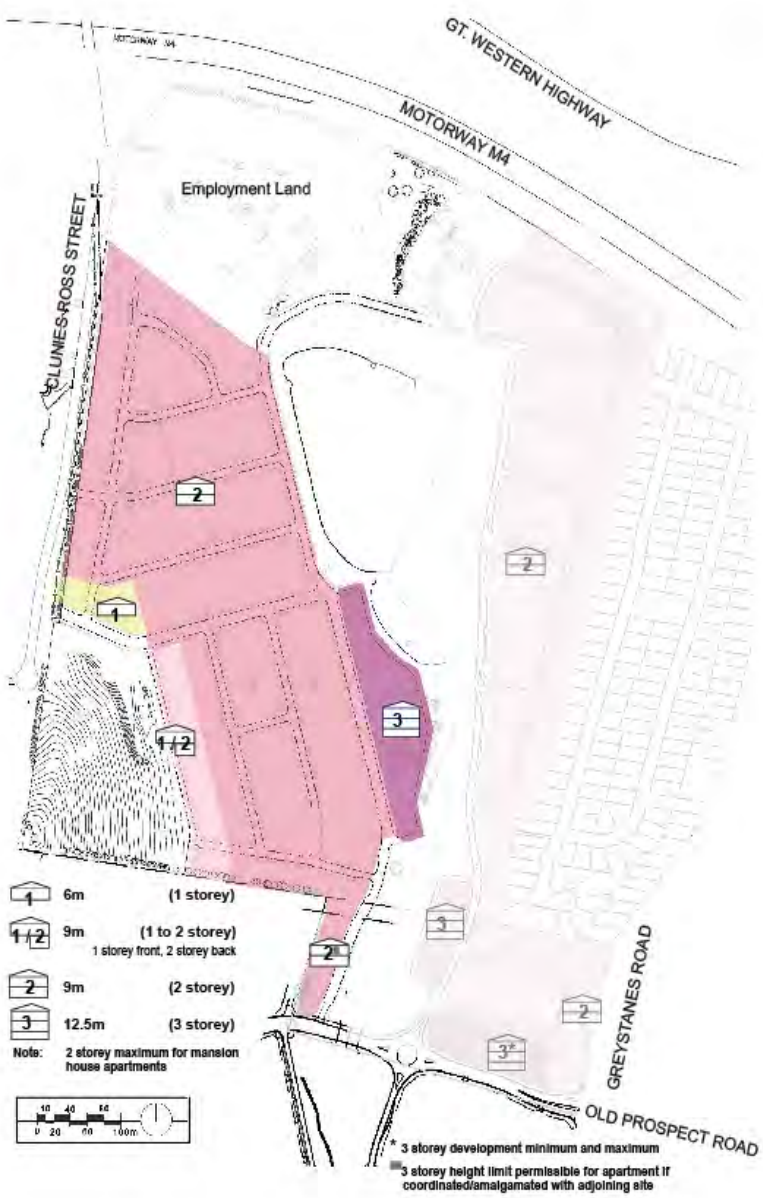


Figure 53: Building height - Pemulwuy North

5.2. Setbacks

Objectives

O1. To provide setbacks to reinforce the vegetated character of the public domain with front gardens.

O2. To establish continuous gardens in deep soil planting in the centre of blocks to increase the amenity of private blocks.

O3. To ensure no loss of amenity for neighbours.

Development Controls

C1. Provide 3.0 - 4.5 metre front setbacks to dwellings as specified in Figure 39 (Private Open Space).

C2. Provide a minimum 5.5 metre setback to garages from the front street boundary.

C3. Front porches or verandas are allowed to encroach within one third of the front setback area in which instance the porch or verandah must be unroofed;

C4. Rear setback to be 6 metres to single storey elements and 8 metres to 2 storey elements.

C5. Rear garages can be built to rear boundary alignment where accessed through shared vehicular access. Any studios over garages are not to overlook or overshadow adjacent dwellings or private open space;

C6. Provide a minimum side setback of 0.9m both sides for detached dwellings and 0.9m minimum for duplex and courtyard houses with a zero lot line permitted one side. No side setbacks required for townhouses/row houses;

C7. Apartment Buildings (Type D housing): Side setbacks provide for minimum separation distances in accordance with Section 4.9 (Visual & Acoustic Privacy), with a minimum of 3 metres; and

C8. Side setback to secondary street frontage shall be 1.5 metres minimum.

Figure 54: Habitable room setback from employment lands.

5.3. Development Adjacent to Other Precincts

a) Development Adjacent to Employment Lands

Objectives

O1. To ensure suitable residential amenity for dwellings adjacent to Employment Land (as shown in Figure 80).

O2. To minimise the impact of noise from the proposed former CSIRO Employment Land on the proposed residential areas;

Development Controls

C1. Habitable rooms/buildings are not permitted within 10m of the rear boundary (refer to Figure 54). Improved glazing is required on windows facing the Employment Land.

C2. Setbacks and landscaping buffer within the Employment Lands must also protect residential amenity.

Employment Land Uses

C3. Noise attenuation to the adjoining residential lands is to be achieved by the appropriate siting of employment buildings to the north (refer to 'Noise Impact Assessment' – Richard Heggie and Associates);

C4. If required, additional acoustic treatment is to extend along the northern boundary between Clunies Ross Street and the Employment Land buildings, the nature of which is to be determined at Development Application stage based on the advice of an appropriately qualified acoustic consultant.

Noise Monitoring

C5. Compliance noise monitoring shall be conducted by Stockland to demonstrate compliance with established noise goals for both traffic and industrial noise. Internal and external noise monitoring shall be conducted by Stockland Corporation Ltd on site to establish that the implemented noise controls will result in an acceptable acoustic amenity in noise affected areas.

Traffic Noise

C6. The installation of a noise logger on site for a period of a least one week is required where a noise barrier is adopted to achieve established noise criteria.

Industrial Noise

C7. Ensure that the noise from employment related uses does not exceed stated criteria in Section 11 - Environmental Management entitled Industrial Noise Criteria for Residences adjoining Clunies Ross Street when measured at the residential receiver.

C8. Operator attended measurements, supplemented by noise logging where appropriate, on site for a period of a least one week is required where a noise barrier is adopted to achieve established noise criteria.

b) Interface to Existing Residential to East.

Objectives

O1. To create new dwellings that do not create undue amenity impacts to the rear of existing dwellings in terms of overshadowing, overlooking, visual impacts or density/bulk of development.

Development Controls

C1. Provide a minimum rear garden zone setback of 6 metres between the eastern site boundary and the single storey rear elements.

C2. Provide a minimum rear setback of 8 metres between the eastern boundary and the two storey elements.

C3. Ensure that new development does not cause undue loss of visual privacy or undue overshadowing to rear of existing gardens and dwellings.

C4. New dwellings to moderate building bulk with generally single storey rear elements.

C5. Orientate windows of upper levels northwards rather than eastwards on rear elements where possible.

6. Subprecinct Controls – Pemulwuy South

The following controls apply specifically to the Pemulwuy precinct predominantly to the south of Butu Wargun as identified in the following Figure 2.

6.1. Height Limits

Objectives

O1. To achieve building heights and forms that respect the streetscape and heritage values of Prospect Hill, and that assist in establishing an attractive streetscape.

O2. To site and design development proposals that are in proximity to the Prospect Hill State Heritage Registered Area to ensure that views to and from the Prospect Hill ridgeline are maintained.

Development Controls

Note:

- The maximum height for a dwelling house (in metres) is detailed within Holroyd Local Environmental Plan 2013, as a written statement and associated maps.
- The minimum floor to ceiling height of a dwelling is controlled by Part B of this DCP.
- Holroyd Local Environmental Plan 2013 applies to views to and from Prospect Hill.

C1. Height limits (expressed as storeys) are stipulated on Figure 55 and should be read in conjunction with the Height of Building map associated with Holroyd Local Environmental Plan 2013.

C2. External wall height controls relate to site falls of up to 1 in 8. For sites steeper than 1 in 8 relaxation of these controls may be permissible. Refer to Figure 56.

Two Storey Zone

C3. Two storey development is permissible within this zone.

C4. Maximum external wall height is to be 6.5 metres.

C5. Maximum building height is to be 9 metres.

C6. Where basement parking is proposed, on sites with slopes greater than 1:8, maximum external wall height can be increased to 7.5 metres and building height to 10 metres.

Two Storey Little Street Zone

C7. Two storey development is permissible within this zone.

C8. Maximum external wall height is to be 6.5 metres; and

C9. Maximum building height is to be 9 metres.

Two Storey Roof Zone

C10. Two storey development with attic rooms or roof terraces permissible within this zone;.

C11. Maximum external wall height is to be 7.5 metres.

C12. Maximum building height is 10 metres.

Pemulwuy Residential

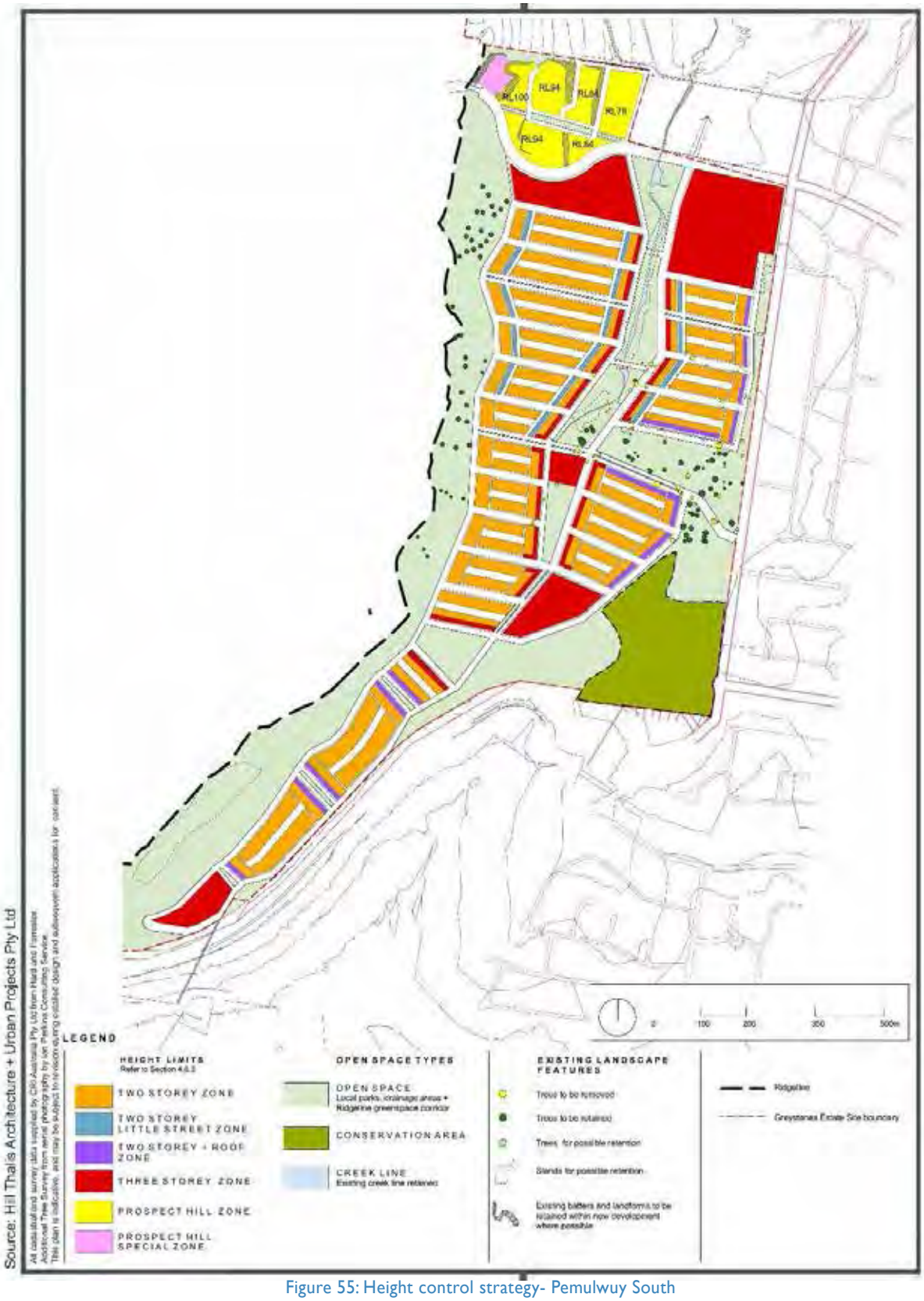


Figure 55: Height control strategy- Pemulwuy South

Three Storey Zone:

C13. Three storey development permissible within this Zone.

C14. Maximum external wall height is to be 10 metres.

C15. Maximum building height is to be 12.5m.

Prospect Hill Development Area:

C16. Maximum building height is not to exceed the RLs stipulated in Figure 55.

C17. Three storey development is permissible in this zone, where achievable.

C18. The maximum external wall height is to be 10 metres.

Prospect Hill Special Area:

C19. Maximum height of development to be determined in consultation with the Heritage Office.

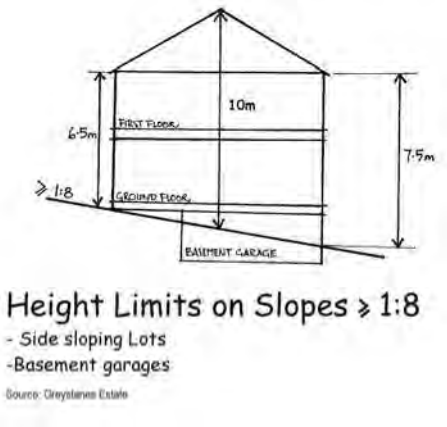


Figure 56: Height limits on slopes >1:8

6.2. Setbacks

Objectives

O1. To provide setbacks to reinforce the vegetated character of the public domain with front gardens.

O2. To establish continuous gardens in deep soil planting in the centre of blocks to increase the amenity of private blocks.

O3. To ensure no loss of amenity for neighbours.

Development Controls

C1. Provide a minimum 3 metre front setback to dwellings.

C2. Provide a minimum 5.5 metre setback to garages from the street frontages.

C3. Provide the following rear landscaped set backs to north-south lots:

a) up to 35 metre depth requires a minimum of 6 metres from rear boundary; and

b) greater than 35 metres depth requires a minimum of 8 metres from the rear boundary.

C4. Provide the following rear set backs to east-west lots:

a) lots accessible from little streets require a minimum of 3 metres from rear of garage zone; and

b) lots accessible from public streets require a minimum of 4.5 metres from the rear boundary.

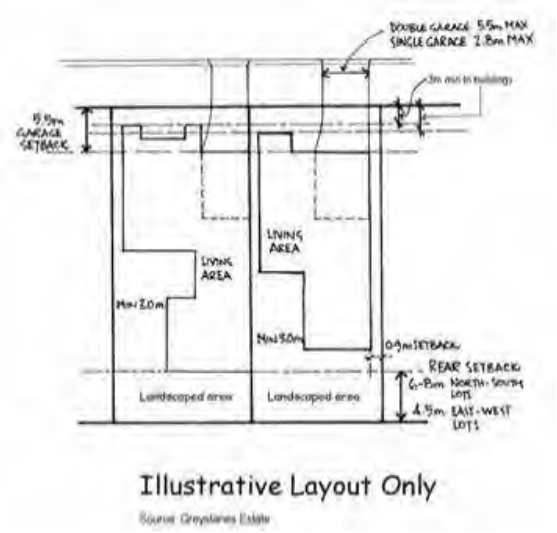


Figure 57: Type A Detached Dwelling- Pemulwuy South- setbacks layout

7. Transport Plan

Principles for a Transport Plan

Principles

P1. To address transport targets.

P2. To establish guiding principles for design and layout of the site consistent with increasing the mode split towards public transport and non private vehicle usage and minimise vehicle kilometres travelled (VKTs).

P3. To provide for all modes of transport which are integrated into the surrounding network of each mode.

P4. To identify a range of transport infrastructure which addresses site requirements including the staging and funding proposals.

P5. To identify links to the Transitway network outlined by 'Action for Transport 2010'.

Development Controls

C1. Reduce the mode split of 'car as driver' for the journey to work by at least 10% (e.g. from 75% to 65%) compared to the existing surrounding area.

C2. Reduce the total VKT (vehicle kilometres travelled) to be generated by the proposed development by at least 5% below that which would be generated by a 'conventional' approach to development".

7.1. Regional Requirements

Objectives

O1. To provide regional transport infrastructure which will achieve the transport targets established by SEPP 59.

O2. To develop transport infrastructure that will service the needs of the site and integrate into an improved regional transport network.

O3. To provide infrastructure which recognises the need to integrate all modes of transport including public transport, private vehicle transport, walking and cycling.

O4. To develop measures to mitigate potential transport impacts generated by the development of Pemulwuy on surrounding areas.

Development Controls

C1. Provide regional (and local) transport infrastructure improvements that are consistent with:

a) The Deeds of Agreement between Stockland and the Roads and Maritime Services;

b) The Deeds of Agreement between Boral Resources (NSW) Pty Ltd and the Roads and Maritime Services; and

c) The Holroyd SEPP 59 Residential Lands Contribution Plan 2004.

Note: Holroyd City Council does not support the upgrade of the Great Western Highway/Beresford Road intersection contained within the RMS Deeds of Agreement. Seek alternative treatments to mitigate potential traffic impacts of the development of Pemulwuy.

7.2. Transport Design Guidelines - Land Use Location

Objectives

O1. To generate efficient travel patterns across the site to reduce VKTs.

O2. To maximise the use and support the viability of public transport services.

O3. to avoid potential conflicts between various land uses.

O4. To site and design land uses to accommodate mobility impaired persons.

Development Controls

C1. Provide appropriate and conveniently located services (such as shops) and open space as shown on the Figures 58 and 59 to reduce trip length and to encourage use of pedestrian/ cycleway networks.

C2. Ensure that land uses are well integrated with public transport stops, nodes and interchanges so as to provide safe, attractive and inviting environments.

C3. Separate residential and employment precincts to avoid potential road function conflicts and unnecessary through traffic.

C4. Locate higher density development in close proximity to transport nodes.

C5. Locate the village centre as shown on the concept plan to avoid unnecessary traffic infiltration in residential streets. The layout strategy is shown in Figure 59.

Pemulwuy Residential

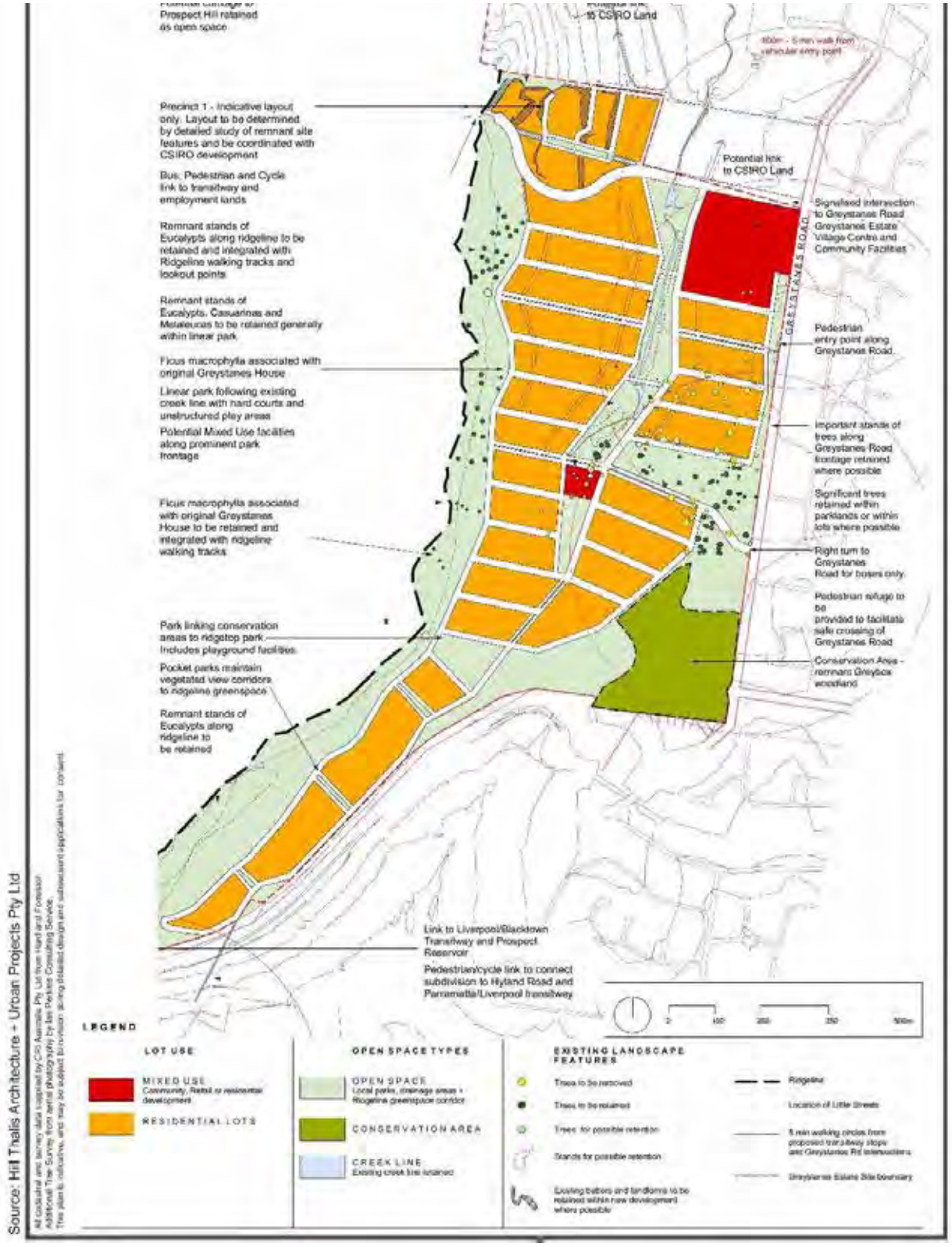


Figure 58: Urban Design Strategy- Pemulwuy South

Pemulwuy Residential

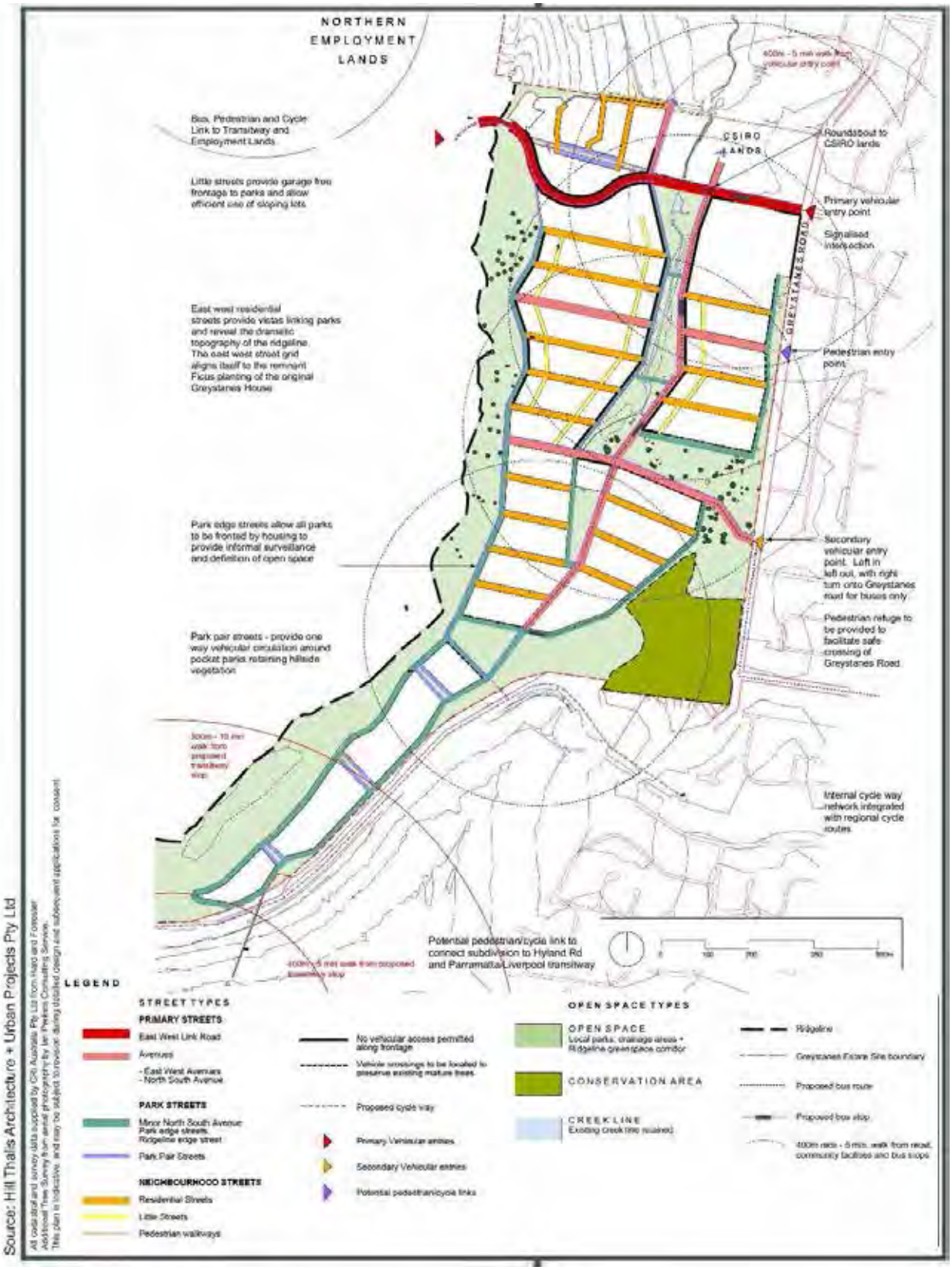


Figure 59: Road hierarchy layout- Pemulwuy South

7.3. Access to Pemulwuy

Objectives

O1. To ensure safe access to Pemulwuy.

O2. To provide access through Pemulwuy by improving the regional road network, including accessing Pemulwuy from Clunies Ross Street, linking through to Butu Wargun Drive.

O3. To design and construct roads in order to control the speed and noise of the anticipated traffic volume and contribute to safety.

O4. To ensure that walking and cycling are encouraged and not impeded by road design.

Development Controls

C1. Ensure that intersections into Pemulwuy are designed with sound traffic planning principles and relevant guidelines including, but not limited to:

a) RMS - Road Design Guide;

b) AUSTROADS – Guide to Traffic Engineering Practice.

C2. Locate vehicular access and linkages to Pemulwuy as shown on:

a) Figure 61 (Street Types - Pemulwuy North); and

b) Figure 62 (Road Hierarchy Layout - Pemulwuy South).

C3. Cowra Street is to provide for pedestrian and cyclist access only from Pemulwuy . Future subdivision layout is to maintain the opportunity for a vehicular link to Cowra Street.

C4. Consider construction of a northern connection from Butu Wargun Drive to Clunies Ross Street.

C5. Provide cycleway and footpath networks consistent with Section 7.10 Pedestrian and Cycle Routes.

7.4. Public Road Design

Objectives

O1. To create a clearly defined road hierarchy based on use, function, amenity and geometric design requirements.

O2. To maximise the efficiency of the Pemulwuy road network to reduce trip lengths and enhance the viability of public transport.

O3. To allow efficient movement through Pemulwuy for regional traffic while discouraging such traffic into the residential areas.

O4. To provide a safe road network for all modes using the roads including private and public transport, cyclists, pedestrians and mobility impaired persons.

O5. To design streets that enhance the physical and visual connectivity of neighbourhoods.

Development Controls

Pemulwuy Residential

C1. The internal road network layout should be sufficiently permeable for convenient pedestrian and local vehicle movement. However, it should also be sufficiently constrained to discourage non-essential traffic from entering the residential precincts.

C2. Detailed design of the road network (e.g. intersection layout, pavement materials) should be consistent with the traffic engineering principles of the RMS's Road Design Guidelines or AUSTROADS Guide to Traffic Engineering Practice. See Figure 60 (Pemulwuy North) and Figure 59 (Pemulwuy South) for an indicative road layout.

C3. The design of roads should seek to minimise the traffic noise impact on adjacent properties particularly at approaches to residential areas.

C4. Street reservations shall be used to accommodate landscaping, run-off treatment and infrastructure such as integrated underground services reticulation.

C5. The design of roads and bridges should seek to accommodate, whenever possible, the continuity of vegetation corridors and habitat to promote fauna movements.

C6. Road design principles are summarised in C7 which address the functional needs of traffic, pedestrians and cyclists. Figures 61 to 66 shows street sections. These requirements do not apply to private access ways.

C7. The design of the roads should minimise the amount of cut and fill and to minimise impacts on salinity.

C8. Traffic flow is to be controlled in residential areas to 50 km/h and below (whilst maintaining the ability for street sweeping) through implementation of the following measures:

a) low profile, landscaped roundabouts at major residential intersections;

b) on-street parking used as an anticipated hazard through the action of parking cars;

c) eliminating opportunities for vehicles to cross directly over intersections by staggering junctions, particularly local streets;

d) overall street lengths are kept to a minimum to reduce potential for acceleration;

e) median strips enclosing roadway carriageway restricting traffic to a single width eliminating overtaking and reducing overall speed;

f) defined bus routes along the collector roads will control the flow of traffic by creating temporary traffic obstacles and slowing traffic, meaning bus bays within residential precincts to be used only when absolutely necessary;

g) planting in median; and

h) planting in parking lanes.

Pemulwuy Residential

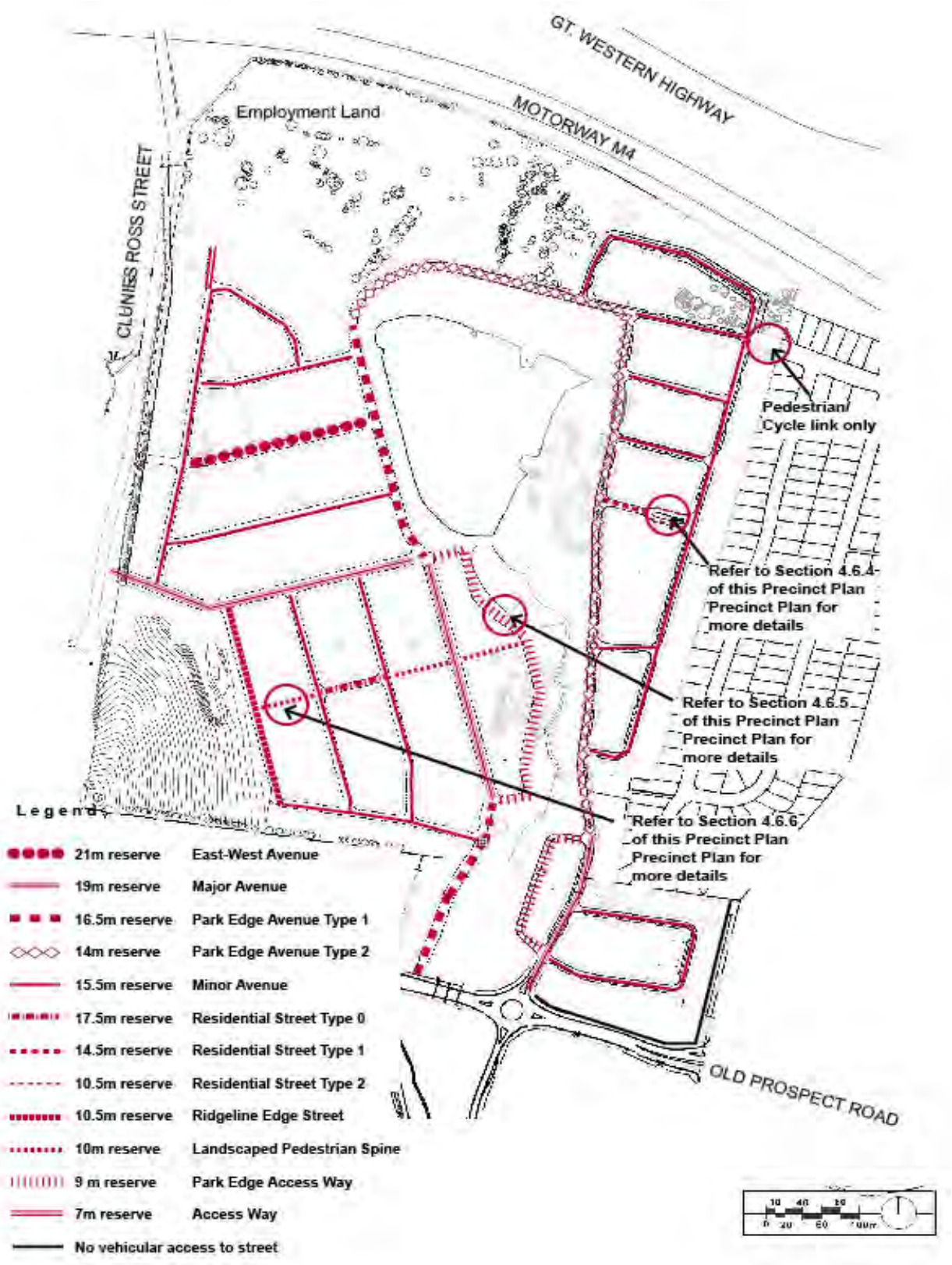


Figure 60: Street types- Pemulwuy North

7.5. Public Road Designs – Pemulwuy North

Development Controls

East-West Avenues (Figure 60)

- indicative traffic volume – 3000– 7000 vehicles per day;
- 21 metre road reserve;
- 14 metre carriageway width;
- one through traffic lane of 3.5 metres, provided in each direction;
- parking provision in carriageway or indented between street trees on both sides; and
- 1.5 metre footpath width on one side, 2.9 metre footpath/cycleway on other.

Major Avenue

- indicative traffic volume – 3,000 – 7,000 vehicles per day;
- 19 metre road reserve;
- 12 metre carriageway width;
- one through traffic lane of 3.5 metres, provided in each direction;
- parking provision in carriageway indented between street trees on both sides; and
- 1.5 metre footpath on each side.

Park Edge Avenues Type 1

- indicative traffic volume – 300 – 3,000 vehicles per day;
- 16.5 metre road reserve;
- 12 metre carriageway width;
- One through lane of 3.5 metres, provided in either direction;
- parking provision in carriageway indented between street trees on both sides; and
- 1.5 metre minimum footpath width on residential side. Cycleway/footpath in reserve.

Park Edge Avenues Type 2 (Figure 61)

- indicative traffic volume – 300 – 3,000 vehicles per day;
- 14 metre road reserve;
- 9.5 metre carriageway width;
- One through lane of 3.5 metres, provided in either direction;
- parallel parking provision in carriageway indented between trees on residential side; and
- 1.5 metre minimum footpath width on residential side. Cycleway/footpath in reserve.

Minor Avenues

- indicative traffic volume – 300 – 3,000 vehicles per day;
- 15.5 metre road reserve;
- 8.5 metre carriageway width;
- parallel parking provision in carriageway indented between trees on one side; and
- 1.2 metre minimum footpath width on both sides.

Residential Street Type 0

- indicative traffic volume – 50 – 300 vehicles per day;
- 17.5 metre road reserve;

- 7.5 metre carriageway width; and
- 1.2 metre minimum footpath width on both sides.

Residential Street Type 1

- indicative traffic volume – 50 – 300 vehicles per day;
- 14.5 metre road reserve;
- 7.5 metre carriageway width; and
- 1.2 metre minimum footpath width on both sides.
- Residential Street Type 2 (Figure 62)
- indicative traffic volume – 50 – 300 vehicles per day;
- 10.5 metre road reserve;
- 5.5 metre carriageway width;
- One way access; and
- 1.2 metre minimum footpath width on both sides.

Ridgeline Edge Streets

- indicative traffic volume – up to 50 - 300 vehicles per day;
- 10.5 metre road reserve;
- 6 metre carriageway width;
- One way access;
- 1.2 metre footpath; and
- cyclists to share road with vehicles.

Park Edge Access Way

- indicative traffic volume – up to 20 - 50 vehicles per day;
- 9 metre road reserve;
- 5.5 metre carriageway width;
- 1.2 metre footpath on residential side;
- One way access;
- One parking lane on residential side;
- 2.5 - 3.0 metre pedestrian/cyclist path in the park reserve on eastern side; and
- 1.2 metre footpath in the park reserve on western side.

Pemulwuy Residential

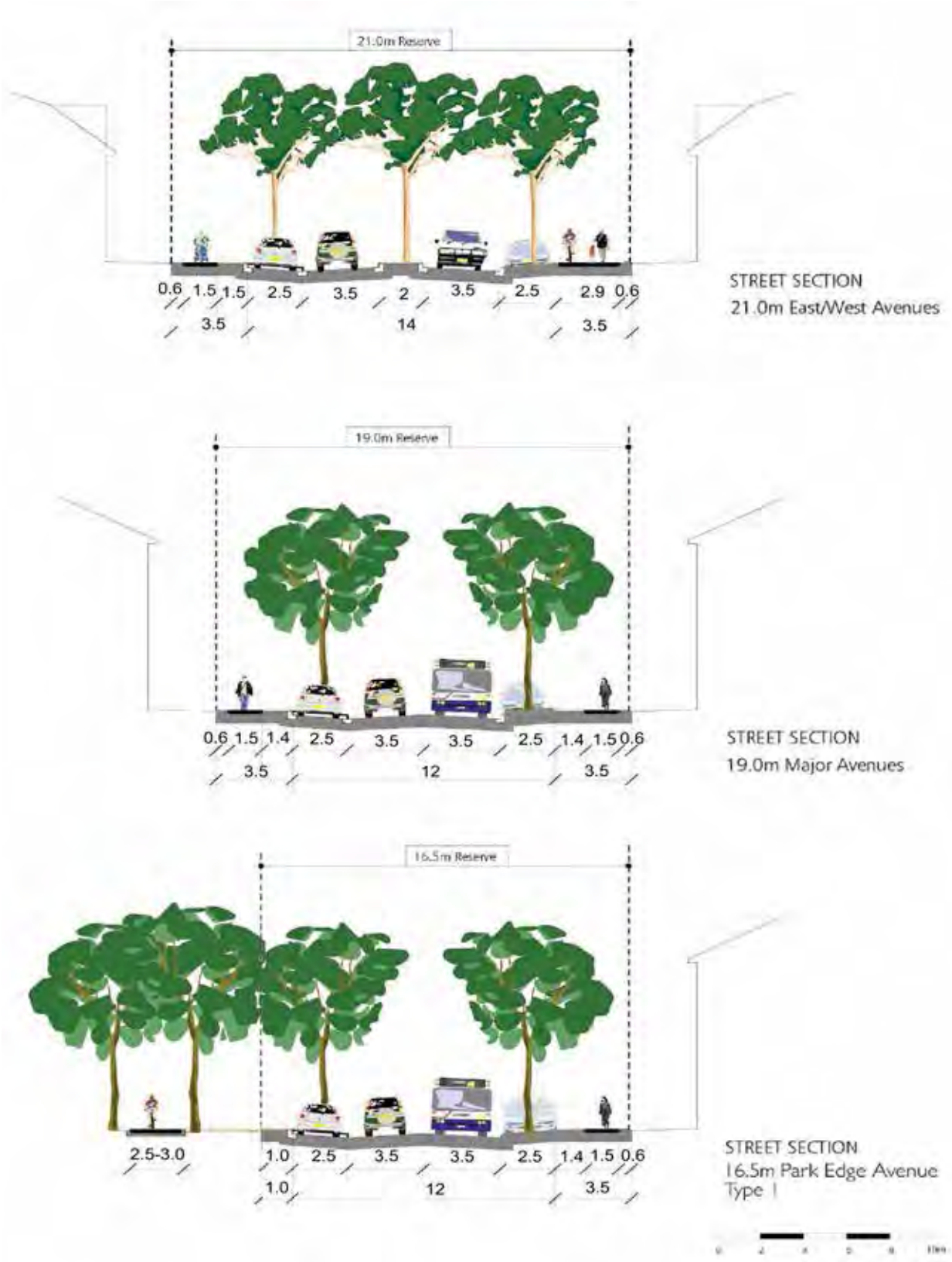


Figure 61: Street Sections- Pemulwuy North

Pemulwuy Residential

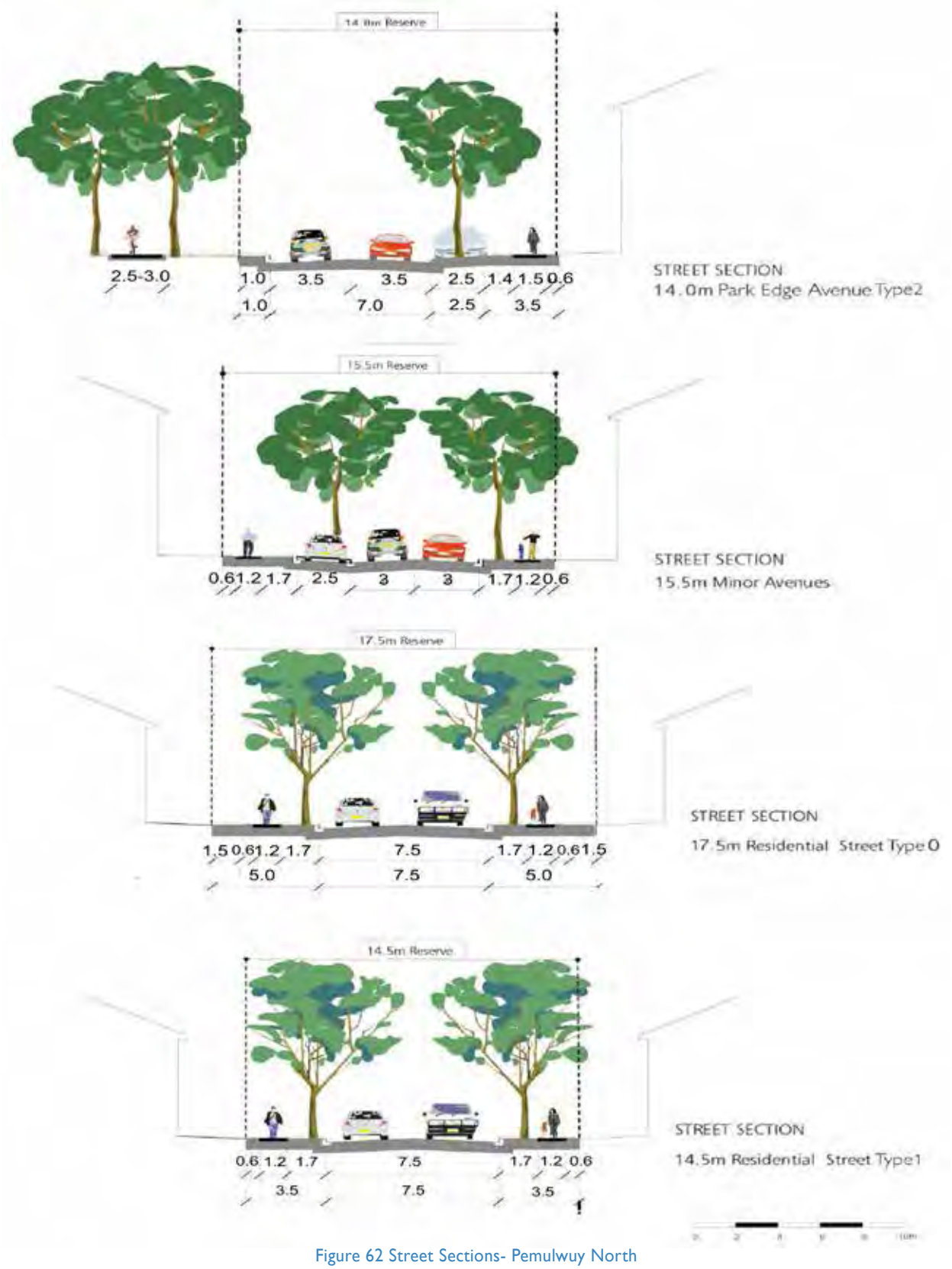


Figure 62 Street Sections- Pemulwuy North

Pemulwuy Residential

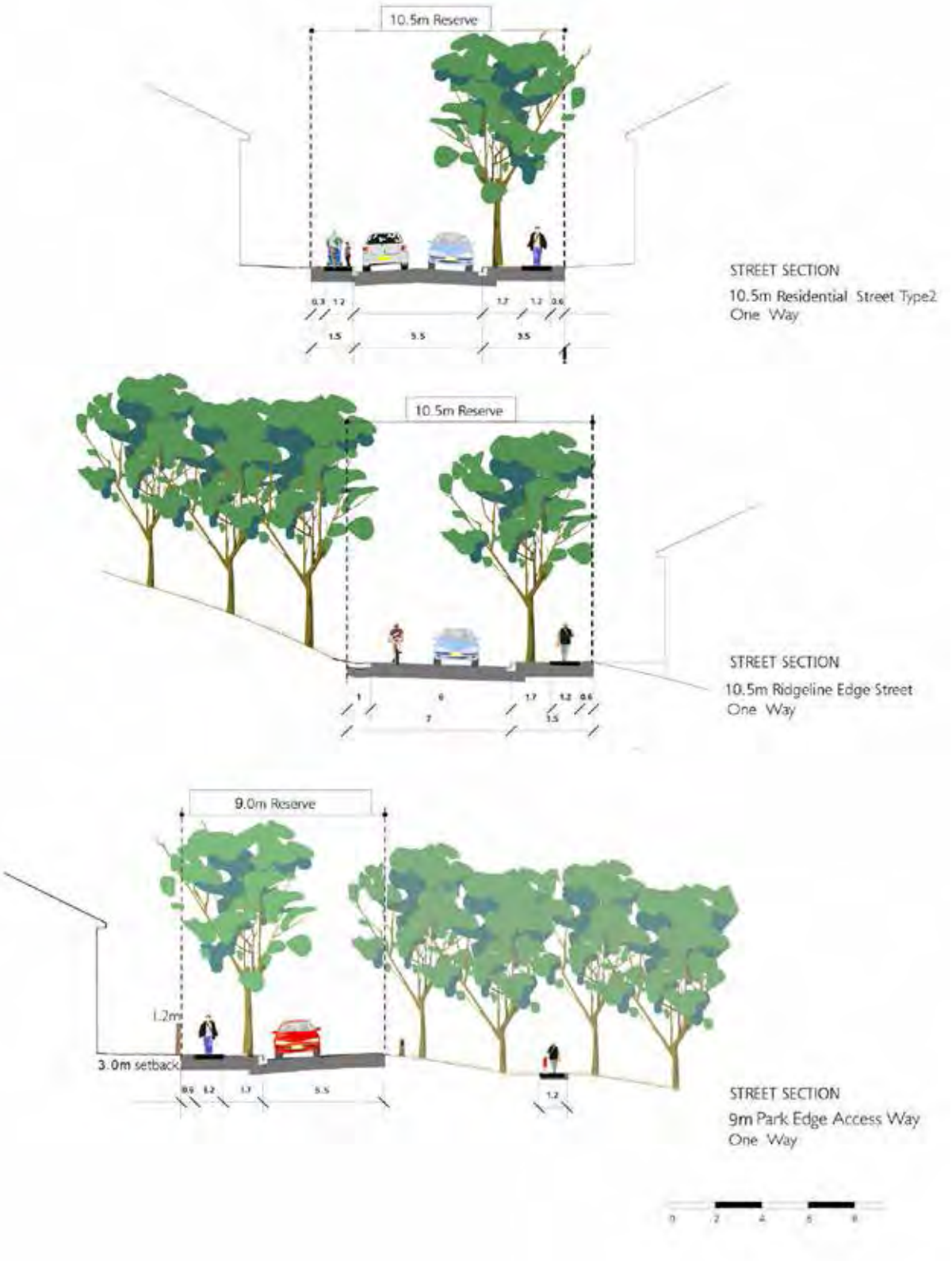


Figure 63: Street Sections- Pemulwuy North

7.6. Public Road Designs – Pemulwuy South

Development Controls

Distributor (East-West Link Road)

- indicative traffic volumes – 11,000 vehicles per day on completion and if open to all traffic.
- 24 metre road reserve;
- two lanes provided in each direction – (3.5m + 3.5m) x 2;
- potential to utilise clearway conditions during peak periods;
- no parking in carriageway from the intersection with Greystanes Road to the first roundabout.
- parking provision in carriageway during non clearway periods (or indented) providing two through traffic lanes in each direction at peak times and one through lane in each direction at other times;
- 1.5 metre footpath width located on one side away from the kerb; and - designated 3 metre shared cycle/ pedestrian path provided.

Collector Road (East-West and Major North-South Avenues)

- indicative traffic volume – 6,000 – 7,000 vehicles per day;
- 19 - 21 metre road reserve;
- one through traffic lane of 3.5 metres, provided in each direction;
- parking provision in carriageway or indented between street trees;
- 1.5 metre footpath width located both sides away from the kerb; and
- an additional 1.4 metre footpath for a cycle lane to be provided on the East- West Avenue

Local Streets (Minor North-South Avenues, Ridgeline Edge, Park Pair, Residential and Park Edge Streets)

- indicative traffic volume – 300 – 3,000 vehicles per day;
- 10 – 15.5 metre road reserve;
- 5.5 – 8.5 metre carriageway width;
- parallel parking provision in carriageway;
- Park Pair Streets one way access;
- 1.2 metre minimum footpath width on both sides excluding Ridgeline edge streets (one side only); and
- cyclists to share road with vehicles.

Local Access Street (Little Streets)

- indicative traffic volume – up to 300 vehicles per day;
- 10.5 metre road reserve;
- 5.5 metre carriageway width;
- one way access;
- no parking provision in carriageway;
- access to all sites;
- 1.2 metre footpath on both sides; and
- cyclists to share road with vehicles.

Pemulwuy Residential

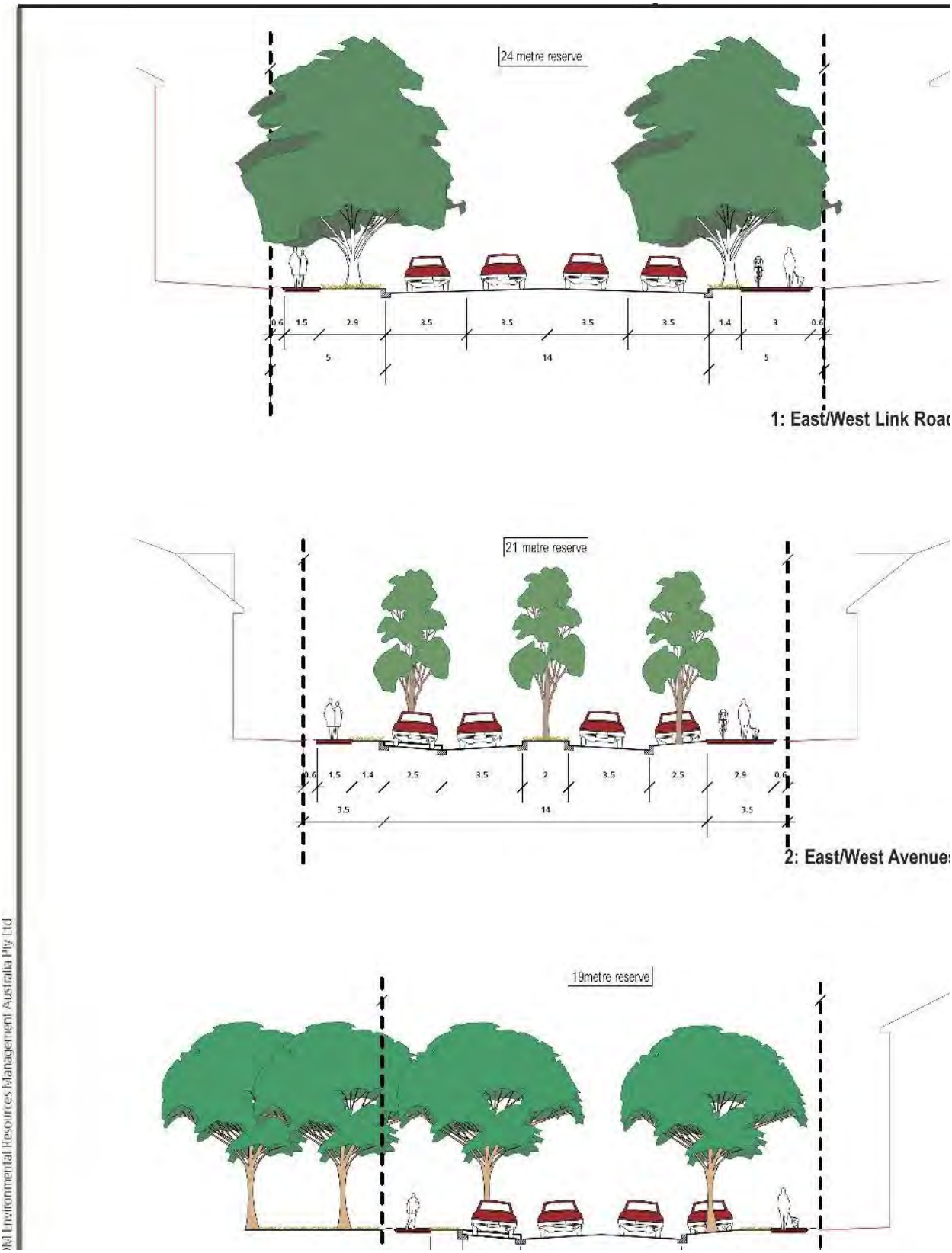


Figure 64: Distributor and collector roads- Pemulwuy South

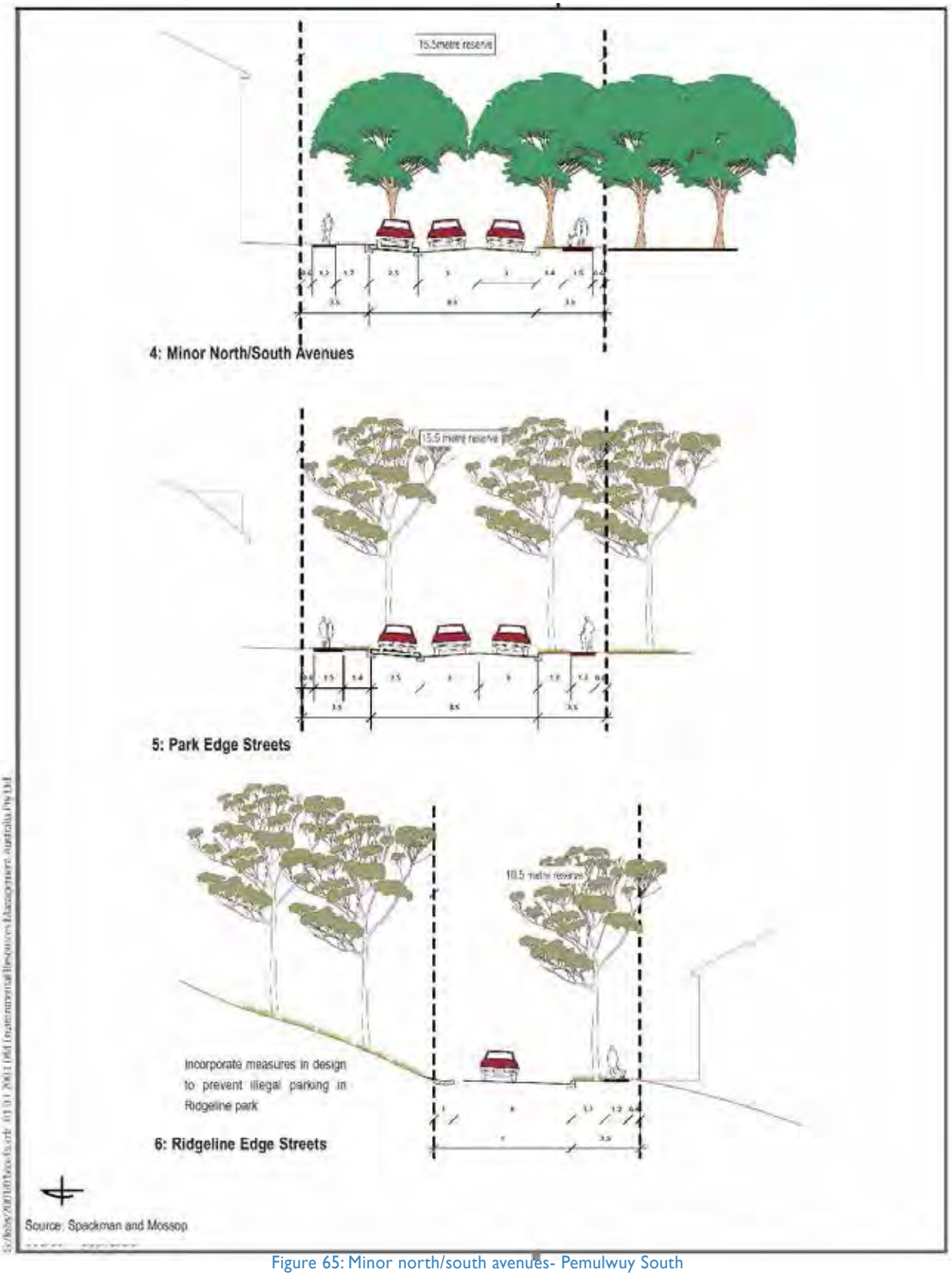


Figure 65: Minor north/south avenues- Pemulwuy South

Pemulwuy Residential

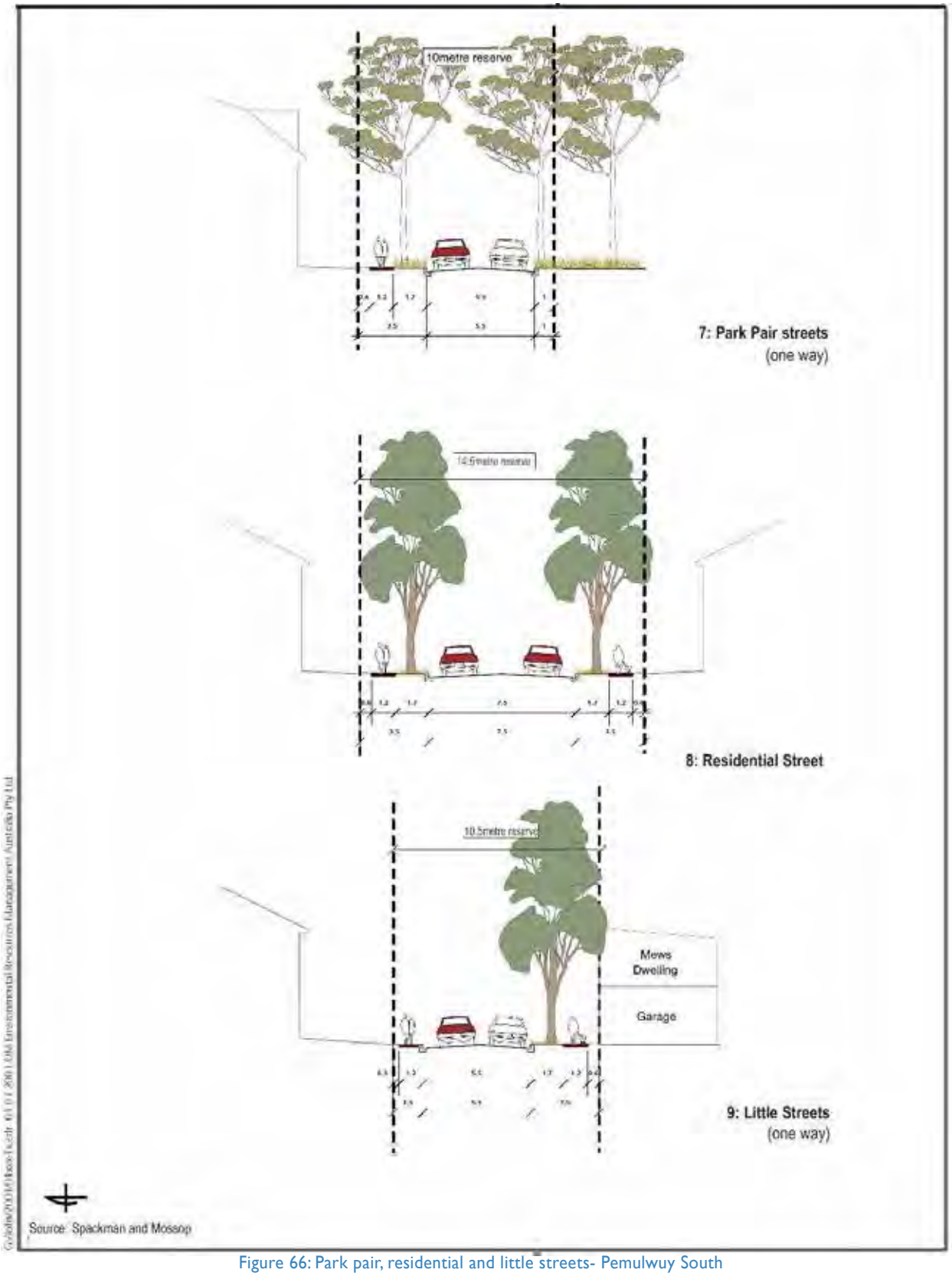


Figure 66: Park pair, residential and little streets- Pemulwuy South

7.7. Streets, Park Edges, Pedestrian Spines - Landscape Designs

Note: For Objectives for design of Street Landscape, Park Edges and Pedestrian Spines, refer to Section 7.5 above.

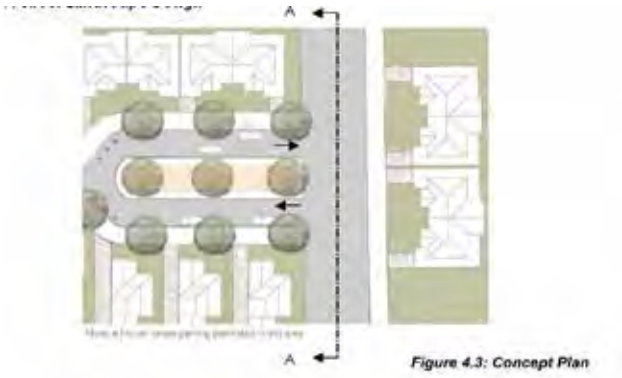


Figure 4.3: Concept Plan

Figure 4.4: Section A-A

Figure 67: Street landscape design

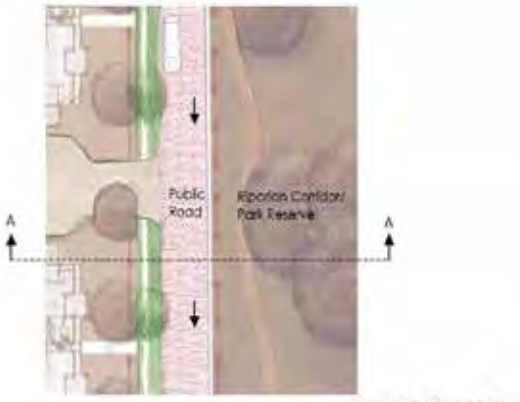


Figure 4.5: Concept Plan

Figure 4.6: Section A-A

Figure 68: Park edge accessways

Figure 68: Street Landscape Design.

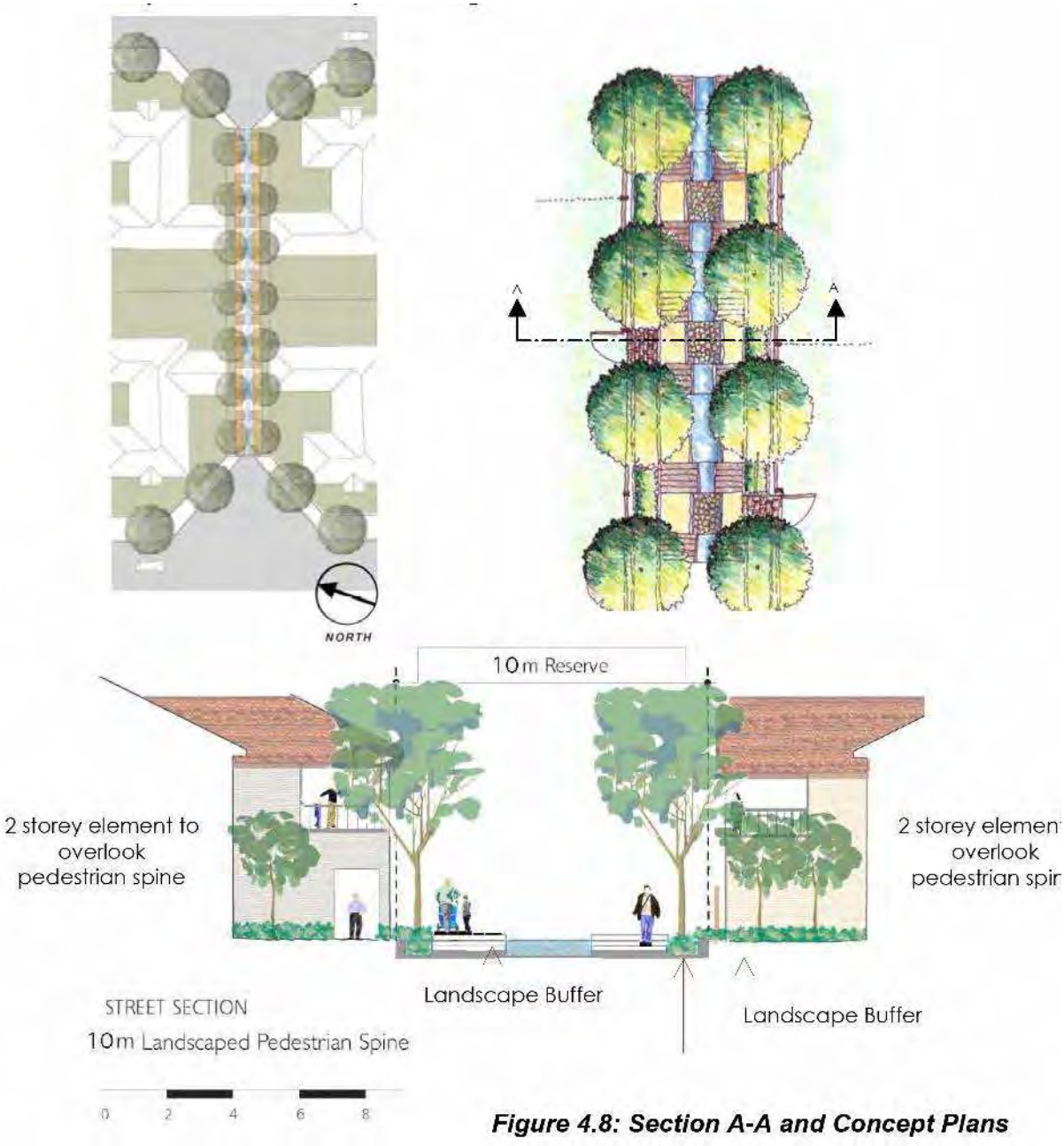


Figure 69: Landscaped pedestrian spine design

7.8. Public Transport

Objectives

O1. Achieve a minimum 10 per cent increase in non-private vehicle mode splits for the journey to work compared to a "conventional development" approach.

O2. Provide a bus route through the site to link to local busways and the regional transport network.

O3. Ensure that public transport stops, nodes and interchanges are safe, attractive and inviting to maximise their use.

O4. Achieve reductions in VKT of at least 5% compared to 'conventional' residential development.

Development Controls

Note: Investigations have indicated that a 10 per cent increase in non-private mode share for the journey to work would be achieved by the provision of alternative travel modes including a rapid bus transitway through the Boral Employment lands, an efficient bus link through the site and provision for cycling and walking.

C1. Public transport access points are to be provided to maximise the proportion of residents who are located within 400m safe walk of a bus stop.

C2. Bus routes should create links to Blacktown, Merrylands Station and the proposed Blacktown to Wetherill Park Transitway.

C3. Bus stops to be identified at 200 metre intervals with bus shelters to be provided at 400 metre intervals along designated bus routes.

C4. In developing the residential land, construct and dedicate roads.

Local Public Transport:

C5. Provide appropriate facilities at bus stop locations to encourage increased use and safety. Such facilities may include bus lay-bys, speed controls to protect pedestrians, shelters and seating for waiting passengers, display of timetable information and street lighting for security.

Note: Normally roads above the local street in the hierarchy are designed as bus routes. For details of minimum criteria for bus route design, see New South Wales Development Design Specification D1 Geometric Road Design (Aus-Spec-1\NSW-D1 Mar 2001)

C6. Make arrangements with bus operators to provide bus services as early as possible within the development in order to promote usage.

C7. Continue to seek optimum timetabling links to the proposed Blacktown/Wetherill Park Transitway as a priority.

C8. Provide link feeder services to surrounding local areas, i.e. Greystanes, to improve access, catchment size and hence service viability.

C9. Implement 'Demand Management' by promoting alternative modes of travel to the private car. This could include distribution of information packs on bus services and cycle routes, free bus tickets, advertising of services and introduction of bus services to each stage of development as the latter is completed.

C10. The site owner/developer is to provide welcome information to incorporate public transport information and timetabling, including links to any proposed transitway.

C11. The alignment and geometry of roads that form bus routes need to allow for efficient and unimpeded movement of buses without facilitating high traffic speeds. Where potential traffic calming devices are installed along bus routes specific design requirements for bus access must be employed; and

C12. Indicative performance guidelines for bus routes are as follows:

Minimum geometric layout:

- Radius: 12.5 metres;

Road grades:

- Max. desired pavement crossfall: 3%;
- Max. desired gradient: (within 50 metres of stations): 6%;
- Absolute max. gradient: (within 50 metres of stations): 12%.

(Source: RMS and AUSTROADS)

7.9. Pedestrian and Cycle Routes

Objectives

O1. To encourage trips to be undertaken by walking and cycling instead of private vehicle.

O2. To promote connectivity throughout Pemulwuy.

O3. To create a clearly defined pedestrian and cycleway network within and through Pemulwuy.

O4. To make connections to regional cycle links and between major areas of proposed and existing open space and other recreational, community and employment land uses.

O5. To ensure non-vehicular links provide a safe and secure environment, both in terms of road safety and personal security, which encourages walking and cycling.

Development Controls

C1. Create pedestrian and cycle linkages between the residential precinct and areas of open space, recreational, community and employment land uses, broadly along the alignment shown on Figure 71 'Holroyd Bike Plan 2009'.

C2. Within the Greystanes Creek Woodland Park, locate pedestrian and cycle routes as far as practicable in the outer protection zone;

C3. Continue a shared vehicle and cycle routes along the ridgeline edge street in Pemulwuy South.

C4. Locate and design walking and cycling networks to:

a) provide direct routes between key trip origins and destinations;
b) minimise steep grades; and
c) be safe in terms of road safety and person security.

Pedestrian:

C5. Undertake detailed design of pedestrian control and protection facilities is to be undertaken in accordance with the relevant sections of the Australian Standards (AS1742) and council's Work Specifications for Subdivision and Development. This includes pedestrian crossings, signage, local area traffic management and disabled access;

C6. Ensure pedestrian only footpaths have a minimum width of 1.2 metres (wider footpath may be required in areas of high pedestrian activity such as community facilities, shops and other activity centres) and a maximum grade of 15 per cent, except where grades on Prospect Hill make this unachievable.

C7. Due to difficult grades, provide only walking tracks up to Prospect Hill linking to strategically located lookout points. The design & location of this path/s is to be in accordance with the Prospect Hill Conservation Management Plan, Heritage Landscape Plan and Heritage Interpretation Plan;

C8. For identified pedestrian spine connections from Prospect Hill to the Woodland Park (see Figure 77), provide a reserve of 10m, with appropriate landscaping. These connections are to be overlooked with 2 storey houses that address the pedestrian route, creating passive surveillance with windows, balconies, sit-outs, and the like. Design fencing to assist in the overlooking of this public domain area.

Cycleways

C9. Design cycling routes within the road hierarchy to reflect the level of activity and function of the various roads such as dedicated cycleways on collector roads and shared access on local streets;

C10. Link designated cycleway routes to the surrounding regional cycleway network. Cycle routes along open spaces are to be between 2.5 – 3.0 metres in width (where shared with pedestrians), and designated accordingly;

C11. Dedicated cycle lanes are to be either line marked or separated from the road lanes.

C12. Provide opportunities for the cycle network to link with the proposed regional cycle route, including that along Lower Prospect Canal Reserve.

C13. Link the pedestrian/cycle route to the north under existing roads (M4, Great Western Highway) using existing culverts if possible. Consult Blacktown City Council in this regard;

C14. Link pedestrian/cycle routes within the Greystanes Creek Woodland Park with those in Pemulwuy South;

C15. Use cycle routes to link all amenities and areas of interest, including commercial/retail areas, play areas and view points;

C16. Ensure technical design requirements such as pavement design and intersection/crossing treatments are consistent with AUSTROADS Guidelines (1998) Guide to Traffic Engineering Practice, Part 14, Bicycles;

C17. Distribute secure bike parking throughout the cycleway network and likely destination points. Parking facilities range from simple hitching rails to secure bike lockers. Key locations would be within the employment precinct, near public transport linkages, at the village centre, at the Village Green, at Prospect Hill Park, and at the eastern detention pond lookout;

C18. Provide for cycle refuge facilities at cycleway access points with collector roads.

Pemulwuy Residential

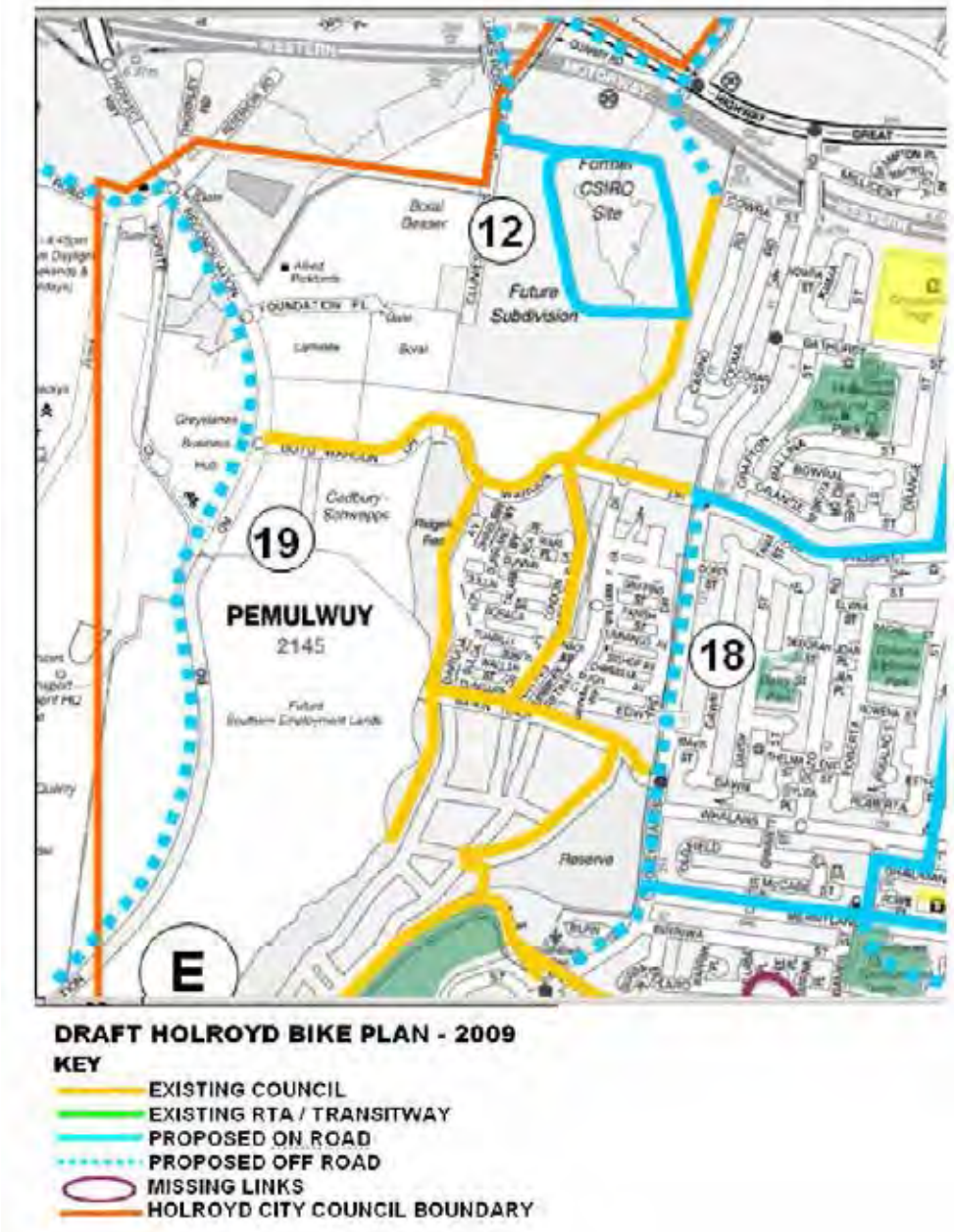


Figure 70: Holroyd Bike Plan 2009

7.10. Service Areas for the Village Centre (Pemulwuy South)

Objective

O1. To provide adequate access for service and delivery vehicles.

Development Controls

C1. Ensure access and circulation design within development complies with Australian Standard AS 2890.

C2. Allow service and delivery vehicles to efficiently and safely access the Village Centre.

C3. Ensure loading dock and delivery areas are appropriately designed.

8. Heritage

8.1. Aboriginal Archaeology and Heritage

To provide information that could be used for planning and impact assessment, detailed archaeological investigations have been completed for Pemulwuy. The sensitive nature of some of the findings means that the accompanying maps (Figures 72 and 73) provide only a general indication of the vicinity of archaeological items. For further information, see the Biodiversity and Heritage Background Report (Pemulwuy South) and Aboriginal Heritage Reports by ERM, May 2004, March 2005 and Jo McDonald Cultural Heritage Management, August 2003; (Pemulwuy North).

Figure 71: Aboriginal Sites Sensitivity Map- Pemulwuy North

Pemulwuy Residential

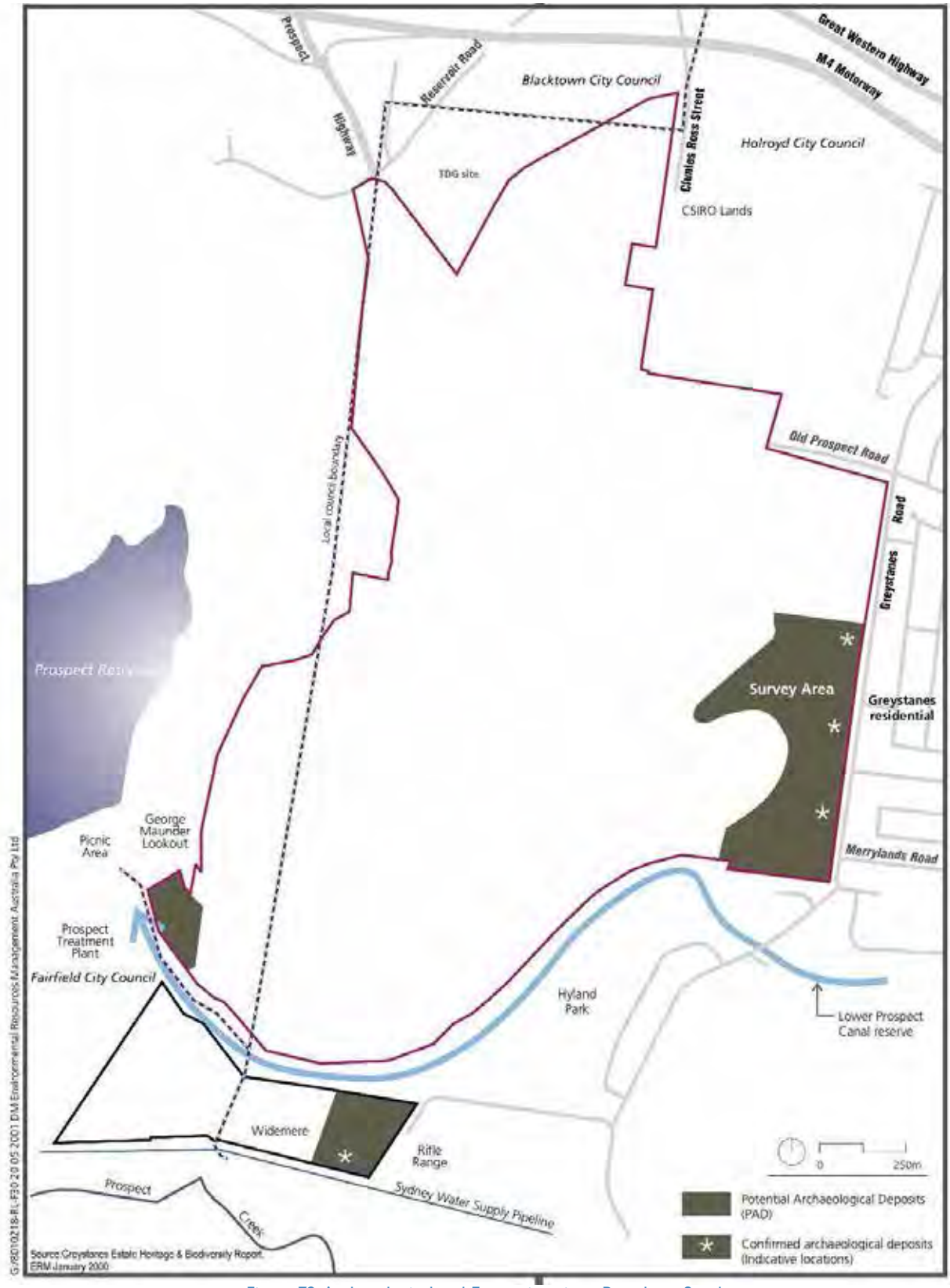


Figure 72: Archaeological and Excavation sites- Pemulwuy South

8.2. Strategic Archaeological Management

The area is important to Aboriginal people, as Prospect Hill and the surrounding area is known to have been a significant meeting place. It also has historical significance for its association with conflict between local Aboriginal people and the first settlers at Prospect Hill. For further explanation, refer to the Prospect Hill Conservation Management Plan.

Objectives

O1. To retain and preserve some representative areas of high potential for archaeological deposits (PAD).

O2. To conserve representative Aboriginal artefacts, sites and sensitive areas (PADs) within open space, where possible.

O3. To salvage information and artefacts from PAD sites that will be impacted by development.

O4. To recreate and manage elements of the cultural landscape by rehabilitating a suitable area of woodland communities to resemble those that existed prior to European settlement. This would be undertaken in consultation with the local Aboriginal community.

O5. To incorporate recognition of the Aboriginal and European heritage of the site into conservation management strategies.

Development Consent

C1. Create an area of open space with the primary function being conservation of ecological and archaeological resources.

C2. Undertake investigations prior to destruction of known or potential sites for the purposes of salvage and contextual information.

C3. Retain all potential scarred trees in open space that is accessible to the Aboriginal community.

C4. Seek comment to destroy CSIRO-4 (PAD2) under section 90 of the National Parks and Wildlife Act 1974.

C5. Develop a program to educate the local community on the pre-European history and heritage values of the Pemulwuy area.

C6. Recreate and manage the cultural landscape in conjunction with the local aboriginal community by vegetating open space to resemble the natural landscape prior to European settlement. These strategies are outlined elsewhere.

a) Scarred Trees

Objectives

O1. To protect identified scarred trees.

O2. To determine the ownership and ongoing management responsibility of the surrounding open space areas.

Development Controls

C1. Ensure scarred trees are located within open space (e.g.: on the western side of Greystanes Creek), surrounded by enhanced locally indigenous vegetation, yet that is accessible to the Aboriginal community.

C2. To protect scarred trees and avoid drawing attention to them, place a screen using locally indigenous shrubs around the tree.

C3. Place any developments such as playground structures, benches, barbecue facilities etc. away from the trees.

C4. Dedicate the open space within which the tree is contained to Council prior to development of adjoining areas.

C5. Consult the Aboriginal community in naming of these open space areas.

C6. Involve representatives of the Aboriginal community in confirming and locating the tree prior to development commencing, and ensure that correct protection measures are in place.

C7. Note the existence and protected status of the scarred tree in any bushfire management plan so that the tree is not impacted during any hazard reduction burning.

b) Excavation for Salvage and Consent to Destroy

Areas of PAD (Potential Archaeological Deposit) that are outside conservation areas will be developed. In order to obtain archaeological information about the site before it is destroyed, a salvage excavation program is required prior to development.

Objectives

O1. To define the excavation program.

O2. To record findings.

O3. To obtain a Consent to Destroy.

O4. To educate the local community in the pre-European history of the site.

O5. To interpret the findings of the ERM archaeological excavations at CSIRO-4 and educate the local community on the pre-European history of the site.

Development Controls

C1. For the area outside any conservation area and outside the drip line of any scarred tree,

prepare an application for section 90 Consent to Destroy from NPWS, with permit to salvage/ collect any artefacts observed by the aboriginal community during monitoring of construction impacts.

C2. In order to obtain archaeological information about the archaeologically sensitive areas, develop a detailed salvage excavation program for selected areas outside any conservation area shown in Figures 71 and 72 (E.g.: PADs 1 to 4).

C3. Prepare a detailed report that outlines the method and results of excavation. In the report discuss the results in light of all surface survey results and excavation results within Pemulwuy.

C4. Provide a copy of the report to the NPWS, Holroyd City Council, the Deerubbin Aboriginal Land Council, Darug Tribal Corporation, Darug Custodian Aboriginal Corporation, and Gandangara Local Aboriginal Land Council.

C5. Prepare a Plan of Management to ensure the ongoing protection of Indigenous cultural heritage that will be preserved within open space across Pemulwuy. Include within the Plan the scarred tree and any PAD within the open spaces, and incorporate relevant natural areas to achieve protection of a holistic cultural landscape. Involve the Aboriginal community in the preparation of the Plan of Management.

C6. Monitor ground clearing during the initial construction phase through the Aboriginal community under a Section 80 Permit in the event that archaeological material is encountered.

C7. If archaeological material is observed during or after clearing, cease work immediately, consult the Aboriginal community, and seek advice from NPWS. The Aboriginal community will collect this material. This work should be covered by the Section 87 Permit and should not impact on the construction schedule.

C8. Should human skeletal remains be encountered, then work must cease immediately and advice sought from NPWS and the Aboriginal community. The section 90 consent would not cover this type of evidence.

C9. Use information obtained from salvage excavation in conjunction with the existing ERM test excavation results when developing an Aboriginal heritage education program including signage for any conservation area and other open space locations.

c) Aboriginal Heritage Management Measures

Objectives

O1. To protect site locations, contextualised in the broader cultural landscape.

O2. To reflect Aboriginal occupation and history in the public areas.

Development Controls

C1. Do not make site locations and descriptions publicly available.

C2. Provide general knowledge of Aboriginal sites and their legal protection to developers and general maintenance staff. The proponent should make clear to construction crews/ subcontractors, the specific responsibilities regarding the protection of Indigenous cultural heritage items (e.g.: CSIRO-1), to ensure that inadvertent damage or destruction does not

occur in those areas to be preserved.

C3. Prepare an education strategy for cultural heritage awareness for developers, contractors and Council. Include a fact sheet and sensitivity map indicating areas requiring particular attention and consultation with the Aboriginal community and NPWS.

C4. Invite the Aboriginal community to actively participate in developing the education strategy.

C5. Consult the Aboriginal community prior to and during clearing and preliminary ground work to collect artefacts from areas to be developed.

C6. Do not erect signs which draw attention to the identified archaeological sites. This will prevent disturbance to Aboriginal and archaeological sites.

C7. In the naming of parklands and reserves, incorporate recognition of Aboriginal occupation and the history of the area. Consult the Aboriginal community in the naming of these features .

C8. Consult the Aboriginal community regarding an appropriate memorial under management measures.

C9. Consult the Aboriginal community on the development of any walking routes or areas within the precinct which incorporate descriptive signs and interpretation along these.

C10. Consult the Aboriginal community regarding the design of landscaping of waterways and parklands in the precinct as well as re-vegetation programs.

d) Grey Box Reserve Aboriginal Heritage Management

Objectives

O1. To conserve areas of high PAD and significant known artefacts or sites within Grey Box Reserve.

O2. To manage the impacts from recreation and access.

O3. To educate the local community in the pre-European history of the site.

Development Controls

C1. Preserve Grey Box Reserve, Pemulwuy, incorporating areas of potential archaeological deposits and representative elements of the cultural landscape.

C2. In particular, preserve the core conservation area in the south eastern corner of the site.

C3. Prepare a plan of management for Grey Box Reserve, detailing measures to appropriately manage the Aboriginal cultural heritage. This should be prepared in consultation with the local Aboriginal community, the National Parks and Wildlife Service (NPWS) and Council.

C4. Limit recreational opportunities in the conservation area to passive activities.

C5. Develop a suitable educational program in consultation with the local Aboriginal community, National Parks and Wildlife Service and Council.

C6. Ensure that interpretive signs and other educational material are general in nature and do not draw attention to any physical aspects of the Aboriginal cultural heritage.

8.3. European Heritage

Objectives

O1. To protect the integrity of the crown of Prospect Hill and other sites identified as being of European heritage significance.

O2. To research and document the history of the site of Pemulwuy and its role in the history of Sydney.

O3. To educate the community on the history and role of the site.

O4. To utilise the history of the site as a theme in its redevelopment.

O5. To preserve the original gates of Greystanes House as an integrated part of the development.

Development Controls

C1. Record Pemulwuy as a whole in its current state photographically, utilising aerial photography and possibly digital video recording.

C2. All documentary, cartographic and photographic material related to the development, growth, buildings and history of the site should be sourced, accessioned and archived. Collect copies of accessible historic material into an archive which must be lodged in the care of an organisation which is acceptable to Council and where it is available for research and educational purposes. Identify archive material held elsewhere and cross-reference it with the above archive. A written description of major structures should accompany the photographic record.

C3. Incorporate the Greystanes House gates into the development at an appropriate location and keep them in a satisfactory condition.

8.4. Prospect Hill State Heritage Registered Area

Objectives

O1. To protect the integrity of the Prospect Hill State Heritage Registered Area.

O2. To research and document the history of the Prospect Hill State Heritage Registered Area and its role in the history of Sydney.

O3. To educate the community on the history and role of the site.

O4. To utilise the history of the site as a theme in its redevelopment.

Development Controls

C1. Maintain the prominence of Prospect Hill as a significant remnant geologic and topographic element. Site and design development at critical locations so that views of the ridgeline are maintained.

C2. Ensure that future use, landscape interventions, heritage interpretation and vegetation management of the Prospect Hill SHRA are informed by and consistent with:

a) Prospect Hill Conservation Management Plan (Conybeare Morrison: 2005);

b) Prospect Hill Heritage Landscape Study and Plan (Government Architect's Office: 2008);

c) Prospect Hill Heritage Interpretation Plan (MUSEcape: 2009).

C3. Development within the vicinity of the Prospect Hill State Heritage Register Area may require a Heritage Impact Assessment to accompany Development Applications. The Heritage Assessment shall be in accordance with the three documents listed above under C2. The need for a heritage assessment is at the discretion of Council.

C4. In the instance where a broad Heritage Assessment of the interface between the Prospect Hill State Heritage Register Area and the adjoining sites has been undertaken, submit with all Development Applications a Statement of Environmental Effects addressing this Heritage Assessment.

9. Biodiversity

Although Cumberland Plain Woodland occurs on site, these remnants are mostly small and in relatively poor condition. Despite this, the endangered status of the woodland has been recognised by the formulation of objectives. A high proportion of the woodland will be conserved and added to by regeneration. The ecological objectives of the site have been developed in recognition of the fact that the site has been extensively cleared, and have been devised to allow for retention and enhancement of the existing patches of native vegetation and, where possible, improving linkages between them.

Objectives

O1. To maintain the existing level of biodiversity during and after development.

O2. To conserve significant vegetation communities that are locally indigenous to Pemulwuy.

O3. To conserve threatened species populations and their habitats.

O4. To retain and enhance the riparian corridor.

O5. To create fauna movement corridors within the site and link to external ecological resources (where practicable allowing for other site uses).

O6. To balance the ecological values of the site with other development requirements.

Development Control

C1. Create areas of public open space with the incorporation of conservation, ecological and archaeological resources.

C2. Provide an open space network which will have multiple functions, including increasing areas of native vegetation and providing fauna movement corridors.

C3. Plant and manage the site to minimise hazards and manage impacts from bushfire.

C4. Conserve remnant communities of Cumberland Plain Woodland and Sydney Coastal River Flat Forest.

9.1. Ecologically Sustainable Development

Objectives

O1. To abide by the precautionary principle.

O2. To promote social equity, including inter/generational equity.

O3. To conserve biological diversity and ecological integrity; and

O4. To improve valuation and pricing of environmental resources.

Development Controls

C1. Undertake adequate studies and analysis of the natural heritage of a site to determine an appropriate course of action having regard to the available information.

C2. Maximise use of renewable energy sources e.g. energy and service efficient subdivision layout; and minimise materials consumption e.g. recycling and re-use of materials in the enhancement and formation of on-site landforms.

C3. Practise water efficiency and conservation measures to reduce water consumption, the use of solar energy for heating appliances, and maintenance or improvement of water quality through a catchment management approach to the site.

C4. Maintain and enhance significant vegetation and habitat.

C5. Minimise the use of non-native flora, and protect threatened ecological communities e.g. provide compensatory and additional habitat in appropriate areas for vegetation corridors, by tree propagation and planting native species within existing and proposed vegetation corridors.

C6. Recognise and integrate significant cultural and archaeological features/aspects into designs.

C7. Ensure that the Cumberland Plain Woodland/Sydney Coastal River Flat Forest along the Creek, containing several mature species typical of the area, is largely conserved and managed to enhance the ecological value of the site.

9.2. Fauna Movement Corridors

Objectives

O1. To provide vegetation which will facilitate movement through the site of non-ground dwelling fauna.

O2. To provide additional foraging habitat.

O3. To provide connectivity with off-site linkages for main corridors to and from external ecological resources.

Development Controls

C1. Use locally indigenous species in vegetating the corridor network including threatened and regionally significant species. Plantings should be propagated from locally collected seed and be hardened on site.

C2. Retain existing canopy species typical of Cumberland Plain Woodland and Sydney Coastal River Flat Forest where possible throughout the site.

C3. Provide a vegetated riparian corridor (consisting of a core riparian zone and outer protection zone) along either side of Greystanes Creek to protect water quality, aquatic habitat and allow for fauna movement, plus some passive recreational and aesthetic functions. Refer to Figures 72 and 73 below.

C4. Ridgeline and creekline corridors should have a minimum width of 20 metres .

C5. Extend the riparian corridor the entire length of Pemulwuy and provide additional opportunities to link westward to Cumberland Plain Woodland around Prospect Reservoir.

C6. Extend the riparian corridor along the eastern side of the detention pond as the primary corridor.

C7. Utility services and recreation uses may be located within the corridor provided they are sited and designed recognising the ecological function of the corridor.

C8. Facilitate fauna movement through the vegetation in the parks street trees and Grey Box Reserve.

C9. Provide details in development applications which demonstrate how connectivity with these off-site linkages can be achieved.

Pemulwuy Residential

Figure 73: Flora and Fauna Corridors- Pemulwuy North

Pemulwuy Residential

Figure 74: Flora and Fauna Corridors- Pemulwuy South

9.3. Development Areas

Objectives

O1. To enhance and maintain biodiversity by complementing other conservation initiatives.

O2. To use locally indigenous plant species, including threatened and regionally significant species, in drainage areas, streetscapes and open spaces.

O3. To reduce water and fertiliser demand.

O4. To reduce salinity effects on the site, buildings and infrastructure.

Development Controls

C1. Manage any development proposal to provide opportunities to enhance and maintain biodiversity by complementing other conservation initiatives.

C2. Use locally indigenous plant species, including threatened and regionally significant species in drainage areas, streetscapes and open spaces. (Use of local native species will not only enhance biodiversity but will reduce water and fertiliser demand, resulting in decreased water and nutrient volumes draining from the site).

9.4. Biodiversity Management Measures

Objectives

O1. To rehabilitate and regenerate native vegetation.

O2. To protect threatened species.

O3. To manage weeds.

O4. To minimise impacts from access to the conservation areas.

O5. To minimise hazards and manage impacts from fire.

O6. To minimise litter and waste.

O7. To control and minimise impacts from sediment disturbance and erosion.

O8. To replace the pine plantation.

O9. To manage feral and domestic animals to minimise impacts on native flora and fauna.

O10. To protect water quality and aquatic habitat.

O11. To protect significant trees.

O12. To involve the community.

Development Controls

C1. Design any conservation area to optimise edge-to-area ratios and to incorporate areas of greatest biodiversity. The conservation areas include the Greystanes Creek riparian corridor, Prospect Hill ridgeline, Grey Box Reserve and other areas identified as bushland.

C2. Prepare a bushland management plan prior to any development which identifies areas to be revegetated, the species to be used and other detailed management issues.

C3. Regenerate the understorey in conservation areas to increase overall viability and robustness.

C4. Collect and propagate seeds of locally indigenous species as part of such development. These are to be used in revegetating the open space corridors, including the riparian corridor and ridgeline.

C5. Prefer native grasses in service/open space areas rather than kikuyu, couch or other conventional non-native grasses. (N.b.: "'Sir Walter" Buffalo grass is a non-native turf species unsuited to these bushland areas).

Threatened Species

C6. Consult with NPWS and specialists in threatened flora to determine specific management measures for Pimelea spicata (a low spreading shrub that is listed as an endangered species) prior to any development within Pemulwuy South.

C7. Prior to development of the residential lands south of Watkin Tench Parade, a recovery plan for Pimelea spicata should be prepared which takes into account the population in Pemulwuy and connectivity with the population found along the Lower Prospect Canal Reserve.

C8. Retain and enhance continuous canopy in the conservation area and open space corridors to allow for possible squirrel glider movement onto the site.

C9. Retain and enhance foraging habitat (Cumberland Plain Woodland) as appropriate within conservation areas to provide for Greater Broad-nosed Bat, Eastern Freetail Bat and Eastern Falsistrelle.

C10. Elsewhere, where there is minimal potential conflict with urban development, retain significant mature trees with high ecological value as habitats for the Powerful Owl, Greater Broad-nosed Bat, Eastern Fasistrelle, Eastern Freetail Bat and the Masked Owl.

Weeds

C11. Remove all weeds from conservation areas.

C12. Ensure that weed control is an integral part of maintaining and enhancing biodiversity of the conservation areas and corridors.

C13. In any bushland management plan, address weed management and removal methods such as hand weeding, spraying etc. The plan is to give attention to the conservation and corridor areas.

C14. Replant cleared areas with locally indigenous plants following weed removal, to minimise soil erosion.

C15. Outline a priority listing of target and noxious weeds in any bushland management plan, including Lantana, African Olive, Smallleaved Privet and Large-leaved Privet.

C16. Ensure that houses have outlooks to the bushland to encourage residents to take ownership of the bush and minimise dumping of rubbish and garden clippings. Houses should not immediately abut conservation areas (ie be separated by road or some other divider).

Access to the conservation areas

C17. Minimise access to conservation areas to allow the sites to regenerate with minimal human

contact.

C18. Domestic animals are prohibited in the conservation areas.

Fire

C19. Prepare a fire management plan for the protection of life and property. The fire management plan should identify suitable fire regimes for the protection and maintenance of biodiversity.

C20. Ensure that fire management elements are incorporated into the design of the conservation areas and through the central ridgeline ie fire trails.

C21. Identify appropriate fire management regimes for vegetation management.

Litter and waste

C22. Provide adequate signs and rubbish bins to encourage proper disposal of litter.

C23. Secure rubbish bins sufficiently to prevent feral cats, dogs, rats and other undesirable species from opening them.

C24. Maintain and empty bins on a regular basis to prevent waste accumulating.

C25. Undertake regular patrols of conservation areas and report rubbish dumping.

Sediment disturbance and erosion

C26. Implement appropriate sediment and erosion controls as per Part A of this DCP.

C27. Commence planting and/or install fencing as soon as possible following weed removal to minimise erosion.

C28. Prepare a sediment and erosion control plan for each subdivision stage. It should address the conservation areas, open space corridors and creekline where applicable.

The pine plantation

C29. Remove the majority of pine trees from Pemulwuy, although some pine trees may be retained for street tree planting.

C30. A program for the removal of the pine trees is to occur on a staged basis.

Feral and domestic animals

C31. Prepare a feral and domestic animal management plan for Pemulwuy north and Pemulwuy South.

C32. Implement an education program for residents on responsible pet ownership.

Water quality and aquatic habitat.

C33. Rehabilitate, enhance and re-establish the waterways of Pemulwuy, including creeklines and drainage lines.

C34. Provide an appropriate vegetated riparian corridor either side of Greystanes Creek. Vegetation within the buffer should be rehabilitated and weeds removed.

C35. Enhance vegetation using locally indigenous species of trees, shrubs, grasses and groundcovers.

C36. Preserve indigenous vegetation in riparian corridors.

C37. Install appropriate pollution controls such as gross pollutant traps in upper catchments (at site

boundary if necessary) to prevent ingress of litter.

Significant trees.

C38. Where existing trees are healthy, sound and can reasonably be incorporated into the design, Council will normally require them to be retained. Council will consider concessions to the development control standards contained within this DCP in order to encourage the retention of existing mature trees. This should be discussed with officers prior to proceeding too far with your plans.

C39. An application to remove a tree may be refused by Council if the tree:

- **a)** Form(s) a prominent part of the streetscape.
- **b)** Stands alone and is thus of more significant than if it were part of a group of trees.
- **c)** Is of historic or cultural significance or is/are registered on any Council register of significant trees.
- **d)** Is prominent due to its height, size, position or age.
- **e)** Is a locally indigenous, rare or endangered species.
- **f)** Provides a significant visual screen.
- **g)** Is part of an important habitat for wildlife.
- **h)** Is part of remnant or riparian vegetation.
- **i)** Can be effectively treated by applying appropriate remedial treatment such as pruning of branches, pruning of roots and removal of deadwood or by other appropriate action as recommended by an arborist.
- **j)** Is listed under the provisions of the Threatened Species Conservation Act 1995. (Listed as a threatened species, is habitat to a threatened species or is part of an endangered ecological community).

Note: Council may refuse an application to remove a tree(s) but may give conditional consent for the appropriate remedial "branch or root pruning" for that tree(s).

C40. Retain and maintain hollow-bearing trees on site for their fauna habitat value wherever possible.

Community involvement

C41. Prepare a community consultation strategy to involve the community in ongoing biodiversity management, including preparation of the bushland management plan.

C42. Develop an educational program highlighting the significance of the site and how the community can be involved in restoring and maintaining the open space corridor.

C43. Ensure that the Aboriginal community is consulted in reserve design, re-vegetation and interpretation programs.

C44. Involve the community in weed removal and replanting programs and continue to involve the community in maintenance to instil a sense of ownership.

10. Stormwater and Flooding Management

10.1. The Catchments

Pemulwuy can be divided into two main catchments. These are:

Catchment A = all of the area of Pemulwuy North (north of Butu Wargun) plus the "Northern Residential Lands" of Pemulwuy South that are north approximately of Bobbina Avenue / Morley Avenue, all of which drains northward to the central former CSIRO Basin in Pemulwuy North via Greystanes Creek; and

Catchment B = that part of Pemulwuy South approximately south of Bobbina Avenue / Morley Avenue, which drains southwards to Prospect Creek, partially called the "Southern Residential Lands"

This is shown indicatively in Figure 75 and in Figure 76 below.

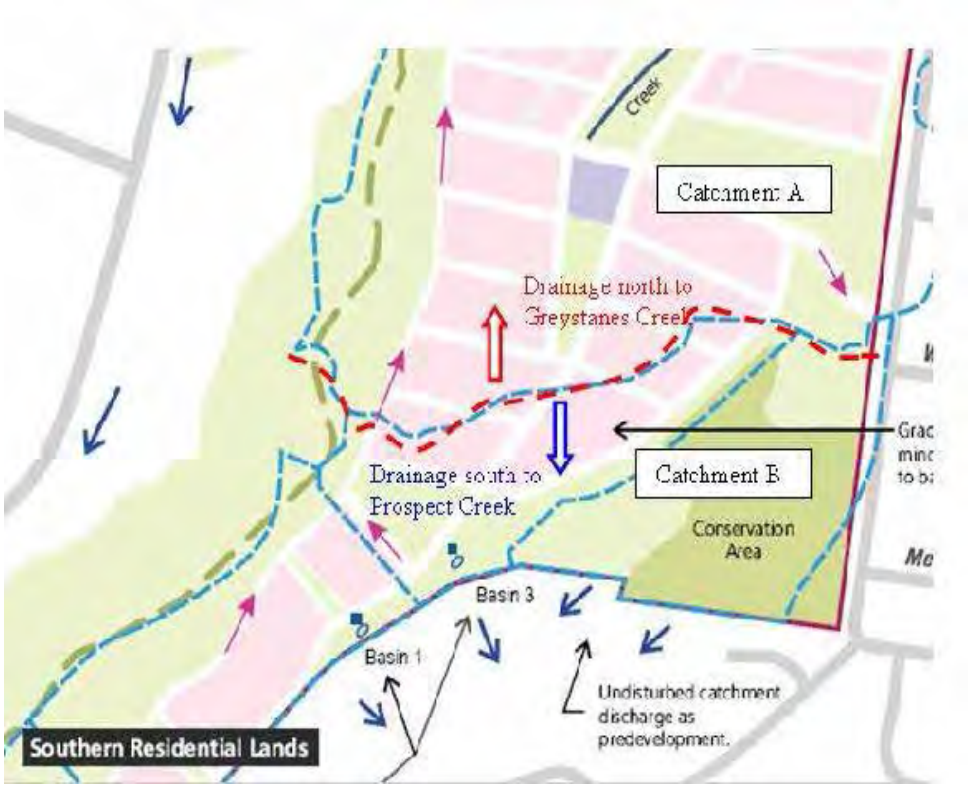


Figure 75: Boundary between catchment A (Greystanes Creek) and Catchment B (Prospect Creek)

Pemulwuy Residential

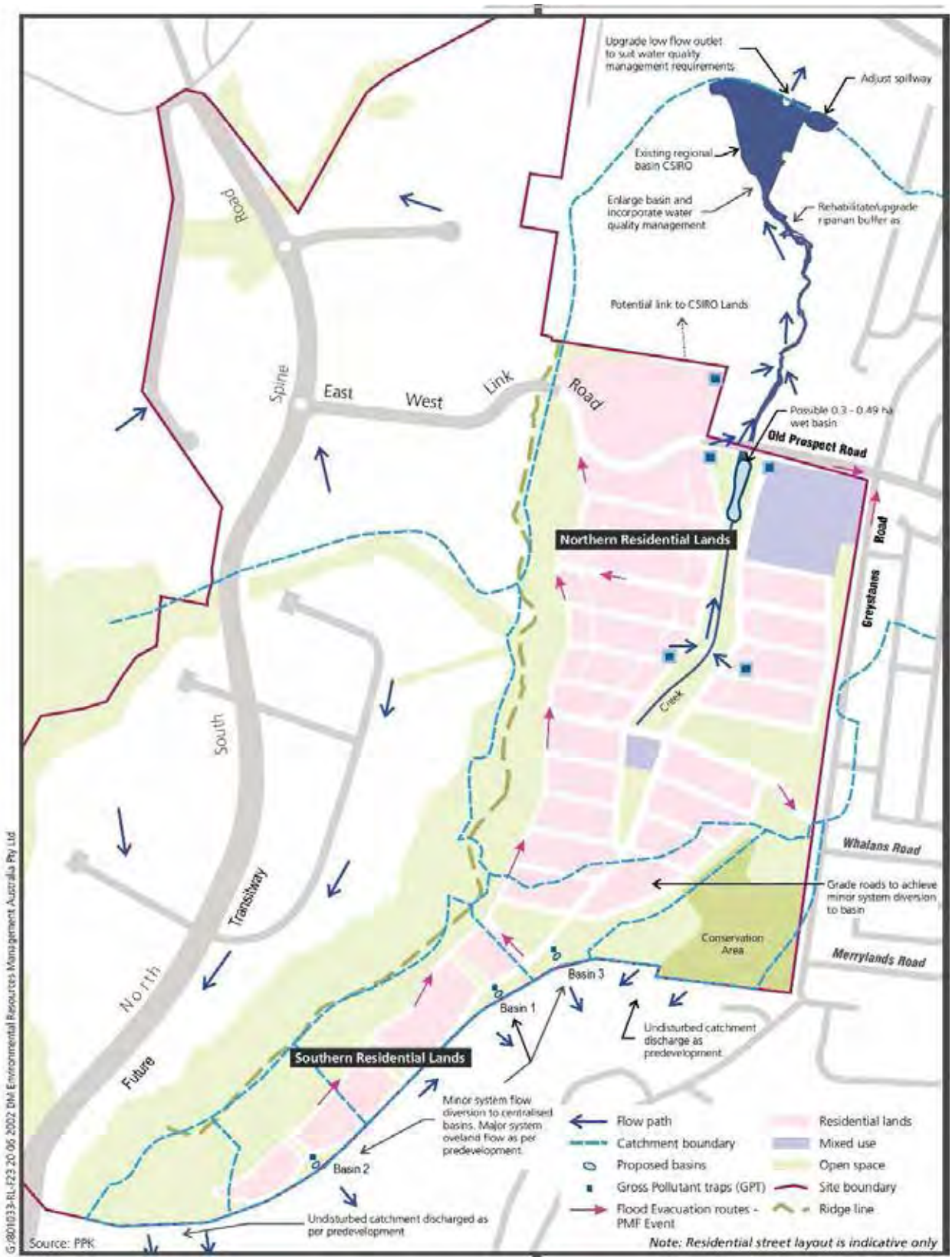


Figure 76: Prospect Drainage Strategy

10.2. Stormwater Management during Construction

Objectives

O1. Prevent sediment polluting creeks.

Development Controls

C1. Ensure that sediment control measures are in accordance with the requirements of the Managing Urban Stormwater Guidelines and with the Managing Urban Stormwater: Soils and Construction published by the NSW Department of Housing or its equivalent.

C2. Stage development activities to minimise land disturbance.

C3. Limit earthworks and disturbance of stable rehabilitated landforms.

C4. Divert clean run-off from upstream areas around disturbed areas.

C5. Stabilise and vegetate areas immediately following the completion of works.

C6. Provide temporary sediment basins, fences, catch drains, check dams and other structures to collect and treat run-off from disturbed areas.

C7. Monitor discharges from sediment basins and implement flocculation as required to limit TSS concentrations in water discharged from the temporary basins to 50 mg/L.

C8. Provide vegetated buffer strips around all water bodies and drainage channels.

C9. Temporarily stabilise stockpiles and disturbed areas.

C10. Restrict vehicle access to designated entry and exits.

C11. Provide stabilised site access.

10.3. Stormwater Management after Development

Objectives

O1. Provide a development consistent with the principles of total watercycle management but recognising potential salinity problems.

O2. Limit stream velocities to prevent erosion and scour of local waterways.

O3. Reduce pollutant loadings to maintain downstream water quality.

O4. Prevent the contamination of surface water or groundwater by stormwater run-off.

O5. Ensure reduced demand for imported mains water by water conservation measures and re-use of stormwater in accordance with the principles of Water Sensitive Urban Design.

O6. Protect and enhance the environmental and scenic value of the creek corridors.

O7. Ensure that additional stormwater runoff generated by the development does not adversely affect peak flows, velocities and water levels downstream of the site in the full range of flood up to 1 in 100 year storm event.

Development Controls

Note: The water treatment objectives for Prospect Creek and the Upper Parramatta River catchments are listed in Tables 1 and 2 respectively. The objectives outlined in these tables are consistent with Council's Stormwater Management Plans.

C1. Ensure stormwater management systems are incorporated in the initial stages of design and infrastructure provided prior to the development of individual sites.

C2. Design stormwater management measures to the water quality objectives of:

- the Stormwater Management Plan,
- the flow requirements of the UPRCT,
- Holroyd City Council, and
- Fairfield City Council.

C3. Where feasible, incorporate in the proposed stormwater management measures, natural treatment mechanisms and features.

C4. Integrate public open space with the trunk stormwater drainage corridors.

C5. Where practical, reuse stormwater collected on developed lots. This can include rainwater tanks.

C6. Carry out further Stormwater Management consultation with authorities during the development application stage.

C7. As part of the development process, undertake detailed hydrologic, hydraulic and water quality modelling.

C8. Use the results of the monitoring program required by the section of this plan below dealing with salinity, to inform surface water management practices as required.

Table 1 POLLUTANT RETENTION CRITERIA FOR PROSPECT CREEK CATCHMENT

Pollutant	Treatment Objective
Suspended Solids	80% retention of the average annual load
Total Phosphorus	45% retention of the average annual load
Total Nitrogen	45% retention of the average annual load
Litter	Retention of litter greater than 50 mm for flows up to 25% of the 1 year ARI peak flow
Coarse Sediment	Retention of sediment coarser than 0.125 mm for flows up to the 1 in 1 year ARI peak flow. Discharge free of settleable matter for all storm events less than or equal to the capacity of the water quality control ponds.
Oil and Grease	No visible discharge
Unnatural discolouration	No visible discharge

Source: Prospect Creek Stormwater Management Plan

Table 2 POLLUTANT RETENTION CRITERIA FOR GREYSTANES CREEK CATCHMENT

Pollutant	Description	Retention Criteria
Litter	All anthropogenic material	70% of objects 5 mm diameter or greater
Coarse Sediment	Coarse sand	80% of the load for particles 0.5 mm or less
Nutrients	Total phosphorus and Total Nitrogen	45% retention of the load
Fine Particulates	Fine sand	50% of the load for particles 0.1 mm dia. Or less
Cooking Oil & Grease	Free Floating Oils that do not emulsify in aqueous solutions	90% of the load with no visible discharges
Hydrocarbons	Anthropogenic hydrocarbons that can be emulsified	90% of the load

Source: Upper Parramatta River Catchment Stormwater Management Plan

Stormwater Pollution Load Assessment in Pemulwuy

To provide preliminary sizes for the water quality ponds, a level one pollution load assessment was completed, as defined in the EPA guidelines. The recommended total wetland pond sizings are:

Greystanes Creek catchment – 2.2 hectare surface area; and

Prospect Creek catchment – 0.75 hectare surface area.

The above pond sizings are subject to confirmation by AQUALM modelling. The proposed Drainage Strategy is shown in Figure 84.

10.4. Source, Conveyance & Discharge

Objectives

O1. To adopt within the stormwater plans three types of runoff quality controls. In summary, the controls are:

- Source Controls - controls applied to the individual lots to address specific pollutants associated with the specific development;
- Conveyance Controls - controls applied to the local and trunk drainage systems which may include grass swales, and streams incorporating ponds, ripple zones and macrophytes; and
- Discharge Controls - controls applied to piped or channelised drainage systems prior to discharging in creeks or water quantity/quality control basins. These include gross pollutant traps, wetlands and water quality control ponds.

O2. To use Source controls to reduce runoff rates and minimise the pollutant loads discharged from individual development sites.

O3. To apply Conveyance Controls to the local and trunk drainage systems to minimise the pollutant load transferred from the development sites to the discharge points.

O4. To use Discharge Controls to ensure that water quality targets in the Stormwater Management Plan are achieved.

Development Controls

Source Control

C1. Use Stormwater Harvesting – i.e.: maximise the amount of stormwater run-off used on the development, minimise impervious areas and, where possible use pervious paving systems.

C2. Install rainwater tanks along with water correcting fittings in accordance with the principles of Water Sensitive Urban Design.

C3. Use Buffer Strips, where the development lot layouts allow, where the landscaping is used to treat run-off. Use vegetated buffer strips to reduce the amount of fine sediment and nutrients discharged from the lot to the stormwater system.

Waterway Protection Control

C4. Protect and enhance the main watercourse flowing through Pemulwuy as a natural stream system.

C5. Collect treated stormwater.

C6. Include in the watercourse a meandering natural runoff channel with aquatic and terrestrial riparian vegetation.

C7. Where feasible, include in the watercourse a meandering low flow invert, ponds and ripple zones, and aquatic and riparian vegetation.

Discharge Control

C8. Provide Gross Pollutant Traps incorporating a screen and coarse sediment sump upstream of the discharge points into the main creekline and not in the core riparian corridor.

C9. Design these to achieve the pollutant reduction targets set out in Tables 1 & 2 for coarse sediment and litter.

C10. Design the traps for cleaning by Holroyd Council's drain cleaning equipment in order to minimise maintenance and cleaning costs.

C11. Provide integrated water quantity and water quality control ponds in the regional basin in Pemulwuy North. Ensure the ponds have been sized to meet the treatment objectives for sediments and nutrients outlined in the stormwater management plans.

C12. The ponds should consist of a series of shallow, densely planted zones and deep water areas.

C13. Locate a device immediately upstream of the basin to prevent floating pollutants and pollution spills entering the basin.

10.5. Residential Catchment 'A' Flow Management (+ Detention ponds)

Objectives

O1. To design and maintain development so that existing peak flows from the Fox Hills basin are not adversely affected, taking into account the planned residential developments in the Catchment, and proposed modifications to the central basin.

O2. To ensure that the stormwater system for any development does not increase the downstream flooding of Pemulwuy.

O3. To convey stormwater within the northern Catchment A of Pemulwuy in the riparian channel / corridor of Greystanes Creek.

O4. To ensure the riparian channel / corridor of Greystanes Creek is part of an important recreational, ecological and visual linear park system capable of conveying the 1 in 100 year average recurrence interval flows.

O5. To link the drainage corridor with water bodies so as to maintain suitable water quality as well as provide further habitat.

O6. To ensure that development does not adversely affect pollution levels in the catchment.

Development Control

C1. As part of any application for the subdivision of land in the Residential Catchment A (to Greystanes Creek), identify such proposals and confirm arrangements to be made for the expansion of the flood basin to attenuate post-development flows and treat run-off quality.

C2. Should it prove impractical or impossible, for whatever reason, to satisfy storage and quality treatment objectives with the flood basin, provide alternative arrangements within the built environment.

C3. Implement the stormwater management measures outlined above during construction. If sediment from the Residential Catchment A (to Greystanes Creek) is deposited off site in the basin or the downstream creek channel during development and construction on the site, remove it at regular intervals and prior to completion of construction.

C4. Provide the following drainage infrastructure:

- drainage corridor along central spine;
- water pollution control within the basin;
- detention storage within the basin;
- creek works to accommodate flows;
- collect runoff from Council drainage system which discharges from Greystanes Road onto the site;
- outlet structures;
- gross pollutant traps;
- pipe drainage; and
- overland flow paths.

C5. Ensure that the community based detention system negates the requirement for on-site detention on individual development lots, as specified in the UPRCT on-site detention policy.

C6. Consider sourcing water from the detention basin to irrigate public reserves in the area, subject to the maintenance of environmental flows to Greystanes Creek.

C7. Ensure wetland planting (macrophyte zones) on the foreshore of the new basin will further increase the ability of the basin to improve stormwater quality.

a) Stormwater Detention (Catchment A)

Objectives

O1. To ensure that the stormwater runoff generated from this portion of the western precinct does not adversely affect peak flows, velocities and water levels downstream of the existing regional basin (refer to Figure 77).

O2. To design on-site detention that is consistent with the conceptual modelling by Patterson Britton This modelling has identified a required storage which can be accommodated between the road and existing basin.

Development Controls

C1. Design on-site detention that is consistent with the conceptual modelling by Patterson Britton (see Figures 77 & 78).

C2. Ensure that detailed design of the basin is integrated with the landscape setting.

C3. Submit details of the basin to Council as part of the Development Application for the relevant stage.

C4. Locate the proposed stormwater detention basin outside the CSIRO basin 100-year flood zone.

C5. To provide preliminary sizes for the water quality ponds, a level one pollution load assessment was completed, as defined in the EPA guidelines. Ensure that the recommended total wetland pond sizings are:

a) Greystanes Creek catchment – 2.2 hectare surface area; and

b) Prospect Creek catchment – 0.75 hectare surface area.

Note: The above pond sizings are subject to confirmation by AQUALM modelling. The proposed Drainage Strategy is shown in Figure 78.

Figure 77: On Site detention concept

Figure 78: On Site detention Detail

10.6. Residential Catchment 'B' Flow Management

The Southern Residential Catchment B is located in the Prospect Creek catchment, and stormwater management plans have been prepared by Holroyd City Council for these local catchments.

Fairfield City Council requires that there be no significant adverse impacts on flood levels in Prospect Creek. Refer to the Prospect Creek Stormwater Management Plan.

Objectives

O1. To design and maintain development in the Residential Catchment B (to Prospect Creek) so that downstream flows are not adversely affected, based on a comparison of peak flows, velocities and water levels in the 2 % AEP, 1% AEP and probable maximum floods at critical points downstream.

O2. To provide pollutant retention criteria for new developments and treatment objectives for various types of developments, through the stormwater management plans.

O3. To ensure that the stormwater runoff generated within Catchment B does not adversely affect peak flows, velocities and water levels within Prospect Creek.

Development Controls

C1. Implement the stormwater management measures outlined above during construction.

C2. If sediment from the Residential Catchment B (to Prospect Creek) is deposited off site in the downstream creek channel during development and construction on the site, remove it at regular intervals and prior to completion of construction.

C3. Provide integrated water quantity and water quality control ponds at each of the discharge points within the site.

C4. Provide the following drainage infrastructure:

- shaping drainage corridor to various outlets;
- water pollution control pond(s);
- detention storage;
- gross pollutant traps;
- pipe drainage; and
- overland flow paths.

C5. Ensure that the community based detention system will negate the requirement for on-site detention on individual development lots, as specified in the UPRCT on-site detention policy.

C6. Ensure that the recommended total wetland pond sizings are:

a) Prospect Creek catchment – 0.75 hectare surface area; and

b) Greystanes Creek catchment – 2.2 hectare surface area.

Note: The above pond sizings are subject to confirmation by AQUALM modelling.

10.7. Stormwater Documentation Requirements

Objectives

O1. To comply fully with Holroyd council's OSD policy and the Upper Parramatta River Catchment Trusts' handbook.

O2. To accommodate capacity for future development of the adjoining residential lands.

Development Controls

C1. Prepare detailed Hydraulic plans to accompany Development Applications for subdivision .

C2. Detail conveyance of existing and proposed overland flows to the satisfaction of Council.

C3. Design all overland flow paths and corridors to accommodate storm events stipulated under the Section below on Flood Risk Management.

C4. Land located along the southern boundary of the Residential Lands may be required to convey a large volume of overland flow from the existing adjoining property to the south/south west. To ensure that overland flow within this portion of the western precinct is adequately conveyed, Development Applications for subdivision of this area shall include the following details and must comply fully with Holroyd council's OSD policy and the Upper Parramatta River Catchment Trusts' handbook:

- a fully detailed catchment analysis in order to determine existing overland flows;
- a fully detailed hydraulic report and associated plans which indicate proposed method of conveying overland flows;

C5. Overland flow paths shall be designed so as to accommodate capacity for future development of the adjoining residential lands.

C6. Provide Stormwater Plans to accompany development applications for individual lots in Pemulwuy.

C7. Ensure these plans are consistent with stormwater management plans prepared by Council, under direction from the EPA.

C8. Adopt within the stormwater plans three types of runoff quality controls - Source, Conveyance and Discharge.

10.8. Water Bodies Management

Objectives

O1. To provide a safe and efficient urban water management system.

O2. To contribute to the amenity, appearance and urban structure of Pemulwuy.

O3. To achieve multiple use of drainage systems.

Development Controls

C1. Utilise the Pemulwuy North regional detention basin to control runoff rates and quality in

Catchment A (incorporating Pemulwuy North and the Northern Residential Catchment of Pemulwuy South).

C2. Utilise Ponds to control runoff rates and quality in Catchment B (namely the Southern Residential Lands of Pemulwuy South).

C3. Maximise use of regional facilities to achieve the runoff flow rate and water quality controls.

C4. Assess adequacy of water quality pond sizes using AQUALM model for construction certificate approval.

C5. Integrate bush regeneration in the agreed core riparian zone to achieve a fully vegetated corridor of local native trees, shrubs and groundcover species and native macrophytes in the water quality ponds. Areas outside the core riparian zone can be multifunctional.

C6. Integrate the landscaping with the design of the waterbodies to improve the amenity of the area.

C7. Include emergent macrophyte plantation in the basin for control of nutrients. All control of sediment must be via source control before entering the Creek.

C8. Ensure the spillway outlet from the basin maintains a continuous downstream environmental flow as approved by Holroyd Council.

C9. Prepare an operational plan for all ponds which is integrated across the entirety of Pemulwuy. The operational plan should set out how the main water bodies will be managed in terms of maintenance, safety, nominating activities, frequency and responsible authorities. This should be in accordance with the requirements of the Constructed Wetlands Manual (DLWC 2000).

C10. Design outlet to the ponds to allow water levels to be varied for aquatic plant management.

C11. Regularly maintain gross pollutant traps and coarse sediment sumps to prevent a build up sediment in main water bodies.

C12. Rehabilitate and protect the existing Creek.

10.9. Flood Risk Management

Objectives

O1. to prevent the negative impact of water on human life and property; and

O2. to prevent the negative impact of development on the receiving waters of the catchment.

Development Controls

C1. Accommodate the minor drainage system flows in pipes with capacity no less than the 5 year ARI storm;

C2. Accommodate flows in excess of the capacity of the minor system in overland flow paths and corridors (major systems), up to the 1 in 100 year ARI storm on the roads and open space;

C3. Provide multiple uses for drainage corridors incorporating a naturalistic meandering low flow channel with a series of pools and ripple zones;

C4. Locate habitable floor levels and developable land, other than open space, at least 0.5 metres above the Greystanes Creek 100 year ARI flood level;

C5. Provide appropriate flood hazard warning signage where appropriate.

C6. Design Butu Wargun Drive to provide a flood-free evacuation route in the event of a probable maximum flood (PMF).

C7. Integrate flood detention and water quality control basins for the Catchment B (Prospect Creek) Lands.

11. Environmental Management

Redevelopment of the former CSIRO site and Boral lands into the Pemulwuy residential lands requires the implementation of numerous environmental management measures to ensure an environmentally sound and sustainable development.

11.1. Site Contamination and Remediation

The residential lands of Pemulwuy have been the subject of a number of site investigations concentrating on identifying areas of environmental concern (AEC) relating to former non-residential activities on the land. These AEC included quarrying, laboratories, chemical storage areas, sheep dips and waste disposal areas. These AEC have been investigated and (where necessary) remediated. The work conducted in assessing and remediating these AEC has been signed off by a NSW Environment Protection Authority (EPA) auditor through the issuing of Site Audit Statements. This does not exclude the need for future assessment and remediation of future AEC at Pemulwuy.

Objectives

O1. To ensure the appropriate assessment, remediation, validation and auditing of potentially contaminated land to reduce the risk of harm to human health or the environment.

O2. To ensure land is suitable for the intended use.

O3. To ensure that future occupants or workers at the site are not exposed to contaminated materials.

O4. To follow the contamination management strategies produced for the various precincts of Pemulwuy.

Development Controls

C1. During bulk earthworks activities, initiate an unexpected findings protocol to address the potential discovery of contaminated soil or other hazardous materials.

C2. As a result of the protocol, ensure that appropriate assessment, and (where necessary) remediation and validation occurs.

C3. Make provision in the protocol to inform Council of the discovery of such materials.

C4. Before the lodgement of any development application for the site, complete a groundwater Assessment in accordance with 'Schedule B(6) Guidelines for Risk Bases Assessment of Groundwater Contamination' in the National Environmental Protection Councils National Environment Protection (Assessment of site Contamination) Measure (1999).

C5. Remediation is required to render the site suitable for the proposed land use, consistent with:

- the Contamination Management Strategy (prepared by Environmental and Earth Sciences and RES for Pemulwuy North); and
- the Remediation Action Plan (prepared by HLA Envirosciences for Pemulwuy South).

C6. Ensure the remediation of the site is certified by a NSW EPA Accredited Site Auditor .

Note: Building waste and asphalt waste have been classified by the NSW EPA as 'inert waste' (Table 1, NSW EPA 1999 - Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-Liquid Wastes). Therefore, materials meeting this description, and meeting the physical and other criteria stipulated in the Material Management Guidelines (HLA 2001, prepared for Pemulwuy South) are not considered to be contaminated, and are therefore not part of the remediation works.

11.2. Earthworks Management

Objective

O1. To ensure that any fill utilised throughout the site is clean and complies with relevant standards.

Development Controls

C1. Determine a Phase 1 Contamination Investigation by an environmental consultant.

C2. Evaluate each portion of the estate as required by the Phase 1 Investigation for:

a) existing condition down to bedrock;
b) groundwater monitoring;
c) validation of both fill zone foundation and proposed fill material to provide material within acceptable EPA criteria for re-use.

C3. Obtain approval of the above by a NSW EPA Accredited Site Auditor to allow placement of fill and the excavation and re-use of on-site material to provide a revised landform.

C4. Upon the validation and approval of fill foundation and fill material, place and compact material generally in accordance with:

a) all material <300 mm in size;
b) compaction up to 98% standard compaction to building and road lots;
c) moisture content 60-90% of optimum;
d) compaction to 95% standard in landscaped areas. Landscaped areas should then be ripped to a depth of 300/450 mm and organic material should then be mixed to improve soil quality as required;
e) Fill to be placed in layers no more than 300mm thickness.

C5. Ensure that final verification of placement of clean fill material is undertaken through the process of design/construction Quality Assurance Audits and validated by a NSW EPA Accredited Site Auditor.

C6. Minimise the potential for establishment of perched water tables at the fill/natural soil interface by ensuring that drainage is established between the two layers.

11.3. Waste Management

Objectives

O1. To minimise waste generation and disposal to landfill during demolition and construction works in accordance with the "waste hierarchy" (which means promoting source separation and subsequent reuse/recycling of materials over and above disposal).

O2. To ensure that reuse/recycling options are utilised at every opportunity and that any necessary waste disposal is lawful and efficient.

O3. To ensure that the provision of adequate and appropriate storage area for waste and

recyclables during all stages of development.

O4. To maximise the amenity of the development and opportunity for reuse/recycling by residents through effective design of facilities.

Development Control

C1. Integrate waste management planning process into all stages of development.

C2. Provide source separation facilities (e.g. waste bays) on building sites so that different materials may be easily separated during demolition and construction works. This will maximise the potential for reuse/recycling during demolition and construction works.

C3. Locate garbage/recycling storage areas in Type D developments so as to be easily serviced, and to not cause any negative impacts in terms of visual appearance, noise or smell, to adjoining properties or to the street.

C4. Provide waste separation facilities in all Type D kitchens to encourage the separation of waste at its source.

C5. Use ventilation stacks wherever possible (and necessary) to vent shops and basements.

C6. Submit a Site Waste Minimisation and Management Plan (SWMMP) in accordance with Part A Section 12.0 of this DCP with any development application prior to development approval.

11.4. Soil Erosion & Sediment Control

Soil Erosion & Sediment Control in Pemulwuy is controlled by Part A Section 13.0 Erosion And Sediment Control.

The control measures are to be in accordance with the Managing Urban Stormwater Guidelines including the Managing Urban Stormwater: Soils and Construction published by the Department of Housing, and have been incorporated into the stormwater management strategy described above in Section 10 entitled Stormwater & Flooding Management.

11.5. Salinity

Salinity within Pemulwuy is controlled by the Holroyd Local Environmental Plan 2013, under Salinity in the Pemulwuy Precinct.

The draft Salinity Hazard Mapping for Western Sydney (DLWC 2000) indicates areas along Greystanes Creek to be classified as an area of extensive salinity hazard, with the remaining land to be areas of localised hazard. Potential salinity on the site is therefore considered to be an environmental constraint which requires appropriate management.

Objectives

O1. To minimise disturbance to natural hydrological systems as a result of development, and to provide for appropriate management of land affecting the process of land salinisation, or affected by salinity.

O2. To prevent damage to buildings and infrastructure in urban areas caused by salinity.

O3. To identify areas of the site that have sufficient cover of non saline soils to warrant no formal salinity treatments.

O4. To increase the volume of non saline soils won from road reserves, etc to be utilised as an "asset" in managing actual salinity affected soils, building sites, drainage and landscaping works.

O5. To decrease the volume of salinity affected soils that require treatment/management.

Development Controls

C1. Prepare a soil salinity management strategy for each stage of development. The main components of the strategy should include:

- **a)** Review of existing geotechnical and geochemical site data to refine interpreted distribution of non saline A and B1 Horizons and slightly to moderately saline B2 and C Horizons;
- **b)** Additional investigations to further refine the soil salinity data base;
- **c)** Co-ordinate subdivision design to optimise earthworks and civil works in relation to soil salinity management. Initiatives could include but not be limited to:
  - **i)** winning/stockpiling A and B1 Horizon materials from road reserves and other areas prior to filling;
  - **ii)** considering lime stabilised subgrades to enable reduced pavement thicknesses and
  - **iii)** decreased excavation volumes of potential salinity affected soils from road reserves;
  - **iv)** scheduling salinity affected soils to be placed at depth in fill areas;
  - **v)** gypsum/lime modification to B1 Horizon sourced fill or insitu material to improve soil condition for revegetation capacity and rate.
- **d)** Prepare and implement an "earthworks management plan" for each subdivision stage: this work should include basic terrain evaluation so that earthworks methods can be tuned for slight, moderate and steep slopes. Induct the earthworks contractor and machine operators on relevant aspects of the earthworks strategy;
- **e)** Implementation and validation of the earthworks management plan will include stockpile quality assurance and management and a level of geotechnical supervision that will require regular engineering inputs in addition to technical inputs for compaction control;
- **f)** Assessment of the need for further salinity management interventions during residential construction, e.g. granular vapour barriers, lime/gypsum treatments, durable concretes, suspended floor construction, etc.

Monitoring

C2. Complement baseline monitoring of soil salinity (performed prior to development) by ongoing monitoring during the development phase to determine any potential changes and inform future stages/sites.

C3. Prepare a salinity monitoring program by an appropriately qualified person.

C4. The monitoring program should consist of monthly sampling, in addition to sampling after rainfall events greater than 20 mm in 24 hours.

C5. Prepare a report consolidating the results of the first 12 months of monitoring and submitted to Council.

C6. Locate the monitoring wells shall be located to facilitate the long term monitoring of the deep and shallow water tables.

C7. Salinity monitoring shall be the responsibility of the owner of the land.

Site Design

C8. Avoid disturbance of natural flow lines and the use of cut and fill construction techniques without adequate alternative drainage provisions - this is where the salinity is first likely to appear.

C9. Retain native vegetation along watercourses.

C10. Rehabilitate disturbed areas using native vegetation.

Stormwater and Drainage

Note: Salinity problems generally occur in the areas where water accumulates, or which are subject to continuous wetting and drying cycles. This can be where natural through flow or surface flow is impeded by buildings, or by associated retaining walls or land resurfacing. Therefore:

C11. Ensure correct drainage, which helps protect foundations, footings and walls from salt attack.

C12. Avoid areas of impeded sub-surface flow and the interception of groundwater.

C13. Minimise deep infiltration and throughflow when designing stormwater management.

C14. Design and construct detention and retention basins to avoid high velocity runoff and soil erosion in susceptible areas, and for ease of maintenance.

Building Slabs/Concrete:

C15. In order to prevent moisture rising through the slab, firstly lay a thick layer of sand on the site. Next, lay a damp-proof membrane of thick plastic.

C16. Make concrete more resistant to salinity by increasing its strength to reduce the permeability.

C17. Consider using a sulphate resistant concrete, which will reduce reinforcement corrosion. Minimum of 65 millimetres of concrete cover on strip or slab reinforcement is recommended in saline environments. Compaction and curing of the concrete are also advised.

C18. Consider suspended slab or pier and beam housing construction methods, to minimise the expose of building materials to corrosive elements and to minimise cut and fill so that groundwater and sub-surface water flow is not impeded.

Bricks

C19. Consider a brick damp course, which if correctly installed, will prevent moisture moving into the bricks.

C20. Consider salt resistant bricks (or exposure quality bricks) and concrete. These are available and are more suitable for use in saline environments.

C21. Consider adding waterproofing to the mortar to prevent water entry.

C22. Vegetation and Landscaping:

C23. Favour gardens which do not require a lot of watering. This includes:

- use of native plants which do not require excess watering,
- deep rooted trees to prevent the ground water table rising,
- the use of mulch, and

- the reduction of lawn areas.

C24. Do not locate gardens close to buildings, as watering may affect foundations or render the dampcourse ineffective.

11.6. Noise & Vibration Management

Objective

O1. To achieve external noise goals where feasible or reasonable.

O2. Where this is considered impractical, to achieve internal noise criteria by appropriate facade treatment.

Development Controls

External Noise Levels

C1. Achieve the Road Traffic Noise Criteria for Residential Receivers as detailed in Table 2

C2. Achieve the Industrial Noise Criteria for Residences adjoining Clunies Ross Street as detailed in Table 3. In particular, though not exclusively.

Internal Noise Levels

C3. Achieve the Internal noise criteria for both traffic and industrial noise in habitable areas as detailed in Table 4. In particular, though not exclusively.

Pemulwuy Residential

Figure 79: Area requiring acoustic treatment

Pemulwuy Residential

Table 2

Type of Development	Day (7.00 am – 10.00 pm)	Night (10.00 pm - 7.00 am)	Where Criteria are Already Exceeded
New residential land use developments affected by freeway/arterial traffic noise.	LAeq(15hour) 55 dBA	LAeq(9hour) 50 dBA	Where feasible and reasonable, existing noise level should be reduced to meet the noise criteria via judicious design and construction of the development. Location, internal layouts, building materials and construction should be chosen so as to minimise noise impacts.
New residential Developments affected by collector traffic noise.	LAeq(1hour) 55 dBA	LAeq(1hour) 50 dBA	Where feasible and reasonable, existing noise level should be reduced to meet the noise criteria via judicious design and construction of the development. Location, internal layouts, building materials and construction should be chosen so as to minimise noise impacts.

Note: These criteria are non-mandatory in nature and the design solutions should take into account cost, feasibility, and equity and community preferences

Table 3:

Time of Day	Intrusive LAeq(15minute) Criterion for New Sources	Amenity LAeq(period) Criterion for New Sources
Day	51 dBA	47 dBA
Evening	51 dBA	44 dBA
Night	46 dBA	42 dBA

Table 4

Internal space	Time Period	Noise Level
Sleeping Areas	Day (7.00 am to 10.00 pm)	LAeq(1hour) 40 dB(A)
	Night (10.00 pm to 7.00 am)	LAeq(1hour) 35 dB(A)
Other Living Areas	Day (7.00 am to 10.00 pm)	LAeq(1hour) 45 dB(A)
	Night (10.00 pm to 7.00 am)	LAeq(1hour) 40 dB(A)

Sleep Arousal Design

C4. For the purpose of setting an acceptable sleep arousal criterion, and taking into consideration the duration of noise level events such as those associated with trucks near or on Clunies Ross Street for example, adopt the Finegold approach, as documented in the Environmental Criteria for Road Traffic Noise (ECRTN; Office of Environment and Heritage, or its equivalent).

C5. Adopt a design indoor sleep arousal ASEL (A-weighted Sound Exposure Level) of 57 dBA to protect future residences, such as those facing Clunies Ross Street.

C6. Limit noise impacts from vehicle traffic upon nearby and adjoining residential land by permitting bus only access on Butu Wargun Drive between the residential and industrial areas.

C7. In the event that Butu Wargun Drive is open to other classes of traffic, the consent authority must consider the noise impacts likely to arise, in particular, whether the ECRTN criteria relevant to Pemulwuy residential areas will be exceeded.

Measuring Traffic Noise

C8. Where required, quantify the external acoustic environment using the methods outlined below. Methods departing the procedural requirements outlined should be supported by a scientifically valid rationale to demonstrate that the method is no less accurate than that described.

C9. Undertake preliminary LAeq (1hour) noise measurements between the periods 7.00 am to 9.00 am or 4.00 pm to 6.00 pm.

C10. Where the measured facade corrected LAeq (1hour) exceeds 55dBA, the requirements of this Plan are triggered and long-term, unattended measurements are required.

C11. Conduct long-term, unattended measurements over a minimum of three consecutive weekdays (ie Monday to Friday, not weekends).

C12. Conduct noise measurements in accordance with Australian Standard AS2702-1984 - Acoustics – Methods for the Measurement of Road Traffic Noise.

Note: LAeq(1hr) is the LAeq noise level for a specific 1 hour period. For assessment purposes, the LAeq(1hr) represents the highest tenth percentile hourly A-weighted Leq noise level (or if this cannot be accurately defined, the LAeq noise level for the noisiest hour) during the period 7am to 10pm or the period 10pm to 7am, as relevant.

C13. Measure LAeq on a 15-minute basis. To calculate the logarithmic average over a 1 hour period, LAeq(1hr) = 10 X log10 ((☐ i=1 to 410(LAeq,15min,i/10)/4), where there are 4 X 15 minute measurements conducted over a 1 hour period.

C14. Carry out noise measurements in positions representative of the nearest facade noise level. Where this is not possible, select a location where accurate extrapolation of the facade noise level can be made from the measurement position.

C15. Where measurements are acquired in the free field façade, apply correction factor of +2.5 dBA.

Measuring Industrial Noise

C16. Conduct operator-attended noise measurements, supplemented by long-term noise logging where appropriate, at residential areas adjacent to Clunies Ross Street.

C17. Noise measurement procedures shall be generally guided by the requirements of AS 1055-1997

"Acoustics - Descriptions and Measurement of Environmental Noise" and the NSW Industrial Noise Policy (INP) 2000.

C18. Carry out noise measurements in positions representative of the yard areas of present and future residences.

Operating Conditions of the Building – Ventilation Measures

C19. Where the indoor design noise levels cannot be satisfied with windows open to an area of 5% of the floor area of the room under consideration, alternative means of ventilation are required.

C20. The following hierarchy of alternatives should be considered in the options analysis with (i) being most preferred and (ii) least preferred:

- **i)** Design the building to ensure that passive ventilation will not seriously compromise the acoustic integrity of the building. Noise sensitive uses should be located as far as practicable from noise sources. Windows should be orientated away from noise sources.
- **ii)** Provide the building with mechanical ventilation satisfying the requirements of the Building Code of Australia.

C21. For the purpose of design analysis, a room by room approach is acceptable and hence assumes that internal doors are closed and that negligible noise transfer between rooms occurs. If a perimeter approach is adopted, the lower indoor design noise level shall be adopted for the composite space.

Acoustic Compliance Reporting:

C22. Accompany Development Applications by a Preliminary Report demonstrating compliance with established noise levels (see Table 11.6.1 and 11.6.2).

C23. Where measured noise levels exceed criteria, state in the Preliminary Report whether a Design Report for road traffic or industrial noise is required.

C24. Ensure that the preliminary report, as a minimum includes:

- **a)** A site plan of the development proposal showing the locating of the noise measurement locations;
- **b)** A summary of the measured industrial or adjusted facade traffic noise levels; and
- **c)** A statement qualifying whether the measured noise levels comply with established noise criteria and whether a Design Report is required.

C25. Where the Preliminary Report demonstrates that a Design Report is applicable, (that is, where the preliminary road traffic or industrial noise measurements exceed the noise goals detailed in Table 11.6.1 and 11.6.2), submit a design report with the Development Application.

C26. The design report shall include:

- **a)** A site plan of the development proposals showing the location of the noise measurement points;
- **b)** Where applicable a graphical representation of the acquired road traffic or industrial noise data.
- **c)** Tabulated results of operator attended noise measurements.

d) A statement quantifying the measured or adjusted facade noise levels derived for design purposes for road noise or, in the case of industrial noise levels, at the yard areas of residential properties.

e) Recommendations for specific noise controls to satisfy the design noise goals.

f) A statement indicating that the design noise levels will be achieved following the effective implementation of the required noise controls.

C27. Following completion of the attenuation measures, submit a statement from "an acoustic consultant having the technical eligibility criteria required for membership of the Association of Australian Acoustical Consultants (AAAC) and/or grade membership of the Australian Acoustical Society (MAAS)", clearly indicating that the acoustic recommendations of the design report have been satisfactorily incorporated.

C28. Submit the validation statement to Council/Principal Certifying Authority (PCA) prior to the issue of Subdivision/Occupation Certificates.

11.7. Air Quality Management

Objectives

O1. To minimise trip length and encourage the use of pedestrian/cycleways.

O2. To reduce traffic emissions overall by improvement of local bus services and linkage to major transport routes and transitways.

O3. To improve energy efficiency through design and orientation of houses.

Development Controls

C1. Design roadways to minimise trip length and encourage the use of pedestrian/cycleways.

C2. Locate and provide access to services and facilities in order to minimise trip length and encourage the use of pedestrian/cycleways.

C3. Include linkages to centres of employment, cultural and natural interest to minimise trip lengths.

C4. Improve local bus services and linkages to major transport routes and transitways.

C5. Design and orientate houses for energy efficiency.

Part Q

Pemulwuy Industrial Controls

Holroyd Development Control Plan 2013

Pemulwuy Industrial

Contents

Pemulwuy Industrial

1. Introduction & Vision

Land Covered by this Part of the DCP

This Part of the DCP relates only to the Pemulwuy North Employment Lands, the land shown in Figure 1. The entirety of the site is within Holroyd local government area (LGA). This DCP does not apply to the whole of the Greystanes Precinct that was defined in the State Environmental Planning Policy No. 59 - Central Western Sydney Economic and Employment Area (SEPP 59). Lands not included are: the residential land within Pemulwuy, parts of the Employment Lands in Blacktown LGA, and the 'Greystanes Southern Employment Lands' (as defined by the 20/07/2007 Part 3A Determination). Also, the southeast boundary of the former CSIRO lands has been redefined to reflect the landowners' intended uses for the lands here. Therefore, this Section of the DCP applies only to some of the employment component of the Greystanes Precinct that was defined in SEPP 59. It also includes the north-west corner industrial land (Lot 101 DP 851785l, Lot 9 DP 374325 and public road reserve) originally excluded from SEPP 59. It also includes the eastern half of Clunies Ross Street linking the two industrial lands, as this is part of the WSEA SEPP 2009 land.

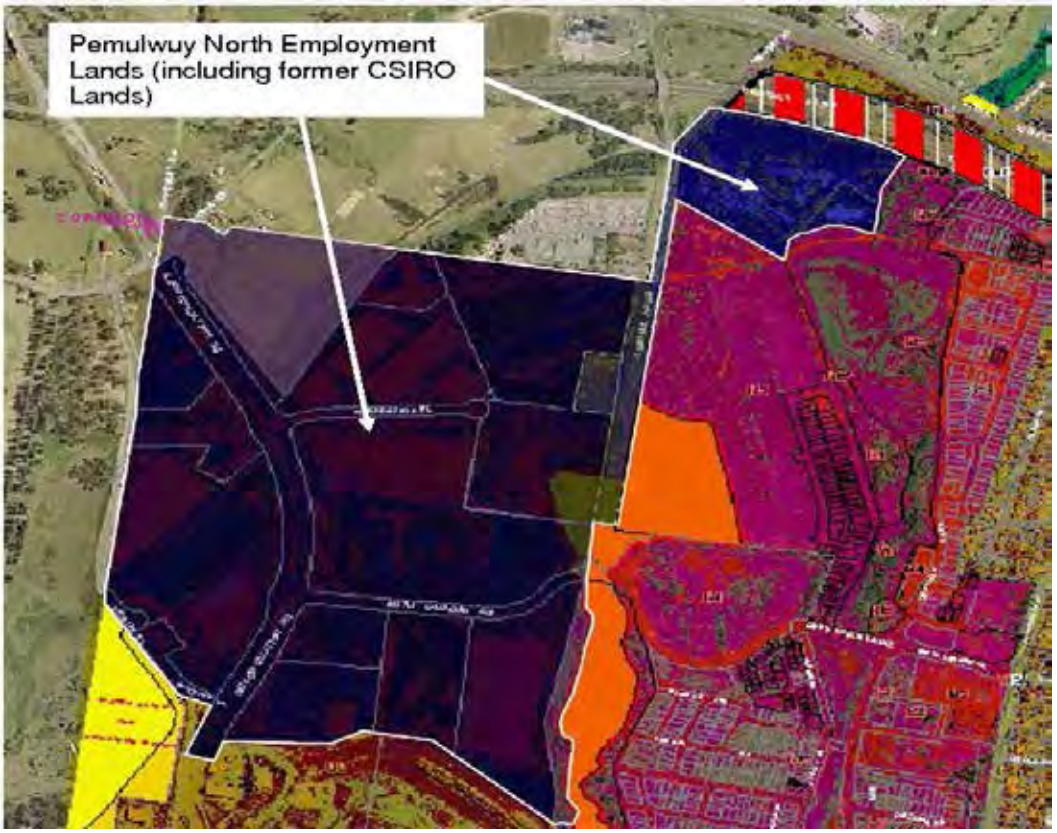


Figure 1- Lands application map- Pemulwuy Northern Industrial lands

Pemulwuy Industrial

Relationship to Other Plans

State Environmental Planning Policy No. 59 - Central Western Sydney Economic and Employment Area (SEPP 59) was gazetted In February 1999, and applied to a number of landholdings in Western Sydney including the Greystanes Estate. The SEPP rezoned the Greystanes Estate for urban development including employment generating and residential land uses and establishes the planning framework for the development of the land.

As a result of to the gazettal of the State Environmental Planning Policy (Western Sydney Employment Area) 2009 (WSEA SEPP) on Friday 21 August, 2009, control of the Employment Lands of SEPP59 was transferred to the WSEA SEPP. Most of the land that is the subject of this section of the DCP is controlled by the WSEA SEPP.

As required now under clause Part 4 (Development control plans) of the WSEA SEPP, prior to the lodgement of a development application for the site, the owner or Council needs to prepare a Development Control Plan for the site pursuant to section 80 (11) of the E&P A Act1979 and consistent with the issues of consideration in Schedule 4 of the WSEA SEPP (Requirements relating to preparation and content of development control plans), and then have it determined (approved) by the Director-General of the Department of Planning.

This section of the Holroyd Development Control Plan 2013 (HDCP) provides guidance on specific development matters pertinent to the land defined in Section 1.1 above, and is consistent with Schedule 4 of the WSEA SEPP. Infrastructure services are not addressed by this DCP, having been provided prior to the adoption of this control.

Where this section of the HDCP does not provide guidance on specific development matters, reference shall be made to other sections of Holroyd DCP 2013, such as Part A (General Guidelines), Parts C (Business Development), Part D (Industrial Development), and Council Codes and Policies. The objectives and controls of these plans will be considered in the determination of the Development Application. Where there is an inconsistency between this Part and Part A or D, this Part should take precedence.

Historically, this section of the Holroyd Development Control Plan 2013 was amalgamated from relevant sections of two Precinct Plans:

- Former CSIRO Site Pemulwuy Employment Lands
- Greystanes Estate SEPP 59 Residential Lands.

These Precinct Plans continue to apply to the subject land of Pemulwuy, except where there is an inconsistency between this Development Control Plan and these Precinct Plans, in which case this DCP prevails to the extent of the inconsistency.

Note: Lot 63 DP 752051, on the western side of Clunies Ross Street, Pemulwuy, was formerly part of the SEPP 59 land, though it had not been included in the Greystanes Estate Precinct Plan.

Pemulwuy Industrial

Objectives

O1. To achieve the principles of ESD through:

- **i)** provision of a range of new employment opportunities;
- **ii)** efficient re-use of degraded land;
- **iii)** proximity of local employment to workforce and the consequent benefits to the community such as reduced travel time, promotion of healthy lifestyles, reduced expenditure for transport;
- **iv)** energy efficient design of employment developments;
- **v)** provision of public transport networks;
- **vi)** implementation of sustainable practices, where practicable e.g. water efficiency and conservation measures to reduce water consumption, maintenance or improvement of water quality through a catchment management approach to the site and the control and minimisation of air pollutant emissions;
- **vii)** efficient use of land to minimise urban growth and better utilise existing infrastructure;
- **viii)** promoting the use of appropriate and renewable source materials;
- **ix)** maintaining and enhancing the significant vegetation and habitat and protecting threatened ecological communities; and
- **x)** recognising and integrating significant cultural and archaeological features/aspects.

O2. To continue existing employment;

O3. To offer new job opportunities in Western Sydney. The accessibility of the site to a regional road and public transport network will assist in attracting new employment generating industries.

O4. To provide within the public domain of the Pemulwuy north employment lands:

- riparian corridor,
- water bodies,
- paths and cycleways, and
- roads.

O5. To design these areas so as to create a unique setting and encourage development throughout the Estate.

Note: For a vision of Residential Pemulwuy, see Section 1.4 of Part P - Pemulwuy Residential Controls.

2. Public Domain and Open Space

2.1. Open Space

Objectives

O1. To protect scenic values and ridge skyline;

O2. To create an integrated open space system that is safe, visually attractive, environmentally sustainable, manageable and flexible to cater for changing community needs;

O3. To retain significant vegetation bands and corridors including the dominant north-south wooded ridgeline; and

O4. To rehabilitate existing quarry batters to provide a vegetated setting for employment lands.

O5. To create a major northern gateway to the employment lands of high quality landscape that reflects the character of the entire employment area.

Development Controls

C1. Provide open space generally in accordance with the development concept set out in Figure 2. The public domain should comprise: riparian corridor, water bodies, paths and cycleways, and roads. The treatment of these areas will be important in creating a unique setting and encouraging development throughout the Estate. These areas are to be reflected in subsequent development applications for the site, and maintained as such.

C2. Open space areas may be used for stormwater detention purposes.

C3. Open space may include elements of the natural environment and provide for active and passive recreation.

C4. Retain and reinforce existing vegetation patterns through the Open space landscaping within public domain areas.

C5. On the north-south wooded ridgeline, replace the pine plantation with new locally indigenous planting to protect the skyline.

C6. Provide a cross site link to allow for connection between Greystanes and Prospect Reservoir.

C7. Provide pedestrian and cycle systems through the riparian corridor where possible, designed to minimise the impact on the ecology of the riparian corridor.

C8. Design accessible open space corridors to ensure the safety of pedestrians and cyclists using the corridors as thoroughfares. See Section 2.1.5.

C9. Maintain and vegetate the riparian corridor in accordance with the agreement with the relevant State authority and to the satisfaction of Holroyd City Council.

C10. Create a major northern gateway to the employment lands of high quality landscape that reflects the character of the entire employment area, as shown in Figure 3.

C11. Provide a linear open space area with water elements, landscaped areas and suitably designed signage, bridge, lighting and pavements to evoke the character and theme of a quality industrial park.

C12. Along the eastern ridgeline, plant to reinforce the topographical bounds of the employment area.

Pemulwuy Industrial

Figure 2- Open Space concept Plan

Figure 3: Illustation- Entry into Employment lands

2.2. Pedestrian and Cyclist Facilities

Objectives

O1. To provide a convenient access to the employment precinct .

O2. To encourage walking and cycling by providing safe, convenient and legible routes to points of attraction within and beyond the suburb.

O3. To provide open space permeability through development precincts.

O4. To link the existing Greystanes community with new development precincts.

O5. To utilise natural drainage systems and vegetation corridors as open space links.

Development Controls

C1. Construct pedestrian footpaths generally as part of the normal street network, other than paths in open space corridors.

C2. Ensure that development applications that relate to the cycle network and pedestrian link the site facilities to the off-site facilities The cycle network is a combination of on street, dedicated street lanes, shared paths (parks and streets) and dedicated paths (parks) that link the main points of attraction, particularly the residential and employment areas and village centre with the open space network including the Prospect Canal linear park and Hyland Park.

C3. Provide key pedestrian and cycle routes broadly along the alignment shown on Figure 3.

C4. Align cycle/foot paths in open space approximately parallel with the park edge streets wherever possible to take advantage of the street lighting and allow for casual surveillance by residents and drivers.

C5. Wherever possible and practical, design and construct footpaths or shared paths to be of appropriate width, longitudinal gradient, sight distance and kerb details to cater for the likely population and user types, including aged people, people with prams and wheelchairs, and people with disabilities. Provide a minimum width of 1200mm and maximum gradient where possible of 15%.

C6. Consider incorporating drainage lines into the open space networks as pedestrian and cycle paths.

C7. Pedestrian and cyclist access to the north east employment area will be via the main gate onto Clunies Ross Street.

C8. Pedestrian access to private land should be designed as an integral part of the internal circulation network.

2.3. Entrance Treatment

Objectives

O1. To create distinctive, high quality, landscaped gateways to the Estate.

Developmennt Controls

C1. Establish north and south entry gateways into the northern employment lands along the spine road to create a distinctive character.

C2. Locate the site entry to the northeast area on Clunies Ross Street and integrate it with the landscape character.

2.4. Street Trees & Furniture

Objectives

O1. To establish a character and unifying element through street tree planting and furniture.

Development Controls

C1. Use thematic street tree planting to complement the role of streets. Use different species for different street types and orientation.

C2. Use a co-ordinated palette of street furniture throughout the Estate.

C3. Ensure that lighting in public areas is of a style, colour and form that is compatible with the street furniture.

C4. Co-ordinate the spacing of light poles with street trees.

2.5. Safety and Security

Objectives

O1. To promote the feeling of safety.

Development Controls

C1. Design buildings to overlook public and communal streets and other public areas to provide casual surveillance.

C2. Through site planning, buildings, fences, landscaping and other features, clearly define territory and ownership of all public, common, semi-private and private space.

C3. Provide appropriate lighting to all pedestrian paths between public and shared areas, parking areas and building entries, and light building entries to provide a sense of security for both residents and visitors.

C4. Ensure no lighting spills onto or affects the amenity of residential areas.

C5. Use robust materials which are aesthetically pleasing in public or communal spaces.

C6. Ensure pedestrian site access and carparking are:

- clearly defined,
- appropriately lit,
- visible to others and
- provide direct access to buildings from areas likely to be used at night.

C7. Design major pedestrian, cycle and vehicle thoroughfares to:

- minimise opportunities for concealment;
- avoid 'blind' corners;
- maximise casual surveillance; and
- allow 'long distance' sight lines.

C8. Identify major pedestrian, cycle and vehicle thoroughfares, and reinforce them as 'safe routes' through:

- appropriate lighting;
- the potential for casual surveillance;
- minimised opportunities for concealment;
- landscaping which allows long-distance sight lines; and
- avoidance of 'blind corners'.

C9. Site and design landscape and fencing so they do not present a security risk by screening doors, windows and major paths.

C10. Provide safety fencing along the ridge line, suitably designed to allow for views and outlook.

C11. Ensure landscaping maintains view corridors & clear sight lines.

3. Building and Siting Requirements

Where this section of the Holroyd DCP 2013 does not provide guidance on specific development matters, reference should be made to other sections of the DCP, such as Part A (General Guidelines), and Part D (Industrial Development). Where there is an inconsistency between this Part and Part A or D, this Part should take precedence

3.1. Land Uses

Objectives

O1. The objectives for and land uses permissible within the Pemulwuy North Employment Lands are defined by:

The WSEA SEPP 2009 (in relation to land zoned IN 1 as defined by that SEPP); and

The Holroyd Local Environmental Plan 2013 (in relation to land zoned IN 2 and excluded from Precinct 10 of the Land Application Map of the WSEA SEPP 2009).

Development Controls

C1. Provide a retail service centre catering for the needs of the workforce at a central location within the employment lands. Locate the centre on a corner allotment facing the north-south spine road so that it is readily accessible to the local workforce . For Hours of Operation, see clause 6.2 of Part D of this DCP.

C2. Provide recreational and community uses within the employment lands consistent with the provisions of the Western Sydney Employment Area SEPP 2009.

C3. Ensure open space that provides active and passive recreation for the workforce. Open space should be readily accessible and well located and should be incorporated within individual developments as well as along public corridors.

C4. Restrict retail activity on industrial land (having the potential to increase land prices and effectively push traditional industrial users out, and to threaten the industrial 'address' and image).

3.2. Lot Sizes and Site Cover

Objectives

O1. To achieve a quality industrial park setting and ensure adequate provision is made for landscaping, parking and manoeuvring areas.

O2. To create site layouts which consider the opportunities and constraints of the site.

Development Controls

C1. Ensure a minimum lot size of 1 hectare, although, a range of lot sizes is anticipated to meet market demand.

C2. Subdivisions of land should:

- seek to maximise solar access to all parts of the development;
- encourage passive solar design; and
- protect site attributes such as views, existing vegetation and other environmental features.

C3. Subdivision of land should avoid the creation of battle-axe blocks or long and narrow blocks at right angles to street frontages.

C4. Maximum site coverage is 60%. Local services including commercial, retail, community and recreational uses are excluded from this provision given the different design characteristics of these uses.

C5. "Site area" is defined as the whole of the land to which an application relates and includes areas set aside for open space, drainage and other services. "Site coverage" is defined as the area of a site covered by buildings including awnings.

C6. In the layout of the site, design the buildings and landscaping to provide direct, convenient and safe access to the street for the pedestrians.

C7. On industrial sites, make adequate allowance for manoeuvring and turning of heavy vehicles on site. In accordance with the Roads and Maritime Service's Policies, Guidelines and Procedures for Traffic Generating Developments, apply the design standard for "large rigid truck".

C8. Ensure that the width of an industrial allotment at the building line is equal to or greater than 24m and the average depth is equal to or greater than 45m.

3.3. Siting

Objectives

O1. To achieve attractive streetscapes.

O2. To provide a quality setting and to allow for landscaped curtilages between buildings and front property boundaries.

O3. To create setbacks that allow for landscaping and visual amenity.

O4. To provide solar access to sites and adjacent development.

O5. On the former CSIRO lands, to create a consistent streetscape with the residential area along the Clunies Street frontage.

O6. On the former CSIRO lands, to provide a setback on the southern boundary that allows for reasonable sunlight access and reduces visual dominance of employment buildings to the rear of the residential area.

O7. To prescribe Asset Protection Zones (APZs) within the Pemulwuy northern employment lands for bushfire protection.

Development Controls

C1. Setback buildings to the west of Clunies Ross Street as follows:

- North-south spine road – buildings are to be setback 20 metres from the property boundary. The first 10 metres is to be landscaped in accordance with the Landscape section below;
- all other roads - buildings are to be set back 8 metres from the property boundary. The first 3 metres is to be landscaped in accordance with the Landscape section below.

C2. Setback buildings within the former CSIRO employment land consistent with figure 4.

C3. within the former CSIRO employment land:

- The Eastern Building Setback is the prescribed flood line based on the dam break Imminent Failure Flood (IFF) line;
- New buildings are not permitted in the IFF zone;
- Carparking and like uses are permitted in the IFF zone;
- New buildings are not permitted within the Asset Protection Zone (APZ).
- No new development, including buildings, car parking, fire trails and like activities, is permitted within the riparian corridor alignment agreed with a State environmental authority.

C4. The setback controls may be varied where:

- a predominant street building line exists;
- the current setback of buildings is staggered and continuity in street building line should be maintained;
- there is no obvious street building line and new buildings should align with existing maximum and minimum building lines of development;
- public domain improvements or environmental benefits such as solar access, protection of vegetation are achieved; or
- where the building is located on a corner site and a lesser setback is consistent with streetscape objectives.

C5. Setback buildings 10 metres from any public open space, including riparian reserves, and 20 metres from Greystanes Creek.

C6. Site and design buildings to allow for casual surveillance of building entrances and the street.

C7. Site buildings to allow for adequate lines of sight to building entrances, the street and carpark areas for pedestrians, cyclists and vehicles.

C8. Locate offices to address and activate the street/s. The warehouse/factory functions as well as car parking, manoeuvring areas, loading and unloading facilities are to be located within the site.

C9. Through layout of the site, the design of buildings and landscaping, provide direct and safe access to the street for pedestrians.

C10. Large setbacks with significant car parking in front of buildings are not permitted on the principal street frontage.

C11. Establish and maintain landscaping within the southern setback of the former CSIRO employment land.

C12. Site and design buildings so that solar access to staff recreation areas on site and in adjoining developments is not compromised between 12 noon and 2pm (as measured at 21 June).

C13. Site buildings to satisfy maintenance, utility and safety requirements.

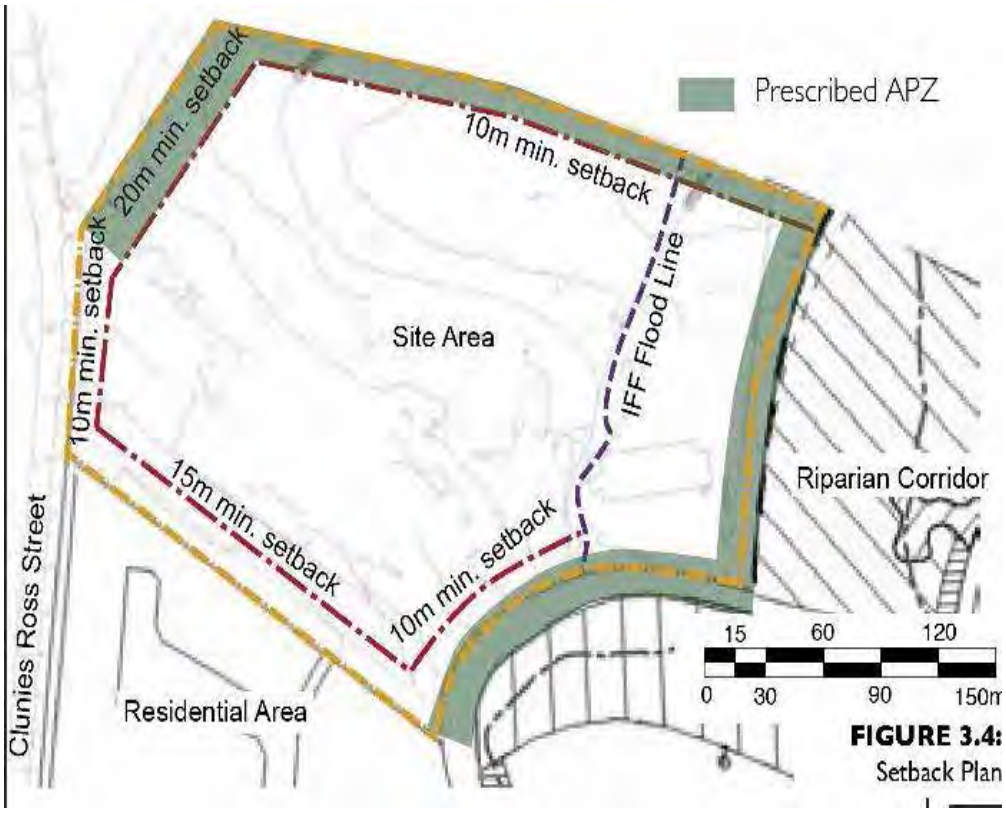


Figure 4- Setbacks- Former CSIRO employment land

3.4. Solar Access

Objectives

O1. To consider mid winter solar access to the office building areas within the Employment Land.

O2. To achieve reasonable mid winter solar access to primary indoor spaces and primary private open spaces within the residential area to the immediate south of the former CSIRO employment land.

Development Controls

C1. Design office areas to consider north/south orientation in order to maximise solar access to the habitable area in midwinter.

C2. Site and design buildings so that solar access to staff recreation areas on site and in adjoining developments is not compromised between 12 noon and 2pm (as measured at 21 June).

C3. Within the former CSIRO employment land, ensure that the residential development to the immediate south of the employment area achieves a minimum 4 hours of direct sunlight to windows of the north facing living areas between 8.00am and 4.00pm midwinter, and 3 hours direct sunlight between 9.00am and 3.00pm to 50% of the private open space in mid winter.

Note: Accompanying development applications, submit shadow diagrams showing the effect of shadows on public open space, adjoining properties and outdoor recreation areas at 9am, 12 noon and 3pm mid winter.

C4. Where industrial development abuts residential lots or streets, shadow diagrams shall

- **a)** be provided demonstrating the impact on adjoining residential properties or public domain;
- **b)** be based on a survey of the site and adjoining development;
- **c)** be at 9.00 a.m., 12.00 noon and 3.00 p.m. at 21st June (private open space); and
- **d)** be at 8.00 a.m., 12.00 noon and 4.00 p.m. at 21st June (north facing living areas).

C5. Additionally, ensure height of such industrial development does not exceed (in metres) the height allowed for the adjoining use along the common boundary, subject to meeting the controls of overshadowing.

C6. If the existing lot or open space already receives less than 4 hours of sunlight then the development shall not further reduce this solar access.

3.5. Building Heights and Design

Objectives

O1. To ensure buildings do not adversely affect views from the M4, Great Western Highway and Prospect Reservoir environs to Prospect Hill.

O2. To create building forms with appropriate scale and height, taking into consideration site topography.

O3. To encourage a high architectural standard of contemporary design and innovation.

O4. To provide for low rise, large scale buildings generally in horizontal form.

O5. To achieve a good quality development which complements the streetscape.

O6. To provide for low rise and large scale building to reduce visual impact to the surrounding area.

O7. To ensure building heights do not adversely impact on the amenity of adjacent residential areas.

O8. To ensure the scale and character of the development is compatible with other employment-generating development in the precinct concerned.

O9. To ensure buildings are compatible with the height, scale, siting and character of existing residential buildings in the vicinity.

O10. On development adjoining residential land, to store goods, plant, equipment and other material resulting from the development within a building, or to suitably screen them from view from residential buildings and associated land.

Development Controls

C1. Ensure that the height and scale of buildings in the Northern Employment area are sensitive to views from the environs of Prospect Reservoir and the M4 Motorway. Generally 12 metres is the building height limit in the Northern Employment area. In the former CSIRO land, building heights shall not exceed 12.2 metres.

C2. In the former CSIRO land, ensure compliance with Part D to protect adjacent residential amenity.

C3. In the former CSIRO land, new buildings should not exceed the height of RL 63.0 metres (AHD).

C4. In the former CSIRO land, the height level of buildings at the 15 metre setback line from the southern boundary, which abuts the residential lands, shall not exceed RL 61.5 metres (AHD). From this maximum height level, the height of buildings may increase away from the southern boundary setback to the highest level permitted for the site providing there are no increased overshadowing effects on the adjoining residential lands.

C5. Ensure the architectural treatment of building facades is directed by energy efficiency and other environmental design considerations.

C6. Articulate building facades to address all street frontages. Building facades can be articulated using architectural elements which include:

- variable roofs and skyline silhouettes (for example: saw toothed or pitched roofs and innovative skillion curved or 'floating' roof forms);
- varying façade alignments;
- 'breaking-up' facades with windows, changing wall alignments and the use of decorative features and structural features.
- variation in materials, finishes and colours;
- location, style and quantity of windows;
- blade and fin walls;
- cantilevered or overhanging elements;
- verandahs, terraces, sun shading devices;
- colonnades; or
- variation in height.

C7. Architectural style is to contribute to the quality of the Estate, with emphasis on the horizontal lines and planes.

C8. Integrate roof top plant and services into building/roof forms or screened and compatible with the building design. Mobile phone towers are not permitted on tops of buildings unless integrated into the building/roof design.

C9. Articulate building entries so they are easily identifiable.

C10. Locate service areas including waste/recycling areas and external storage areas away from principal frontages and adequately screen them from view from any public road.

C11. Locate loading docks, roller shutters and other building openings that detract from the appearance of the building so they are not visible from the principal street frontage.

C12. Minimise cut and fill to protect existing drainage patterns and maintain integrity of the groundwater system.

3.6. External Materials and Colours

Objectives

O1. To contribute to the visual quality of the Pemulwuy northern employment lands through selection of building materials and colours.

Development Controls

C1. Use materials and colours for buildings and roofs that are subtle (no strong hues), recessive (mid-tone) and non-reflective.

C2. Create varied facades through choice of external materials, including masonry, metal panels, CFC panels, metal sheeting for walls and roofs.

C3. Express one predominant external material. The range of external materials on any individual building should be limited and compatible.

C4. Ensure that dado panels or similar are a minimum height of 2 metres to all external walls. Construct dado panels of face brick, masonry, or other material that provides a high standard of finishes.

C5. Pre-colour metal deck roofs in landscape tones.

C6. Use only low maintenance and robust materials.

C7. Minimise variations in colour. Accent colour is acceptable, e.g. for corporate logos and architectural details.

C8. Ensure that external finishes are graffiti resistant.

Note: Indicate details of external materials and colours on the plans accompanying development applications.

3.7. Energy and Water Efficiency

Objectives

O1. To encourage site planning and building design that optimises site conditions to achieve energy efficiency.

O2. To design working environments that minimise energy and water use .

O3. To encourage use of building materials that minimise impact on development.

O4. To use passive and active design initiatives that respect the principles of ecological sustainable development.

O5. To implement sustainable practices, e.g. water efficiency and conservation measures to reduce water consumption, and the use of solar energy for heating appliances.

O6. To encourage Water Sensitive Urban Design Principles (WSUD) for the new development.

O7. To encourage the use of rainwater tanks for outdoor use and toilet flushing in accordance with the requirements of Sydney Water;

O8. To encourage the use of permeable paving, wherever possible, to increase water filtration into the ground.

Development Controls

C1. Ensure all building development (including additions and alterations) complies with the requirements of the Building Code of Australia (BCA), and relevant reports accompany applications for construction.

C2. In designing the orientation, internal layout and design of buildings, minimise energy consumption for heating and cooling. Aspects to consider include:

- light penetration to internal areas;
- natural ventilation;
- passive solar design;
- shading devices to minimise glare;
- solar access to outdoor recreation areas.

C3. Select building materials which, where feasible:

- use renewable resources;
- are energy efficient;
- are low maintenance;
- are recycled or recyclable;
- are non polluting;
- are non-ozone depleting; and
- avoid where possible the use of PVC.

C4. Install rainwater tanks to provide water for flushing toilets and other non-potable uses.

C5. See Section 7.1 below under Stormwater Management for controls for water flow and quality

management during and particularly after development, and for Stormwater plans to minimise pollutant loads.

C6. Ensure compliance with Part A Water Sensitive Urban Design (WSUD).

3.8. Landscaping

Objectives

O1. To encourage a high standard of landscaping to enhance the streetscape and amenity of the Pemulwuy north employment lands.

O2. To accommodate outdoor staff areas.

O3. To provide for retention of water for irrigation and drainage purposes.

O4. On sites adjacent to the open space corridors, to select species to complement the plant species in the corridors.

O5. To screen the interface to the adjacent residential uses.

O6. To soften the impact of built form and car parking areas.

Development Controls

Note that "Landscaping" incorporates vegetation, gardens, outdoor staff recreation areas, natural site features and watercourses, but does not include that part of the site used for driveways, parking or outdoor storage.

C1. Design the landscape of both hard and soft landscape features to create a quality industrial park setting. Hard landscape features include paving, terracing, retaining walls and kerbing. Soft landscape features refer to vegetation (including grass, shrubs and trees).

C2. Within the landscape masterplan, identify existing waterbodies, creeks and creeklines on the site and provide for protection and rehabilitation of riparian zones within the site.

C3. Design landscaping to visually unify and enhance the overall quality of the Pemulwuy north employment lands.

C4. Provide outdoor amenity/recreation facilities for employees within the landscaped areas, to meet the likely needs of the workforce.

C5. Protect existing significant trees and incorporate them into the design.

C6. Provide landscaping as both hard and soft areas. However, provide and maintain approximately 15% of a site as soft landscaped area at ground level. The location of the landscaped areas will be determined at the development application stage having regard to meeting the criteria contained in this section. Landscaping design of both hard and soft landscape features should create a unified setting;

C7. Where feasible, drain hard stand areas to soft landscaping areas to improve on-site infiltration of stormwater.

C8. Provide non-slip finishes to paving.

C9. Design landscaping to complement the buildings on site, the adjoining developments and streetscape, and to be compatible in scale.

C10. Separate landscaped areas from vehicle areas with an effective physical barrier.

C11. In the former CSIRO land, where a site adjoins a non- industrial use, provide a mature planting buffer and secondary acoustic fence within the industrial lot within the side and rear setbacks. Adequate acoustic buffers are required so that any impact is minimised.

C12. Plant local indigenous species with mulched beds to help improve water quality and reduce water consumption.

C13. Plant to highlight pedestrian and vehicular access points and building entries.

C14. Landscape informally to promote parkland quality. Structured treatment may be used to enhance entries, etc.

C15. Provide earth mounding in the landscaped setback along the north-south spine road. Embankments should be no steeper than 1:4 gradient in order to enable vegetation to be grown and maintained.

C16. Landscape carparks to complement the surrounding landscaped areas, soften car parking areas and provide shade for parked cars. Plant a minimum of one tree for every four car parking spaces. Provide landscaping around the perimeter of carpark areas.

C17. In open parking areas, plant 1 shade tree per 4 cars within or around the parking areas, except in the instance of central carpark divides (see Part D of this DCP).

C18. Install automatic irrigation systems for all landscaped areas on the developed lots. Design them to meet specific site requirements. Consider minimising water consumption and preventing salinity in the design of landscaping and irrigation systems; prefer irrigation systems that monitor soil moisture conditions.

C19. Install a drip irrigation system to all soft landscaped areas to reduce water use. Connect this system to rainwater storage tanks where possible.

C20. Design landscaping to assist energy conservation in buildings and have regard to microclimatic conditions and shading control.

C21. Design landscaping to encourage safety by ensuring street surveillance is possible, paths are not excessively screened and lighting is provided to pathways and building entries.

C22. Design landscaping and setbacks to create an environment that encourages walking and the pedestrian use of public streets.

C23. Submit a separate landscape masterplan with the first application received to subdivide land in each stage of the development. Requirements for subdivision include:

a) details of landscape concepts including thematic street planting, lighting and street furniture proposals to guide future development;
b) proposals for entry gateways in the north and south as appropriate;
c) identification of existing and proposed open space and vegetation corridors including riparian land, drainage corridors, stormwater detention ponds;
d) identification of existing natural features such as waterbodies and creeklines;
e) reference to and consistency with any relevant bushland management plan;
f) location and extent of pedestrian and cycleway networks; and;
g) demonstrate provisions for linkages of the above facilities to facilities on adjoining land.

3.9. Signage

Objectives

O1. To encourage signage that contributes to the aesthetic integrity of the Pemulwuy north employment lands.

O2. To ensure signage does not detract from the visual appearance of the buildings and locality.

O3. To provide the opportunity for an approved use to adequately state the nature of the business conducted on the premises;

O4. To regulate signage so that it contributes to the identity of the site;

O5. To ensure signage does not compromise the safety of the M4 user;

O6. To ensure illuminated signs do not unduly affect the amenity of the surrounding areas or interfere with driver's vision.

Development Controls

C1. Relate advertising, other than real estate signs, to the use occurring on the respective property. i.e.: to serve only to identify the occupants of the premises.

C2. Locate directional and tenancy signage in a convenient point close to the main entry to a development.

C3. Locate signs below parapet level.

C4. Moving, blinking or flashing signs are prohibited.

C5. Incorporate signage into the architectural elements of the building of a size, shape and colour that does not detract from the architectural character of the building.

C6. Where council has a fixed building line, advertisements will generally not be permitted between the building line and street alignment. Council will consider allowing business identification signs that serve only to identify the occupants of the premises, within the building line, provided they comply with the standards set out below. Council will also consider advertisements in the form of logos and trademarks, where they are incorporated into landscaping design.

C7. Provide no more than one wall sign per occupancy, on the facade of the unit with which that occupancy is associated. The sizes and dimensions of such signage shall have regard to existing signage on other units, and dimensions of 2m x 1m are permitted without consent.

C8. Where there is only one occupant for an entire building, provide no more than one wall sign per building facade.

C9. Directory boards are to be comprised of not more than one (1) panel per unit. Each panel is:

a) to be uniform in size, colour and dimensions;

b) not to exceed 0.2 square metres per panel; and

c) to serve only to identify the number of the unit and the name of the respective occupant.

C10. Locate the directory board on or behind the building line setback adjacent to the entrance to the site, unless with the prior consent of Council. Where the directory board is proposed

to be located within the building line setback incorporate it into the landscaping to Council's satisfaction.

C11. Ensure that signage is easily readable.

C12. Locate and display illuminated signs in a manner that does not cause glare, distract drivers or adversely impact on the amenity of nearby residences.

Figure 5- Example of Tenancy signage

3.10. Fencing

Objectives

O1. To allow for security in the Pemulwuy north employment lands.

O2. To ensure that the design of fencing contributes to the streetscape and amenity of the Pemulwuy north employment lands.

O3. To provide for the amenity of adjacent residential land.

Development Controls

C1. Avoid fencing between the building and the principal street frontage, where possible.

C2. Where fencing is required for safety or security reasons to be forward of the building line, ensure that it is of a standard and style that does not detract from the landscaping and main building facades. Pre-painted solid metal fencing will generally not be acceptable. Provide details of fencing at the development application stage.

C3. Locate fencing so it does not impede sight lines for drivers.

C4. Ensure that fencing complements all landscaping to minimise visual impacts to the adjacent residential areas whilst providing site security.

C5. Restrict fences fronting Clunies Ross Street to a height of 1 metre above natural ground level.

C6. Within the Pemulwuy north employment lands, open form front fences to a height of 1.8 metres will be considered having regard to the presentation and design of the fence;

C7. Utilise graffiti-resistant materials and finishes on fencing.

3.11. Exempt and Complying Development

For See Part 5 (General Commercial and Industrial Code) of the State Environmental Planning Policy (Exempt and Complying Development Codes) 2008. This SEPP controls certain Commercial and Industrial development with respect to:

- internal alteration to a building that is used as bulky goods premises, commercial premises, premises for light industry or a warehouse or distribution centre; or
- Change of use of [Commercial and Industrial] premises;
- Mechanical ventilation systems;
- Shop front and awning alterations;
- Skylights and roof windows.

Part 1 of the SEPP defines the general requirements for exempt and complying development for Commercial and Industrial purposes.
Part 2 controls general exemptions such as Access ramps, Bollards, Demolition, Minor building alterations, Privacy screens, Scaffolding, hoardings and temporary construction site fences, Replacement of identification signs, Temporary builders' structures, and Water features and ponds.

4. Transport

4.1. Principles for a Transport Plan

Guiding principles and performance targets for the establishment of a transportation system for Pemulwuy were based on SEPP 59 (State Environmental Planning Policy No. 59 – Central Western Sydney Economic and Employment Area). These principles have guided the precinct plans on which this DCP is based. With the transferral of much of the land to which this DCP applies to the State Environmental Planning Policy (Western Sydney Employment Area) 2009 (WSEA SEPP), the "existing precinct plans" (upon which this section of the DCP is based) continue to apply in determining a development application.

Note: see clause 26 (Development on or in vicinity of proposed transport infrastructure routes) of the WSEA SEPP.

Objectives

O1. To address transport targets.

O2. To establish guiding principles for design and layout of the site consistent with increasing the mode split towards public transport and non private vehicle usage and minimise vehicle kilometres travelled (VKTs).

O3. To provide for all modes of transport, including roads, transit ways, walking and cycling facilities, which are integrated into the surrounding network of each mode.

O4. To identify a range of transport infrastructure which addresses site requirements including the staging and funding proposals.

O5. To identify links to the Transitway network outlined by 'Action for Transport 2010'.

O6. To recognise freight and industry transport requirements including:

- linkages from the site to the M4 Motorway; and
- initiatives for integrating freight handling between industries.

Development Controls

C1. Reduce the mode split of 'car as driver' for the journey to work by at least 10% (e.g. from 75% to 65%) compared to the existing surrounding area.

C2. Reduce the total VKT (vehicle kilometres travelled) to be generated by the proposed development by at least 5% below that which would be generated by a 'conventional' approach to development".

4.2. Regional Transport Requirements

Objectives

O1. To provide regional transport infrastructure which will achieve the transport targets established in clause 4.1.

O2. To develop regional transport infrastructure that will service the needs of the site and integrate into an improved regional transport network.

O3. To provide infrastructure which recognises the need to integrate all modes of transport including public transport, private vehicle transport, walking and cycling.

O4. To develop measures to mitigate potential adverse transport impacts generated by the development of Pemulwuy on surrounding areas.

Development Controls

C1. Provide regional (and local) transport infrastructure improvements that are consistent with the Deeds of Agreement between the owners and the Roads and Maritime Services. Note: Holroyd City Council does not support the upgrade of the Great Western Highway/Beresford Road intersection contained within the RMS Deeds of Agreement. Seek alternative treatments to mitigate potential traffic impacts of the development of Pemulwuy.

4.3. Transport Design Guidelines - Land Use Location

Objectives

O1. To generate efficient travel patterns across the site to reduce VKTs.

O2. To maximise the use and support the viability of public transport services.

O3. To avoid potential conflicts between various land uses.

Development Controls

C1. Locate higher traffic generating land (office, retail) uses in close proximity (within 400 metres, walking distance) to public transport stops, nodes or interchanges on regional transport routes (such as the transitway) to reduce traffic generation and improve public transport usage and service viability.

C2. Provide appropriate and conveniently located services such as shops and open space to reduce trip length and encourage use of pedestrian / cycleway networks.

C3. Ensure that land uses are well integrated with public transport stops, nodes and interchanges so as to provide safe, attractive and inviting environments for public transport patrons.

C4. Separate residential and employment precincts to avoid potential road function conflicts.

C5. Favour co-locating similar or co-dependent employment developments within close proximity in order to generate potential synergies in transport and freight, so as to:

a) maximise simultaneous servicing by one vehicle thereby reducing the number of trips entering and leaving the site;

b) improve trip containment levels within the site;

c) manage travel demand. The location of co-dependent developments is primarily market driven. However, the marketing and sales promotion strategies employed can have a significant impact on the type of land uses attached to the development site and should be employed as a travel demand management tool.

4.4. Access and Circulation

Objectives

O1. To ensure safe access movements to/from the Pemulwuy north employment area.

O2. To provide access through the employment area to improve the regional road network.

O3. To provide access to the employment area for employment land uses which minimise impacts on the surrounding local community.

O4. To construct roads in such a way to accommodate the anticipated traffic volumes and in particular heavy vehicles. For example, to ensure that road access facilities are commensurate with the scale and extent of the proposed development and compatible with the surrounding traffic network.

O5. To provide a 50 metre road reserve which allows for the future provision of a 25 metre wide transitway by the RMS.

O6. To minimise potential conflict between street traffic and pedestrians caused by the vehicular movements to and from the site.

O7. To minimise potential conflict between service vehicle (heavy vehicle) with smaller vehicle.

Development Controls

C1. Ensure that intersections into the Pemulwuy north employment lands are designed with sound traffic planning principles and relevant guidelines including but not limited to:

a) Roads and Maritime Services's Road Design Guide;

b) Roads and Maritime Services's Guide to Traffic Generating Development (1993);

c) AUSTROAD - Guide to Traffic Engineering Practice; and

d) while ensuring that walking and cycling are encouraged and not impeded.

C2. Direct property access to north-south link will not be permitted other than in circumstances stated below.

C3. The number of road access points to the north-south link is restricted, and at full development no direct property access from the north-south link will be permitted. Provide access from a limited number of service roads and separate the intersections by a minimum distance of 500 metres. Therefore there are only two service road intersections with the north-south link between the northern boundary and Butu Wargun Drive.

C4. Direct property access from the north-south spine road, is only permitted as an interim arrangement during the staged construction of the development. Direct access to properties north of Butu Wargun Drive is permitted until the north-south spine road is constructed to the southern boundary of Pemulwuy north employment lands.

C5. Provide the north-south link through the employment precinct so that direct and efficient access for freight and other heavy vehicles is provided to employment lots from the regional road network.

C6. Ensure site access allows vehicles to enter and exit in a forward direction

C7. Within the former CSIRO employment land, ensure vehicular access to and from the site is via Clunies Ross Street only, as illustrated in Figure 6. Direct vehicular access to the residential land is not permitted.

C8. Within the former CSIRO employment land, provide a potential access point at the southern end of site boundary to Clunies Ross Street for emergency vehicles, as illustrated in Figure 6.

C9. Within the former CSIRO employment land, ensure that emergency Access for fire appliances has a minimum width of 6m with 7m passing bays and internal radius of 6m for corners.

C10. Within the former CSIRO employment land, ensure driveway width, configuration and location shall accord with 'Roads and Maritime Services's' Guide to Traffic Generating Development (1993) and Australian Standard AS 2890.1: 2004.

C11. Within the former CSIRO employment land, position access to Clunies Ross Street as far as practicable, to minimised impacts to adjoining residential development. Locate the driveway as far north as practicable having regard to sight lines along Clunies Ross Street.

C12. Design internal circulation road and heavy vehicle manoeuvring areas to comply with the requirements of the following:

- • AS2890.1-2004;
- • AS2890.2-2002; and
- • NSWB Guidelines for Emergency Vehicle Access.

Figure 6- Site access within the former CSIRO Employment land

4.5. Parking

Objectives

O1. To encourage a reduction in the level of vehicular traffic by reducing parking requirements.

O2. To ensure adequate parking for various land uses and sustain the market viability of the development.

O3. To ensure that all car parking demands generated by any development are accommodated on the development site.

O4. To design parking supply in accordance with the site's urban design principles. Thus, to:

a) ensure that the provision of off street car parking facilities does not detract from the visual character, particularly the streetscape of an area; and

b) ensure that the location of driveways, parking and servicing areas are efficient, safe and suitably landscaped.

O5. To implement parking strategies which minimise adverse impacts on local communities and wider land uses. For example, to minimise conflict between service vehicles (heavy vehicles) and smaller vehicles within the site.

Development Controls

On-Street Parking

C1. Note that the provisions of on-street parking for various road types within the road hierarchy are summarised below in Section 4.7, which indicates that on-street parking would be appropriate on some roads with the exception of the north-south spine road and the first 500 metres of the east-west link from Greystanes Road.

C2. Design on-street parking to be consistent with the design principles and dimensional requirements of Australian Standards AS2890.5 and 1742.11.

C3. In the provision of on-street parking, do not compromise street security and urban design / streetscape objectives.

Off-Street Parking Design

C4. Design off-street parking to be consistent with the design principles and dimensional requirements of Australian Standards AS2890.1: 2004. Include in the design, compliance with driveway dimensions and location, sight distances, and dimensions for circulation aisles and grade / ramps.

C5. Design off-street parking to ensure that vehicles are able to efficiently access parking spaces within minimal manoeuvring.

C6. Suitably landscape off-street parking areas to minimise visual dominance.

Off-Street Parking Supply

C7. Note that the parking requirements of developments within the Pemulwuy north employment lands are assessed on a site-by-site basis due to the varying parking demands of particular land uses.

C8. Use Part D clause 3.8 (Parking and Vehicular Access) of this DCP as the appropriate guidelines

for the supply of off-street parking. However, consider these guidelines as maximum provisions rather than minimum provisions, as a means of encouraging public transport use (dependant upon provision of public transport).

C9. Minimise off-street parking supply, having regard to:

a) access to public transport (located within 400 metres);
b) likely employee usage of pedestrian and cycleway links to the employment precinct;
c) surveys of existing similar developments indicate a lower parking demand;
d) land use synergies with surrounding land uses;
e) the ability to manage the use of on street parking; and
f) complimentary/shared use of parking facilities.

4.6. Service Areas

Objectives

O1. To provide adequate access for heavy vehicles.

O2. To design road networks to minimise freight and heavy vehicle movements through the employment zones.

O3. To create separation between service areas (loading and unloading docks) and parking in order to avoid traffic congestion;

O4. To ensure that service areas are located and designed to facilitate convenient and safe usage.

Development Controls

C1. Position loading/unloading facilities so they:

a) do not interfere with visitor and employee parking spaces;
b) minimise any potential noise impacts; and
c) avoid delivery vehicles standing on any public roads, footways, laneways or service roads.

C2. Provide adequate on-site manoeuvring to enable all vehicles to enter and leave the site in a forward direction.

C3. Design access and circulation design within developments to comply with requirements specified by Australian Standards AS2890.2 2002. This will allow heavy vehicles to efficiently and safely access sites from the road network and internal facilities such as loading docks and courier type drop off zones.

C4. Design all roads to be wide enough to allow passage of regular service vehicles and emergency vehicles. These factors have been considered in the development of the road hierarchy described in the Section on Public Road Design.

4.7. Public Road Design

Objectives

O1. To create a clearly defined road hierarchy based on use, function, amenity and geometric design requirements.

O2. To maximise the efficiency of the Pemulwuy road network to reduce trip lengths and enhance the viability of public transport.

O3. To allow efficient movement through Pemulwuy for regional traffic while discouraging such traffic into the employment or residential areas.

O4. To provide convenient and efficient access for freight transport to the employment precinct.

O5. To provide a safe road network for all modes using the roads including private and public transport, cyclists, pedestrians and mobility impaired persons.

O6. To design streets that enhance the physical and visual connectivity of neighbourhoods.

Development Controls

Note: The north-south link, also known as the Spine Road and Transitway, together with the East-West Sub Arterial Distributor, also known as Butu Wargun Drive to the west of Prospect Hill, have been constructed to required dimensions. However, further road design principles are summarised below which addresses the functional needs of traffic, pedestrians and cyclists. These requirements do not necessarily apply to private roads.

C1. Ensure that the internal road network layout should be permeable for direct pedestrian movements, but sufficiently constrained in order not to attract regional traffic into the employment or residential precincts.

C2. Ensure that detailed design of the road network (i.e. intersection layout, pavement materials) is consistent with the traffic engineering principles of the RMS's Road Design Guidelines or the Austroad Guide to Traffic Engineering Practice.

C3. Design roads so as to minimise the traffic noise impact on adjacent properties, particularly at approaches to residential areas.

C4. Design roads and bridges so as to accommodate, wherever possible, the continuity of vegetation corridors and habitat to promote fauna movements.

The Spine Road:

C5. Currently, one traffic lane is provided in each direction. In future. Consider providing a dual lane carriageway with two through traffic lanes in each direction.

C6. The RMS to provide two bus only transitway lanes within the road reserve (one in each direction) plus median, shoulder and footpath/cycleways.

C7. Ensure no parking in the road reserve.

C8. Ensure no direct property access.

C9. Provide a 1.2 - 1.75 metre width footpath located on both sides away from the kerb.

C10. Provide a cycleway separated from the road pavement.

Butu Wargun Drive (west of Prospect Hill):

C11. Ensure the potential to utilise clearway conditions during peak periods.

C12. Ensure parking provision in carriageway during non clearway periods (or indented) providing two through traffic lanes in each direction at peak times and one through lane in each direction at other times.

C13. Provide a 1.2 metre - 1.75 metre width footpath located on both sides away from the kerb.

C14. Provide a designated cycle lane.

Access Streets

Note: Access streets contain an indicative traffic volume of less than 6,000 vehicles per day depending upon particular land uses. Cyclists are to share the road with vehicles.

C15. Provide a 20 metre road reserve.

C16. Provide an 8 metre carriageway where no on-street parking is permitted and heavy vehicle turning movements can be accommodated.

C17. Provide access to all sites.

C18. Provide a 1.2 - 1.5 metre width footpath located both sides away from the kerb.

C19. Ensure that employment precinct road widths provide sufficient space to allow heavy vehicles to enter and exit lots safely in a single forward turning movement.

C20. In cul-de-sacs, provide a 12-metre kerb radius turning area.

4.8. Public Transport

Objectives

O1. To achieve a minimum 10 per cent increase in non-private vehicle mode splits for journey to work compared to a "conventional development" approach.

O2. To provide a rapid bus transitway through the site which creates links between the site and the regional transport network.

O3. To ensure that public transport stops, nodes and interchanges are safe, attractive and Development Controls

Development Controls

Rapid Bus Transitway

C1. Provide public transport access points to maximise the proportion of employees who are located within 400 metres safe walk of a bus stop on a regular bus route.

C2. Integrate Transitway Stations where possible with the surrounding land uses. In particular, the transitway stations should be located near the service centre, local activities, associated businesses and the public domain.

C3. Align the transitway to follow the north-south Spine Road through the employment precinct.

C4. Ensure the proposed transitway comprises:

a) two transitway lanes, one in each direction;

b) 2 stations;

c) stations that provide adequate accessibility, shelter, and commuter information to encourage usage. This will include facilities and linkages for pedestrians and cyclists.

Local Public Transport

C5. Ensure that local bus feeder services from the residential and employment precincts are able to provide access to the site and future Transitway.

C6. Provide link feeder services to surrounding local areas, i.e. Greystanes, to improve access, catchment size and hence service viability.

C7. Provide appropriate facilities at bus stop locations to encourage increased use and safety. Such facilities would include bus lay-bys, speed controls to protect pedestrians, shelters and seating for waiting passengers, display of timetable information and street lighting for security.

C8. Co-locate bus stops should with after-hour business or other activity wherever possible.

C9. The alignment and geometry of roads that form bus routes need to allow for efficient and unimpeded movement of buses without facilitating high traffic speeds. Where potential traffic calming devices are installed along bus routes, specific design requirements for bus access must be employed.

C10. Implementation of 'Demand Management' by promoting alternative modes of travel to the private car. This would include distribution of information packs on bus services and cycle routes, free bus tickets and advertising of services.

C11. Indicative performance guidelines for bus routes are as follows:

Minimum geometric layout:

a) Radius: 12.5 metres;

Road grades:

a) Max. desired pavement crossfall: 3%;

b) Max. desired gradient: (within 50 metres of stations): 6%;

c) Absolute max. gradient: (within 50 metres of stations): 12%.

(Source: RMS and AUSTROADS)

4.9. Pedestrian and Cycle Routes

Objectives

O1. To encourage trips to be undertaken by walking and cycling instead of private vehicle.

O2. To promote connectivity throughout Pemulwuy.

O3. To create a clearly defined pedestrian and cycleway network within and through Pemulwuy.

O4. To make connections to regional cycle links and between major areas of proposed and existing open space and other recreational, community and employment land uses.

O5. To ensure non-vehicular links provide a safe and secure environment, both in terms of road safety and personal security, which encourages walking and cycling.

Development Controls

C1. Create pedestrian and cycle linkages between the residential precinct and areas of open space, recreational, community and employment land uses, broadly along the alignment shown on Figure 4 'Holroyd Bike Plan 2009'.

C2. Locate and design walking and cycling networks to:

a) provide direct routes between key trip origins and destinations;

b) minimise steep grades; and

c) be safe in terms of road safety and person security.

Pedestrian

C3. Undertake detailed design of pedestrian control and protection facilities in accordance with the relevant sections of the Australian Standards (AS1742) and council's Work Specifications for Subdivision and Development. This includes pedestrian crossings, signage, local area traffic management and disabled access.

C4. Ensure pedestrian-only footpaths have a minimum width of 1.2 metres (wider footpath may be required in areas of high pedestrian activity such as community facilities, shops and other activity centres) and a maximum grade of 15 per cent, except where grades on Prospect Hill make this unachievable.

Cycleways

C5. Design cycling routes within the road hierarchy to reflect the level of activity and function of the various roads such as dedicated cycleways on collector roads and shared access on local streets;

C6. Link designated cycleway routes to the surrounding regional cycleway network. Cycle routes along open spaces are to be between 2.5 – 3.0 metres in width (where shared with pedestrians), and designated accordingly.

C7. Dedicated cycle lanes are to be either line marked or separated from the road lanes.

C8. Provide opportunities for the cycle network to link with the proposed regional cycle route.

C9. Use cycle routes to link all amenities and areas of interest, including commercial/retail areas, play areas and view points.

C10. Ensure technical design requirements such as pavement design and intersection/crossing treatments are consistent with AUSTROADS Guidelines (1998) Guide to Traffic Engineering Practice, Part 14, Bicycles;

C11. Distribute secure bike parking throughout the cycleway network and likely destination points. Parking facilities range from simple hitching rails to secure bike lockers. Key locations would be within the employment precinct, near public transport linkages, and at the village centre.

C12. Provide for cycle refuge facilities at cycleway access points with collector roads.

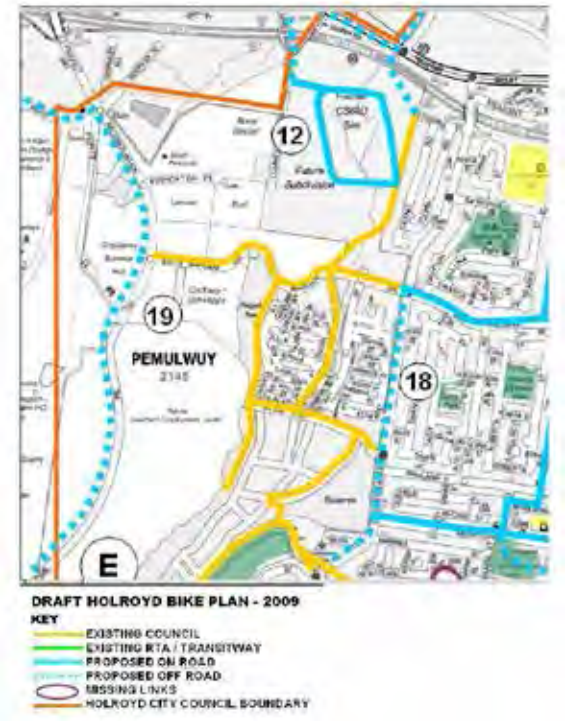


Figure 7- Holroyd Bike Plan 2009

5. Heritage

5.1. Guiding Principles

Clause 8 of Schedule 4 of the State Environmental Planning Policy (Western Sydney Employment Area) 2009 states that:

In making provision for or with respect to heritage conservation, a development control plan must address:

(a) the impact of proposed development on indigenous and non-indigenous heritage values, and

(b) opportunities to offset impacts on areas of heritage significance.

In terms of Archaeological and European Heritage, SEPP 59, upon which this DCP is based, requires that any precinct plan or DCP is to abide by the following relevant guiding principles:

O1. To have regard to the conservation of items of heritage significance identified in the SEPP 59 or any other environmental planning instruments or subject to an order under the Heritage Act 1977;

O2. To have regard to development should be planned to minimise impacts on areas of high biodiversity or Aboriginal heritage significance and should seek to enhance the values of these areas.

5.2. Archaeology

Objectives

O1. To protect site locations.

O2. To reflect Aboriginal occupation and history in the public areas.

Potential Archaeological Deposits:

Within the Employment Lands of Pemulwuy, two areas originally identified as having Potential Archaeological Deposits (PAD), were located in the northern section and south western corner of the Pemulwuy employment lands. Further investigations by Navin Officer (2001) concluded that there were no areas of PAD on the site, and that no further mitigation measures were required on the previously nominated PADs. Nevertheless:

Development Controls

C1. Take care when disturbing this area, and if archaeological material is observed during or after clearing, work should cease immediately and the Aboriginal community consulted and advice sought from NPWS.

C2. Do not make site locations and descriptions publicly available.

C3. Provide to developers and general maintenance staff only general knowledge of Aboriginal sites and their legal protection.

C4. Prepare an education strategy for cultural heritage awareness for developers, contractors and Consent authority staff, including a fact sheet and sensitivity map indicating areas requiring particular attention and consultation with the Aboriginal community and NPWS.

C5. Invite the Aboriginal community to actively participate in developing the education strategy.

C6. Consult the Aboriginal community prior to and during clearing and preliminary ground work to collect artefacts if any, from areas to be developed.

C7. Do not erect signs which draw attention to the archaeological sites, so as to prevent disturbance and defacement of Aboriginal/archaeological sites.

C8. In naming parklands, reserves and roadways, incorporate recognition of Aboriginal occupation and the history of the area. Consult the Aboriginal community in the naming of these features.

C9. Consult the Aboriginal community on the development of any walking routes or areas within the precinct which incorporate descriptive signs and interpretation.

C10. Develop a program to educate the local community in the pre-European history of the site.

C11. Recreate and manage the cultural landscape in conjunction with the local Aboriginal community by vegetating open space to resemble the natural landscape prior to European settlement.

Note: The former CSIRO employment land is highly disturbed. It has been mostly cleared and subject to many years of use for research laboratories and associated stock holding areas associated with a CSIRO sheep research laboratory. Previous disturbance is associated with WW II occupation by a U.S. Army Camp. Consequently, there are no Aboriginal Archaeological management measures applicable to the former CSIRO employment land.

5.3. European Cultural Heritage

For more information, see the Prospect Hill Conservation Management Plan.

Objectives

O1. To protect the integrity of the crown of Prospect Hill.

O2. To research and document the history of the site of Pemulwuy and its role in the history of Sydney.

O3. To educate the community on the history and role of the site.

O4. To utilise the history of the site as a theme in its redevelopment.

O5. To protect Prospect Hill from development sited below RL 97, which approximately defines the curtilage of the Prospect Hill State Heritage Registered Area.

Development Controls

C1. See Section 5.4 for controls for the Prospect Hill State Heritage Registered Area.

C2. Record Pemulwuy as a whole in its current state photographically, utilising aerial photography and possibly digital video recording.

C3. All documentary, cartographic and photographic material related to the development, growth, buildings and history of the site should be sourced, accessioned and archived. Collect copies of accessible historic material into an archive which must be lodged in the care of an organisation which is acceptable to Council and where it is available for research and educational purposes. Identify archive material held elsewhere and cross-reference it with the above archive. A written description of major structures should accompany the photographic record.

C4. Ensure that all development adjacent to the Prospect Hill State Heritage Registered Area is accompanied by a Heritage Assessment with all Development Applications. The Heritage Assessment shall be in accordance with the three documents listed below under 5.4 C2.

C5. In the instance where a broad Heritage Assessment of the interface between the Prospect Hill State Heritage Registered Area and the adjoining sites has been undertaken, submit a Statement of Environmental Effects addressing this Heritage Assessment with all Development Applications.

5.4. Prospect Hill State Heritage Registered Area

Objectives

O1. To protect the integrity of the Prospect Hill State Heritage Registered Area.

O2. To research and document the history of the Prospect Hill State Heritage Registered Area and its role in the history of Sydney.

O3. To educate the community on the history and role of the site.

O4. To utilise the history of the site as a theme in its redevelopment.

Development Controls

C1. Maintain the prominence of Prospect Hill as a significant remnant geologic and topographic element. Site and design development so that views of the ridgeline are maintained.

C2. Maintain the views from Prospect Hill towards the Blue Mountains and St. Bartholomews, Prospect.

C3. Ensure that future use, landscape interventions, heritage interpretation and vegetation management of the Prospect Hill SHRA are informed by and consistent with:

a) The Prospect Hill Conservation Management Plan (Conybeare Morrison: 2005);

b) The Prospect Hill Heritage Landscape Study and Plan (Government Architect's Office: 2008); and

c) The Prospect Hill Heritage Interpretation Plan (MUSEcape: 2009).

C4. Ensure that all development adjacent to the Prospect Hill State Heritage Register Area is accompanied by a Heritage Assessment with all Development Applications. The Heritage Assessment shall be in accordance with the three documents listed above under C2.

C5. In the instance where a broad Heritage Assessment of the interface between the Prospect Hill State Heritage Register Area and the adjoining sites has been undertaken, submit a Statement of Environmental Effects addressing this Heritage Assessment with all Development Applications.

C6. Prepare management plans for open space and other public domain areas, and identify how they will inform and educate the community and utilise the history of the site as a theme of the redevelopment, using interpretative trails, signage, environmental design and other features.

6. Biodiversity

Ecological objectives for the northern employment lands take into account the provisions of SEPP 59, upon which this DCP is based, National Parks and Wildlife Act 1974, the Threatened Species Conservation Act 1995, Environment Protection and Biodiversity Act, recommendations of the Urban Bushland Biodiversity Survey - Stage 1: Western Sydney (NPWS, 11 99 111), Rivers and Foreshores Improvement Act 1948 and Fisheries Management Act 1994.

6.5. Biodiversity in Development Areas

Objectives

O1. To maintain and enhance the existing level of biodiversity during and after development.

O2. To incorporate ecological and archaeological resources into the creation of public open space .

O3. To rehabilitate and regenerate native vegetation.

O4. To protect significant trees.

O5. To reintroduce local indigenous species where feasible, especially in drainage areas, open spaces and landscaped areas.

O6. To create fauna movement corridors within the site and to external ecological resources (where practicable allowing for other site uses).

O7. To reduce water and fertiliser demand.

O8. To protect threatened species.

O9. To manage weeds.

O10. To plant and manage the site to minimise hazards and manage impacts from bushfire.

O11. To manage litter and waste to minimise impacts.

O12. To control and minimise impacts from sediment disturbance and erosion.

O13. To manage feral and domestic animals to minimise impacts on native flora and fauna.

O14. To protect water quality and aquatic habitat.

O15. To involve the community.

Development Controls

Local species

C1. Undertake a tree survey to identify and flag all significant trees on the site to be retained.

C2. Prepare a bushland management plan prior to development which identifies areas to be revegetated, the species to be used and other detailed conservation area management issues.

C3. Ensure tree removal is approved under Holroyd City Council's Local Environmental Plan 2013.

C4. Ensure tree removal is subject to Arborist Assessment and recommendation.

C5. Use locally indigenous plant species, including threatened and regionally significant species in drainage areas, streetscapes, open spaces and landscaped areas. This will not only enhance biodiversity but will reduce water and fertiliser demand.

C6. Select plant species used in the development of the site from the 'Indigenous Plant List - Holroyd' from Table D2.1 of the BASIX Specifications .

C7. Retain existing canopy species typical of Grey Box Woodland unless significant harm is likely to result.

C8. Where possible, retain significant mature trees with high ecological value as habitat for the Grey Headed Flying Fox (e.g. Melaleuca swamps, Banksia woodlands, mangroves and riparian woodlands).

C9. Avoid lopping or removing Grey Box Woodland canopy species greater than three metres tall.

C10. Collect and propagate seeds of locally indigenous species prior to development. Use these, hardened on site, in revegetating the open space corridors.

C11. Prohibit species other than locally indigenous species in the central ridgeline corridor and strongly discourage them in the service / open space corridors.

C12. Retain and enhance continuous canopy in the open space corridors to allow for possible squirrel glider movement onto the site.

C13. Retain and maintain hollow-bearing trees on site for their fauna habitat value wherever possible.

C14. Incorporate in the design of sites sufficient space to allow for tree establishment, where proposed. This includes the provision for the development of deep structural roots.

C15. Investigate the use of native grasses in service / open space corridors rather than kikuyu, couch or other conventional non-native grasses.

Weeds

C16. A priority listing of target and noxious weeds should be outlined in the bushland management plan, including lantana, African olive, small-leaved privet and large-leaved privet.

C17. The bushland management plan should address weed management and removal methods such as hand weeding, spraying etc. The plan should give attention to the corridor areas.

C18. Remove all weeds, including any non indigenous native species.

C19. Weed control should be an integral part of maintaining and enhancing biodiversity of the corridors.

C20. Involve the community in weed removal and replanting programs; continue to involve community in maintenance to instil a sense of ownership.

C21. Replant cleared areas with locally indigenous plants following weed removal, to minimise soil erosion.

Waste Management

C22. Provide adequate signs and rubbish bins to encourage proper disposal of litter.

C23. Secure rubbish bins sufficiently to prevent feral cats, dogs, rats or other undesirable species from opening them.

C24. Maintain and empty bins on a regular basis to prevent waste accumulating.

C25. Incorporate litter and waste management in the community consultation strategy.

Creeklines (see also clause 6.2 Fauna Movement Corridors, below)

C26. Rehabilitate, enhance and re-establish on-site waterways including creeklines and drainage lines.

C27. Identify locations within the corridor network, in addition to the central ridgeline, where understorey regeneration can be promoted. Plantings should allow for a continuous canopy along the length to facilitate movement of non ground-dwelling fauna.

C28. Only plant locally indigenous species in vegetating the corridor network including threatened and regionally significant species.

C29. Commence planting and/or install fencing as soon as possible following weed removal, to minimise erosion.

C30. Provide an appropriate buffer either side of creeklines. Rehabilitate vegetation within the buffer and remove weeds.

C31. Install appropriate pollution controls such as gross pollutant traps in upper catchments (at site boundary if necessary) to prevent ingress of litter.

C32. Prepare a sediment and erosion control plan with particular emphasis on the open space corridors and creekline.

Sediment and erosion controls

C33. Ensure appropriate sediment and erosion controls are implemented on site.

C34. Prepare a sediment and erosion control plan for each stage of the development, as per DCP Part A clause 13.0 (Erosion and Sediment Control).

Feral and domestic animals

C35. Prepare a feral and domestic animal management plan incorporating strategies outlined in the Background Report.

C36. Implement an education program on responsible pet ownership.

Fire

C37. Prepare a Fire Management Plan for the protection of life and property within Pemulwuy north employment lands. The Fire Management Plan should identify suitable fire regimes for the protection and maintenance of biodiversity.

C38. Ensure that fire management elements are incorporated into the design of the central ridgeline i.e. fire trails.

C39. Identify appropriate fire management regimes for vegetation management.

C40. Provide external hydrants for bushfire operations.

C41. Plant fire retardant species within the landscape areas.

C42. On the former CSIRO lands, provide roads of 6 metres in width for fire appliances access with passing bays for opposing vehicles;

Community involvement

C43. Ensure that Aboriginal community are involved in reserve and corridor design, revegetation and interpretation programs.

C44. Develop an educational program highlighting the significance of the site and how the community can be involved in restoring and maintaining the conservation area and open space corridors.

C45. Prepare a community consultation strategy to involve the community in ongoing biodiversity management including preparation of the bushland management plan.

C46. Involve the community, including local school groups in Streamwatch programs.

6.6. Fauna Movement Corridors

Note: The main fauna corridor within Pemulwuy is proposed within the residential area. It is a predominantly vegetated corridor with some passive recreational and aesthetic functions. This corridor should be located along the central ridgeline separating the employment lands from residential development. See also C26 to C32 above on Creeklines.

Objectives

O1. To extend the ridgeline fauna movement corridor westward to provide additional opportunities to link to Greybox Reserve and Prospect Reservoir.

Development Controls

C1. Plant vegetation in riparian corridors, to facilitate fauna movement through the other open space corridors and street trees.

C2. Provide vegetation which will facilitate movement through the site of non ground dwelling fauna as well as providing additional foraging habitat.

C3. Within development applications, provide details which demonstrate how connectivity with off-site ecological linkages can be achieved.

7. Environmental Management

7.1. Stormwater Management during construction

The Pemulwuy employment lands can be divided into two main catchments. These are:

- the Pemulwuy north employment lands, approximately 82 hectares, that drain to the Greystanes Creek; and
- the Pemulwuy south employment lands, approximately 134 hectares that drain to Prospect Creek.

Development of the Pemulwuy employment lands without proper mitigation measures will increase the flow volumes and pollutant loads discharged to these creeks. Greystanes Creek is a tributary of the Toongabbie Creek and is located in the upper Parramatta River catchment. A Stormwater Management Plan was prepared for this catchment by the four catchment councils and the Upper Parramatta River Catchment Trust. See Appendix A.

A riparian corridor in the north of the Pemulwuy north employment lands is constructed, capable of conveying the 1%AEP flood flows. Water flows in a naturalistic creek channel, providing aquatic habitat and riparian vegetation as well as cycle and pedestrian pathways. It links to the constructed wetland basin in the north eastern part of the Lands to maintain suitable water quality as well as providing further aquatic habitat. Where possible, make maximum use of regional detention basins or water quality control ponds just downstream of the Lands.

Objectives

O1. To prevent sediment polluting creeks during construction of the development.

Development Controls

C1. Prior to construction a sediment and erosion control strategy will be developed in accordance with the "Blue Book" 2004 and Holroyd City Council Requirements . See DCP Part A clause 13.0 (Erosion and Sediment Control) for Council's requirements.

C2. Sediment and Erosion control plans are required for new developments to prevent pollution of the creeks during the construction phase of the development. The plans are required to be prepared in accordance with the Managing Urban Stormwater guidelines including the Managing Urban Stormwater: Soils and Construction published by the Department of Housing.

C3. Stage development activities to minimise land disturbance.

C4. Limit earthworks and disturbance of stable rehabilitated landforms.

C5. Divert clean run-off from upstream areas around disturbed areas.

C6. Stabilise and vegetate areas immediately following the completion of works.

C7. Provide temporary sediment basins, fences, catch drains, check dams and other structures to collect and treat run-off from disturbed areas.

C8. Monitor discharges from sediment basins and flocculation as required to limit TSS concentrations in water discharged from the basins to 50 mg/L.

C9. Provide vegetated buffer strips around all water bodies and drainage channels.

C10. Temporarily stabilise stockpiles and disturbed areas exposed for more than 15 days.

C11. Restrict vehicle access to designated entry and exits.

7.2. Stormwater Managment After development

Objectives

O1. Provide a development consistent with the principles of total watercycle management but recognising potential salinity problems.

O2. Limit stream velocities to prevent erosion and scour of local waterways.

O3. Reduce pollutant loadings to maintain downstream water quality.

O4. Prevent the contamination of surface water or groundwater by stormwater run-off.

O5. Ensure reduced demand for imported mains water by water conservation measures and re-use of stormwater in accordance with the principles of Water Sensitive Urban Design .

O6. Protect the downstream aquatic ecosystems and riparian vegetation of any creek corridors.

O7. Ensure that additional stormwater runoff generated by the development does not adversely affect peak flows, velocities and water levels downstream of the site in the full range of flood up to 1 in 100 year storm event.

O8. Meet catchment wide water quality objectives of EPA's Interim Environmental Objectives and Sydney Harbour and Parramatta River Catchment.

O9. Ensure that additional stormwater runoff generated by the development does not adversely affect peak flows, velocities and water levels downstream of the site in the full range of floods.

Development Controls

C1. The treatment objectives for the Upper Parramatta River catchments are listed below in Table 1. The objectives outlined in this table are consistent with Council's Stormwater Management Plans.

C2. Ensure stormwater management systems are incorporated in the initial stages of design and infrastructure provided prior to the development of individual sites.

C3. Design on-site stormwater management measures to the water quality objectives of:

a) the Stormwater Management Plan,
b) the flow requirements of the UPRCT, and
c) Holroyd City Council.

C4. Where feasible, incorporate in the proposed stormwater management measures, natural treatment mechanisms and features.

C5. Integrate public open space with the trunk stormwater drainage corridors.

C6. Where practical, reuse stormwater collected on developed lots. This can include rainwater tanks. This should be encouraged to minimise pollutant exports and reduce the hydrologic impacts associated with the development.

C7. Carry out further stormwater management consultation with authorities during the development application stage.

C8. As part of the development process, undertake detailed hydrologic, hydraulic and water quality modelling .

C9. Design stormwater systems including on-site storage so that there are no linkages between surface and groundwaters to minimise the risk of contamination of surface waters by potentially saline groundwaters.

C10. Use the results of the monitoring program required by the Soil Erosion section of this plan to inform surface water management practices as required.

Table 1 POLLUTANT RETENTION CRITERIA FOR GREYSTANES CREEK CATCHMENT

Pollutant	Description	Retention Criteria
Litter	All anthropogenic material	70% of objects 5 mm diameter or greater
Coarse Sediment	Coarse sand	80% of the load for particles 0.5 mm or less
Nutrients	Total phosphorus and Total Nitrogen	45% retention of the load
Fine Particulates	Fine sand	50% of the load for particles 0.1 mm dia. Or less
Cooking Oil & Grease	Free Floating Oils that do not emulsify in aqueous solutions	90% of the load with no visible discharges
Hydrocarbons	Anthropogenic hydrocarbons that can be emulsified	90% of the load

Source: Upper Parramatta River Catchment Stormwater Management Plan

C11. Design and maintain development so that downstream flows are not adversely affected, based on comparison of peak flows, velocities and water levels in the 2 year ARI, 100 year ARI and probable maximum floods at critical points further downstream

C12. .Arrangements for the expansion of the regional detention basin (200m to the north of the Pemulwuy north employment lands in Blacktown City Council LGA) must be confirmed and proposals identified as part of any application for the subdivision of land in the Pemulwuy north employment lands.

C13. Should it prove impractical or impossible, for whatever reason, to modify the detention basin to meet the above-stated objective that downstream off-site flows are not adversely affected, a flood retarding basin should be provided within the Pemulwuy north employment lands to satisfy that objective.

C14. During any development and construction, remove at regular intervals any sediment from the Pemulwuy north employment lands deposited off site in the flood basin of the Pemulwuy north employment lands or the downstream creek channel, and again prior to completion of construction.

C15. On the former CSIRO lands:

a) provide on-site Stormwater Detention for the entire site;

b) provide an above ground detention basin that accords with Upper Parramatta River Catchment Trusts requirements;

c) install end of line proprietary water quality devices which are capable of removing gross pollutants and fine sediment, at suitable locations before discharging into the basin; and

d) utilise the aboveground detention basin to facilitate further settling of suspended solids and the removal of nutrients.

Figure 8: The constructed wetlands- Pemulwuy North Employment Lands

e) The recommended wetland ponding size for the Greystanes Creek catchment is 1.4 hectares surface area.

7.3. Stormwater plans

Objectives

O1. To employ source controls to minimise the pollutant loads discharged from individual development sites.

O2. Apply conveyance controls to the local and trunk drainage systems to minimise the pollutant load transferred from the development sites to the discharge points.

O3. Use Discharge controls immediately prior to discharge from the employment land to Greystanes Creek. This will ensure that water quality of the downstream creek is protected.

Development

C1. Prepare Stormwater Plans to accompany development applications for individual lots in the Employment Lands.

C2. Ensure these Plans are consistent with Stormwater Management Plans prepared by councils by direction from the EPA.

C3. Adopt a treatment for the individual lots which addresses source controls issues.

C4. Incorporate Convergence and Discharge Controls in the design of the drainage infrastructure for the site. In summary the controls are:

a) Source Controls = controls applied to the individual lots to address specific pollutants

associated with the specific development;

b) Conveyance Controls = controls applied to the local and trunk drainage systems these may include grass swales, and streams incorporating ponds, riffle zones and macrophytes; and

c) Discharge Controls = controls prior to discharge from the Pemulwuy north employment lands prior to run-off flowing into Greystanes Creek. These include gross pollutant traps, wetlands and water quality control ponds.

Source Controls

C5. Pollution Prevention – Minimise the amount of impervious areas on the development lot, bund and roof all chemical and fuel storage areas, roof vehicle servicing and refuelling facilities, separate run-off from 'clean' and 'dirty' areas of the lot.

C6. Stormwater Harvesting = Maximise the amount of stormwater run-off used on the development lot. Investigate the feasibility of re-using stormwater runoff for dust suppression systems, vehicle washing and wheel washes, and irrigation of landscaped areas of the lot.

C7. Oil/Water and Oil/Grit Separators = Use oil/water and oil/grit separators and first flush basins to treat run-off from 'dirty' areas of the development lot. Design these systems to meet the pollution retention criteria for hydrocarbons and coarse sediment in Table 1.

C8. Buffer Strips = landscape approximately 15% of the area of the lots. Where the development lot layouts allow, use the landscaping to treat run-off from the primary treatment devices. Plant vegetated buffer strips to reduce the amount of fine sediment and nutrients discharged from the lot to the wetlands and water quality control ponds.

Conveyance controls

C9. Grass Swales = Use open grass swales in the detailed design of the subdivision in preference to conventional kerb and gutter and pipe drainage. Swales reduce flow velocities limiting erosion of the stream banks. The lower velocities and filtration through vegetation reduces fine sediments, nutrients, hydrocarbons and heavy metals discharged to the treatment ponds.

C10. Watercourse Profiles = one watercourse is provided through the Estate to collect stormwater run-off, draining to the northern water quality control ponds. Where feasible the watercourse, should include a meandering low flow invert, ponds and riffle zones, and aquatic and riparian vegetation.

Discharge controls

C11. Provide gross pollutant traps, incorporating a screen and coarse sediment sump, upstream of the ponds and wetlands. Design these to achieve the pollutant reduction targets set out in Table 1for coarse sediment and litter.

C12. Provide Constructed Wetlands and Water Quality Control Ponds for tertiary treatment of stormwater before it is discharged from the Pemulwuy north employment land to Greystanes Creek. The wetlands and ponds have been sized to meet the treatment objectives for sediments and nutrient outlined in the stormwater management plans. The ponds and wetlands should be located off-line with a bypass channel used to divert flows during large storms around the ponds. The ponds, where feasible, should consist of a series of shallow densely planted zones and deep water areas.

7.4. Water Quality Control Pond Management

Note: A Constructed Wetland and Water Quality Control Pond is located in the northern sector of the Pemulwuy north employment lands. The riparian zone is established in the western portion of the same lands, and also carries overland flow originating in the Prospect Reservoir area, to the water quality control pond (see Figure 9). The flood basin does not apply to the former CSIRO lands.

Objectives

O1. To provide dry weather flows and minimise changes in the hydrologic regime of Greystanes Creek.

O2. To provide a safe, efficient urban water management system which also contributes to the amenity, appearance and urban structure of the Pemulwuy north employment lands.

O3. To achieve multiple use of drainage systems.

Development Controls

C1. In addition to the Water Quality Control Pond (a constructed wetland) on site, the Pemulwuy north employment lands may also use regional detention basin immediately north of the Lands.

C2. Prepare an Operational Plan for the pond. This should set out how flow releases in the main water body are managed to improve baseflows in the downstream creek, Which suffers from decreased base flows due to urbanisation of the catchment.

C3. Note that hard edges may be required to prevent creation of mosquito habitat.

C4. Design the outlet into the pond to allow water levels to be varied for aquatic plant management.

C5. Regularly maintain the gross pollutant traps and coarse sediment sumps to prevent a build-up of sediment in the main water bodies.

C6. Develop an operational manual for the wetland pond that outlines the requirements for inspections and maintenance.

C7. Integrate the landscaping with the design of the waterbodies to improve the amenity of the area.

C8. Maximise use of regional facilities to achieve the run off flow rate and water quality controls.

C9. As an industrial catchment with native landscaping, there will generally be insufficient nutrients to promote excessive aquatic weed growth. However, should any aquatic weed management measures be required, implement the following methods:

- **a)** changes in basin water levels;
- **b)** harvesting of the aquatic weed; or
- **c)** application of herbicides approved for aquatic weed management by the EPA.

C10. Seek to attain a 1.4 hectare area for the wetland pond

Figure 9: The constructed wetland and riparian corridor Pemulwuy North Employment lands

7.5. Flood Risk Management

Development Controls

C1. Design any proposed structure with a floor level (habitable, office, storage, and/or shop) a minimum of 500mm above the 1% AEP flood level .

C2. In the Pemulwuy North Employment Lands, the riparian channel cross-section has been designed so that the Probable Maximum Flood levels (called Flood Prone Land) will be contained within the 40 metre riparian corridor. Development is prohibited within this corridor.

C3. Design road systems to provide a flood-free evacuation route.

C4. On the former CSIRO lands, site all new buildings outside the Imminent Flood Failure (IFF) zone, and provide them with adequate free board to the IFF levels.

7.6. Site Contamination and Remediation

The Pemulwuy Employment Lands largely comprise land that has been quarried as part of Prospect Quarry. Historical and present land uses include:

- quarrying and overburden stockpiles;
- recycling of construction materials;
- quarry maintenance buildings; and
- pine plantation and naturally vegetated areas.

State Environmental Planning Policy 55 requires Council to consider contamination issues in determining development and subdivision applications. Given the limited range of past and present land uses, the possibility of site contamination is considered to be low.

However, to ensure that land is free from contamination, a Stage 1 Preliminary Environmental Audit was required to be submitted with the first development application received for the Pemulwuy north employment lands.

A Site Audit Statement was also provided to address the former CSIRO site.

Objectives

O1. To ensure the appropriate assessment, remediation, validation and auditing of potentially contaminated land to reduce the risk of harm to human health or the environment.

O2. To ensure land is suitable for the intended use.

O3. To ensure that future occupants or workers at the site are not exposed to contaminated materials.

O4. To undertake investigations and remediation consistent with Holroyd DCP Part A - Appendix K – Contaminated Land Policy.

Development Controls

C1. Initiate an unexpected findings protocol to address the potential discovery of contaminated soil or other hazardous materials during bulk earthworks activities.

C2. As a result of the protocol, ensure that appropriate Stage 2 assessment, and (where necessary) remediation and validation occurs.

C3. Make provision in the protocol to inform Council of the discovery of such materials.

C4. Before the lodgement of any development application for the site, complete a groundwater Assessment in accordance with 'Schedule B(6) Guidelines for Risk Bases Assessment of Groundwater Contamination' in the National Environmental Protection Councils National Environment Protection (Assessment of site Contamination) Measure (1999).

C5. Remediation is required to render the site suitable for the proposed land use, consistent with the above Stage 1 Environmental Audit.

C6. Ensure the remediation of the site is certified by a NSW EPA Accredited Site Auditor.

7.7. Earthworks Procedures

Objectives

O1. To ensure that any fill utilised throughout the site is clean and complies with relevant standards.

Development Controls

C1. Evaluate each portion of the Pemulwuy north employment lands as required by the Phase 1 Investigation provided by an environmental consultant for:

a) Existing soil condition down to bedrock;
b) Groundwater monitoring;
c) Validation of both fill zone foundation and proposed fill material to provide material within acceptable EPA criteria for re-use.

C2. Provide approval of the above by a NSW DEEC&W Accredited Site Auditor to allow placement of fill and the excavation and re-use of on-site material to provide a revised landform.

C3. Upon the validation and approval of fill foundation and fill material, place and compact material generally in accordance with:

a) all material <300 mm in size;
b) compaction up to 98% standard compaction to building and road lots;
c) moisture contact 60-90% of optimum;
d) compaction to 95% standard in landscaped areas. Rip landscaped areas to a depth of 300/450 mm and mix in organic material to improve soil quality as required.

C4. Final verification of placement of clean fill material will be undertaken through the process of design/construction Quality Assurance Audits.

7.8. Salinity

A site investigation, entitled Greystanes Estate Salinity Assessment, carried out by ERM in June 2001, undertook limited field testing of the DLWC Draft Salinity Hazard Mapping for Western Sydney, and found areas of known salinity and extensive salinity hazard within the Pemulwuy north employment lands, associated with the riparian corridors in particular.

Objectives

O1. To minimise disturbance to natural hydrological systems as a result of development.

O2. To ensure the proper management of land affected by salinity.

O3. To prevent damage to buildings and infrastructure caused by salinity.

O4. To manage and mitigate impacts from salinity

Development Controls

Monitoring

C1. Undertake monitoring of groundwater levels to provide additional information on which to base future design.

C2. Establish monitoring wells in two cross-sections in the creek located adjacent to the northern boundary of the Pemulwuy North Employment Lands.

C3. The monitoring program should consist of monthly sampling for a minimum period of 5 years or until development is commenced on all lots within the Northern Employment Lands, in addition to sampling after rainfall events greater than 20 millimetres in 24 hours.

C4. These results should be consolidated into a single report at the end of each 12 month period.

C5. For development proposed in the areas known as at risk of salinity and extensive salinity hazard, this report must be used to refine building location, layout and design as appropriate and salinity prevention and management measure must be addressed in development applications submitted to the consent authority. Some measures that could be considered include:

Building Slabs/Concrete

C6. In order to prevent moisture rising through the slab, firstly lay a thick layer of sand on the building site. Next, lay a damp-proof membrane of thick plastic.

C7. Concrete can be made more resistant to salinity by increasing its strength to reduce the permeability. A sulfate resistant concrete can also be used which will reduce reinforcement corrosion. A minimum of 65 millimetres of concrete cover on strip or slab reinforcement is recommended in saline environments. Compaction and curing of the concrete are also advised.

Bricks

C8. A brick damp course which is correctly installed will prevent moisture moving into the bricks. It is possible to use exposure quality bricks which are more resistant to water

and salt. Waterproofing can also be added to the mortar to prevent water entry.

Parks and Gardens

C9. Plant gardens which do not require a lot of watering. This includes use of native plants which do not require excess watering, deep rooted trees to prevent the ground water table rising, the use of mulch, and the reduction of lawn areas. See section Landscaping above.

C10. Where automatic watering systems are installed, measure soil moisture content to ensure they work, and to counter the possibility of over-watering.

C11. Do not locate gardens close to buildings, as watering may affect foundations or render the dampcourse ineffective.

Site Design

C12. Avoid disturbance of natural flow lines, as this is where the salinity is first likely to appear. This includes retaining native vegetation along watercourses and rehabilitation of disturbed areas using native vegetation.

C13. Minimise throughflow when designing stormwater management, and this includes the careful design and construction of detention and retention basins to avoid high velocity runoff and soil erosion in susceptible areas.

7.9. Noise Impacts

Objectives

O1. To reduce road traffic noise.

O2. To limit noise impacts from vehicle traffic upon nearby and adjoining residential land.

O3. To implement a strategic approach in new industrial areas to ensure that amenity objectives are not compromised.

O4. To achieve an equitable share of the amenity, as per The NSW Government's Industrial Noise Policy.

O5. To more evenly distribute allowable amenity noise limits amongst the employment sites.

O6. To minimise the risk of adverse cumulative impacts.

O7. To provide some flexibility in sharing the noise within each zone.

O8. To ensure that the use of the land does not create an offensive noise or add significantly to the background noise level of a locality.

Development Controls

Road Traffic Noise

C1. Construct the north-south spine road and the east-west road in a manner that minimises road traffic noise. Utilise the range of road design measures within the NSW Government's Environmental Criteria for Road Traffic Noise (ECRTN).

C2. Permit bus only access on the east-west road between the residential and industrial areas prior to the establishment of the North-South spine link.

C3. Before opening the east west road to other classes of traffic the consent authority must consider the noise impacts likely to arise, in particular, whether the ECRTN criteria relevant to the northern residential area will be exceeded.

Industrial Noise Controls (west of Clunies Ross Street)

C4. Employment lands in the Pemulwuy have been divided into 5 noise zones for the purpose of managing noise impacts (See Figure 11). Each zone has an amenity limit that should not be exceeded (by all sites operating within that zone) at any residential receiver. The limits for each zone are shown in Figure 11 are set out in Table2. Note that this map may be out of date, and that measures must be taken at the "Nearest Affected Residential Location", whether that residence has been constructed or not.

Figure 10: Noise zones-Pemulwuy North Employment Lands

Table 2 Noise Emissions Limits (LAeq) at Nearest Affected Residential Location

Period	Noise from Zone 1	Noise from Zone 2	Noise from Zone 3	Noise from Zone 4	Noise from Zone 5	Residential Noise Criterion
Day	50 dBA	50 dBA	49 dBA	49 dBA	51 dBA	55 dBA
Evening	40 dBA	40 dBA	39 dBA	39 dBA	41 dBA	45 dBA
Night	35 dBA	35 dBA	34 dBA	34 dBA	36 dBA	40 dBA

Industrial Noise (the former CSIRO land)

C5. The noise criteria presented in Table 3 is applicable to the residential receivers on the former CSIRO land.

Table 3 Noise Criteria for Residences Adjoining the former CSIRO Employment Land - dBA re 20 µPa

Time of Day	Intrusive LAeq (15 minute) Criterion	Amenity LAeq (period) Criterion
Day – 7am – 6pm	51	47
Evening – 6pm – 10pm	51	44
Night – 10pm – 7am	46	42

C6. Site garbage collection, machinery, parking areas, and air conditioning plants away from adjoining residential area and where necessary, screen them by barrier or other acoustical treatment.

C7. Where the residential interface is not shielded from employment generated noise by employment buildings (south-west corner), provide a noise barrier to allow for acceptable acoustic outcomes at the residential receiver (see above table);

C8. Incorporate acoustic measures, such as an acoustic barrier, into the built form to mitigate noise impacts on the adjacent residential lands.

C9. Accompany all Development Applications for potential noise generating industries adjacent to residential zoned land with documentation from a qualified Acoustic Engineer specifying noise standards.

C10. Ensure compliance with the relevant requirements such as the Noise Guide for Local Government New South Wales Industrial Noise Policy.

C11. Comply with Acoustic Standards: Noise Limits (Table 7.7.2 from Noise Impact Assessment by Richard Heggie Associates Pty Ltd) measured at the residential boundary.

C12. Provide a noise impact assessment with Development Applications that propose activities with operating hours outside Council's standard business hours.

C13. Note: 24 hour operation of business use is permissible providing the residential receiver noise criteria (as mentioned above) are achieved.

7.10. Air Quality

Objectives

O1. To ensure no adverse impacts on residences both within and surrounding Pemulwuy.

O2. To ensure minimal emissions.

Development Controls

C1. Provide air quality control measures during and after development of the Estate.

C2. Address the relevant air quality guidelines within each development application in the employment area for industrial uses.

C3. During construction, implement appropriate mitigation measures such as truck washing bays and wetting of dirt roads.

C4. Ensure that the use of any premises and machinery is in accordance with the Protection of the Environment Operations Act 1997.

C5. If any proposed use or activity within the site falls into Schedule 1 of the Protection of the Environment Operations Act 1997, the occupier must hold a licence from the NSW OEH , or its equivalent.

C6. Within the Statement of Environmental Effects of a Development Application, include an assessment of air quality according to EPA standards.

C7. Ensure that the endorsement of any machinery used does not result in air pollution emissions that exceed EPA guidelines.

Appendix A- Stormwater Management Plan

STORMWATER MANAGEMENT

A.1 INTRODUCTION

Stormwater management measures will be required as part of the development of the employment lands to protect the water quality of downstream creeks. The site is to divided into two main catchments these are:

- the Northern Employment Lands, approximately 82 hectares, that drain to the Greystanes Creek; and
- the Southern Employment Lands, approximately 134 hectares that drain to Prospect Creek.

Development of site will increase the flow volumes and pollutant loads discharged to these creeks. Greystanes Creek is a tributary of the Toongabbie Creek and is located in the upper Parramatta River catchment. A stormwater management plan was prepared for this catchment by the four catchment councils and the Upper Parramatta River Catchment Trust.

The Southern Employment Lands are located in the Prospect Creek catchment. Fairfield, Holroyd, Bankstown and Liverpool Councils have prepared a stormwater management plan for this catchment. The stormwater management plans provide pollutant retention criteria for new developments and rank treatment objectives for various types of developments.

Currently it is anticipated that the majority of the employment lands will be developed for a range of uses which would typically include warehouses, transport facilities, distribution centres, manufacturing and supporting offices. The minimum lot size is one hectare.

A.2 STORMWATER MANAGEMENT OBJECTIVES

Stormwater management objectives for water quality for new urban areas are set out in Council's stormwater management plans. These objectives include measures to manage pollutants generated during the construction and operational phase of the development. Stormwater management measures for the Greystanes Estate also address the issue of water quantity.

A.2.1 Construction Objectives

Sediment and Erosion control plans are required for new developments to prevent pollution of the creeks during the construction phase of the development. The plans are required to be prepared in accordance with the manual 'Managing Urban Stormwater: Soils and Construction' (NSW Department of Housing, 1998). Measures that will be implement include:

- staging development activities to minimise land disturbance;
- limiting earthworks and disturbance of stable rehabilitated landforms;
- diversion of clean run-off from upstream areas around disturbed areas;
- stabilise and vegetate areas immediately following the completion of works;
- provide sediment basins, fences, catch drains, check dams and other structures to collect and treat run-off from disturbed areas;
- sediment basins sized for the 1 in 3 month design storm based on the majority of fill materials being coarse-grained;
- monitoring discharges from sediment basins and flocculation as required to limit TSS concentrations in water discharged from the basins to 50 mg/L;
- vegetated buffer strips around all water bodies and drainage channels;

- temporarily stabilisation of stockpiles and disturbed areas, not associated with the on-going quarry operations, exposed for more than 15 days; and
- restricting vehicle access to designated entry and exit points.

A.2.2 Operational
The treatment objectives for Prospect Creek and the upper Parramatta River catchments are listed in Table A.1 and Table A.2 respectively.

The range of urban land uses produce different types and quantities of pollutants and consequently the stormwater treatment strategies used to mitigate these impacts vary depending on the type of development proposed. To assist in selecting the appropriate treatment strategies the Upper Parramatta River Stormwater Management Plan (SMP) ranks the treatment objectives for a range of urban land use based on their importance for that particular land use. Rankings provided in the listed in Table A.3 below.
The stormwater management strategy for a new development is required to address all the listed pollutants, however in the case of an industrial development only the pollution retention criteria for
objectives ranked (a) to (e) need to be met.

A.3 STORMWATER MANAGEMENT STRATEGY
A.3.1 Stormwater Management Principles
Stormwater management principles listed below for the employment lands have been developed to meet water quantity objectives, the water quality treatment objectives set out in the SMP's and to address the broader issues of water sensitive urban design. Key stormwater management principles to be used in the design of stormwater management systems in the employment lands are:

- stormwater management systems will be incorporated in the initial stages of design;
- on-site stormwater management measures will be used, where feasible to meet catchment wide water quality objectives;
- the proposed stormwater management measures will incorporate, where feasible, natural treatment mechanisms and features;
- integration of the public open space with the trunk stormwater drainage corridors;
- on-site stormwater reuse will be encouraged to minimise pollutant exports and reduce the hydrologic impacts associated with the development;
- stormwater systems designed so that there are no linkages between surface and groundwaters to minimise the risk of contamination of surface waters by potentially saline groundwaters;
- the results of the monitoring program required by Section 7.7 of this Plan should be used to inform surface water management practices as required;
- development should be designed so that downstream flows off-site are not adversely affected.
- For the Northern Employment Lands, avoid any increases in flood peak flows, velocities and water levels at all downstream points in the full range of flood

magnitudes, taking into account the planned developments on the adjoining sites and modifications to the DUAP basin.

- For the Southern Employment Lands, avoid any increases in flood peak flows and velocities at all downstream points in the full range of flood magnitudes, taking into account the planned
- developments on the adjoining sites.

These principles are designed to meet the following key objectives:

- limit stream velocities to prevent erosion and scour of local waterways;
- reduce pollutant loadings to maintain downstream water quality;
- prevent the contamination of surface water or groundwater by stormwater run-off;
- reduced demand for imported mains water by water conservation measures and re-use of stormwater;
- protection of downstream aquatic ecosystems and riparian vegetation; and
- enhance the scenic and recreational value of creek corridors and water quality control ponds.

A.3.2 Stormwater Plan

A stormwater plan will be prepared to accompany the development applications for the employment lands.

The stormwater plan for the sub-division of the land will address issues associated with the conveyance and discharge controls. Source controls will be designed at the development application stage for the individual lots. In summary the controls are:

- Source Controls- controls applied to the individual lots to address specific pollutants associated with the specific development;
- Conveyance Controls - controls applied in the local and trunk drainage systems these include grass swales, and streams incorporating ponds, riffle zones and macrophytes; and
- Discharge Controls - controls prior to discharge from the estate prior to run-off flowing into the creeks. These include gross pollutant traps, wetlands and water quality control ponds.
- i. Source Controls
- A range of source controls can be used to minimise the pollutant loads discharged from the individual development lots. The type of controls adopted will depend on the nature of the development. Stormwater management plans will be prepared and submitted with the development applications for the individual lots.
- Pollution Prevention - Minimise the amount of impervious areas on the site, bund and roof all chemical and fuel storage areas, roof vehicle servicing and refuelling facilities, separate run-off from 'clean' and 'dirty areas' of the site.
- Stormwater Harvesting – Maximise the amount of stormwater run-off used on-site. Investigate the feasibility of re-using stormwater run-off for dust suppression systems, vehicle washing and wheel washes, and irrigation of landscaped areas of the site.

- Oil/Water and Oil/Grit Separators - Oil/water and oil/grit separators and first flush basins are to be used to treat run-off from 'dirty' areas of the site. These systems will be designed to meet the pollution retention criteria for hydrocarbons and coarse sediment in Tables A.2 and A.3. Oil/grit separators are to be provided for all site car parks with more than 12 spaces. Treatment devices are to be sized to treat the run-off from the 90th percentile rainfall event, (BCC 2001).
- Buffer Strips - Approximately 15% of the lots will be landscaping. Where the site layouts allow the landscaping will be used to treated run-off from the primary treatment devices. Vegetated buffer strips will be used to reduce the amount of fine sediment and nutrients discharged from the site to the wetlands and water quality control ponds. Research by the CRC for Catchment Hydrology on vegetated buffer strips found that a six metre wide strip can reduce sediment loads by up to 90% and nutrient loads by up to 70%, (CRC 1997).

ii. Conveyance Controls

- Grass Swales – In the detailed design of the sub-division open grass swales can be used in preference to conventional kerb and gutter and pipe drainage. Swales reduce flow velocities limiting erosion of the stream banks. The lower velocities and filtration through vegetation reduces fine sediments, nutrients, hydrocarbons and heavy metals discharged to the treatment ponds.

Typical pollutant removal rates are; total suspended solids – 75 -100%, hydrocarbons 75-100%, nutrients - 50-75%, and heavy metals – 60%, (EPA 1997a).

- Watercourse Profiles – Three main watercourses will be provided through the site to collect stormwater run-off. Two for the southern employment lands draining to the southern water quality control ponds and the second drains to the northern water quality control ponds. Where feasible, the watercourses will include a meandering low flow invert, ponds and riffle zones, and aquatic and riparian vegetation.

iii. Discharge Controls

- Gross Pollutant Traps – Gross pollutant traps incorporating a screen and coarse sediment sump will be provided upstream of the ponds and wetlands. These will be designed to achieve the pollutant reduction targets set out in Tables A.2 and A.3 for coarse sediment and litter.
- Constructed Wetlands and Water Quality Control Ponds - Wetlands and ponds will be provided for tertiary treatment of stormwater before it is discharged from the estate to Prospect Creek or Greystanes Creek. The wetlands and ponds have been sized to meet the treatment objectives for sediments and nutrient outlined in the stormwater management plans. The ponds and wetlands would be located off-line with a bypass channel used to divert flows during large storms around the ponds. The ponds, where feasible, should consist of a series of shallow densely planted zones and deep water areas.

The relationship between the three levels of stormwater treatment in the treatment train approach is shown in Figure 11 below.

A.4 STORMWATER POLLUTION LOAD ASSESSMENT

To provide preliminary sizes for the water quality ponds, a level one pollution load assessment was completed, as defined in the EPA guidelines, (EPA 1997c). This level of

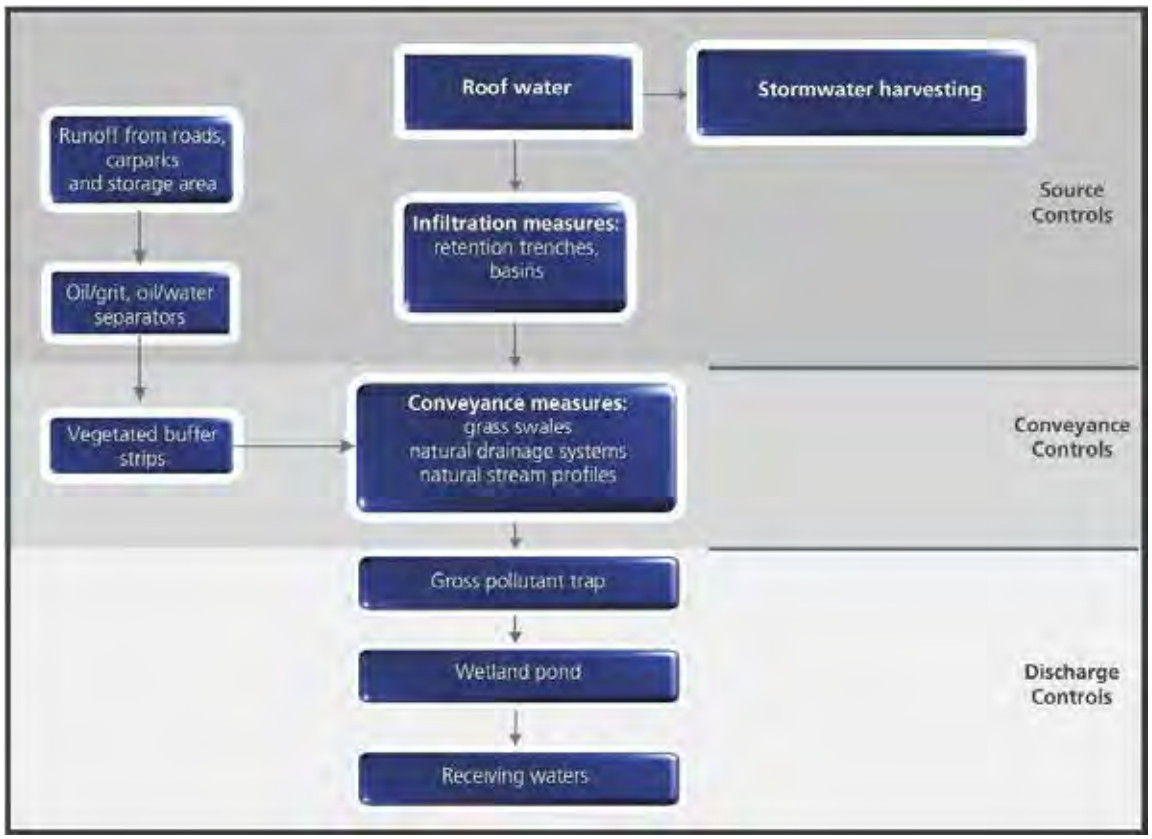


Figure 11: Stormwater Management System

stormwater quality model is suitable for preliminary sizing, but given the size and scales of the development would need to be supported by a more detailed, level two water quality model, at the detailed design phase.

For the purposes of the modelling existing pollutant loads were estimated assuming that the entire area of the quarry was a rural catchment. Due to the lack of site specific water quality data Event Mean Concentrations (EMC's) based on the Sydney Water's water quality monitoring data for a range of land uses in the catchment. No EMC data is available for quarries so average rural EMC values have been used. This is a conservative approach and under-estimates the existing pollutant loads.

Pollutant loads after development with no controls were estimated using average EMC values for industrial catchments. The surface area of wetland/water quality control ponds necessary to achieve the pollutant reduction targets was then calculated. Pond sizes have been calculated based on achieving two levels of treatment the first is the treatment objectives outlined in the SMP's and the second is to reduce postdevelopment pollutant loads to the rural pollutant loads. Wetland surface areas were estimated using the surface loading rates included in the EPA's guidelines 'Managing Urban Stormwater Treatment Techniques'. These are described as Option 1 and Option 2 respectively in the tables below. Details of the pollution load assessment are included in Appendix A of this paper and summary of the results are provided in Tables A.4 – A.6.

A.5 RECOMMENDATIONS

Staged sediment and erosion control plans should be prepared for the development of the infrastructure for the employment lands. Sediment and erosion plans should also be submitted with the individual development applications for the lots. The plans should be prepared in accordance with the guidelines published by the NSW Department of Housing 'Managing Urban Stormwater Soils and Construction'.

The stormwater management strategy outlined in Section A.3.2 should be adopted for the site so that the water quality objectives set in the relevant SMP's are met and exceeded. These measures include a 'treatment train' approach with site specific controls included on the individual lots and conveyance and discharge controls included during the design of the infrastructure for the employment lands. Water quality control ponds (WQCP) are to be included in both the northern and southern employment lands. These are to have a minimum surface area of 1.4 and 2.0 hectares respectively. WQCP's will be designed to achieve the treatment objectives set out in both the Prospect Creek and Upper Parramatta River SMP's for suspended solids and nutrients for the Southern Employment lands and Northern Employment Lands respectively. Approximately 50% of the water quality control ponds are to be shallow wetland area planted with appropriate species of emergent macrophytes. The remaining areas are deeper open water zones. The ponds should have a minimum hydraulic retention time of twelve days.

The effectiveness of the proposed stormwater management measures is to be confirmed using more detailed water quality modelling. The model should use appropriate EMC values, a daily time step and a ten year simulation period that incorporates years with rainfall totals similar to the 10th, 50th and 90th percentile years, (EPA 1997c).

A.6 REFERENCES

Bankstown, Fairfield, Holroyd and Liverpool City Councils, 1999 Prospect Creek Catchment Stormwater Management Plan

BCC 2001 Blacktown City Council, 2001 Stormwater Quality Control Policy

CRC 1997 Cooperative Research Centre for Catchment Hydrology, 1997 Controlling Sediment and Nutrient Movements within Catchments - Industry Report.

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Cooperative Research Centre for Catchment Hydrology, 1998 From Roads to Rivers. Gross Pollutant Removal from Urban Waterways.

EPA 1997a Environment Protection Authority, November 1997 Managing Urban Stormwater. Treatment Techniques.

EPA 1997b Environment Protection Authority, April 1997 Managing Urban Stormwater. Strategic Framework. Draft.

EPA 1997c Environment Protection Authority, November 1997 Managing Urban Stormwater. Council Handbook. Draft.

Environment Protection Authority, December 1998 Managing Urban Stormwater. Source Control. Draft.

New South Wales Department of Housing, August 1998 Managing Urban Stormwater: Soils and Construction

Lower Hunter and Central Coast Regional Environmental Management Strategy, 1999 Water Sensitive Urban Development. Implementation Issues for the Lower Hunter & Central Coast.

Patterson Britton and Partners, January 2000 Greystanes Estate General Services Plan

PPK Environment and Infrastructure, April 2001 Drainage Services Plan for the Employment Land

Upper Parramatta River Catchment Trust, July 1999 Upper Parramatta River Catchment Trust Stormwater Management Plan

Part R

Tamplin Road Reserve

Holroyd Development Control Plan 2013

Tamplin Road Reserve

Contents

Tamplin Road Reserve

Introduction

Land covered by this Part

This part applies to the land shown on Figure 1 and known as the Tamplin Road Reserve.

Relationship to other Parts of this DCP.

Part R of Holroyd DCP 2013 shall be read in conjunction with the following Parts of Holroyd DCP 2013, which contain objectives and development controls that may relate to development in this part:

Part A- General Controls

Part B - Residential Development

Part C -Commercial, Shop top housing and Mixed use Development

Part E - Public Particpation

Part F - Advertising and Signage

Part G - Places of Public Worship

Part H - Heritage and Conservation

Part I - Child Care Centres

Definitions

Tamplin Road Reserve

The historic Linnwood Estate is located in the suburb of Guildford and is bounded by Tamplin and Byron Roads (refer to Figure 1).

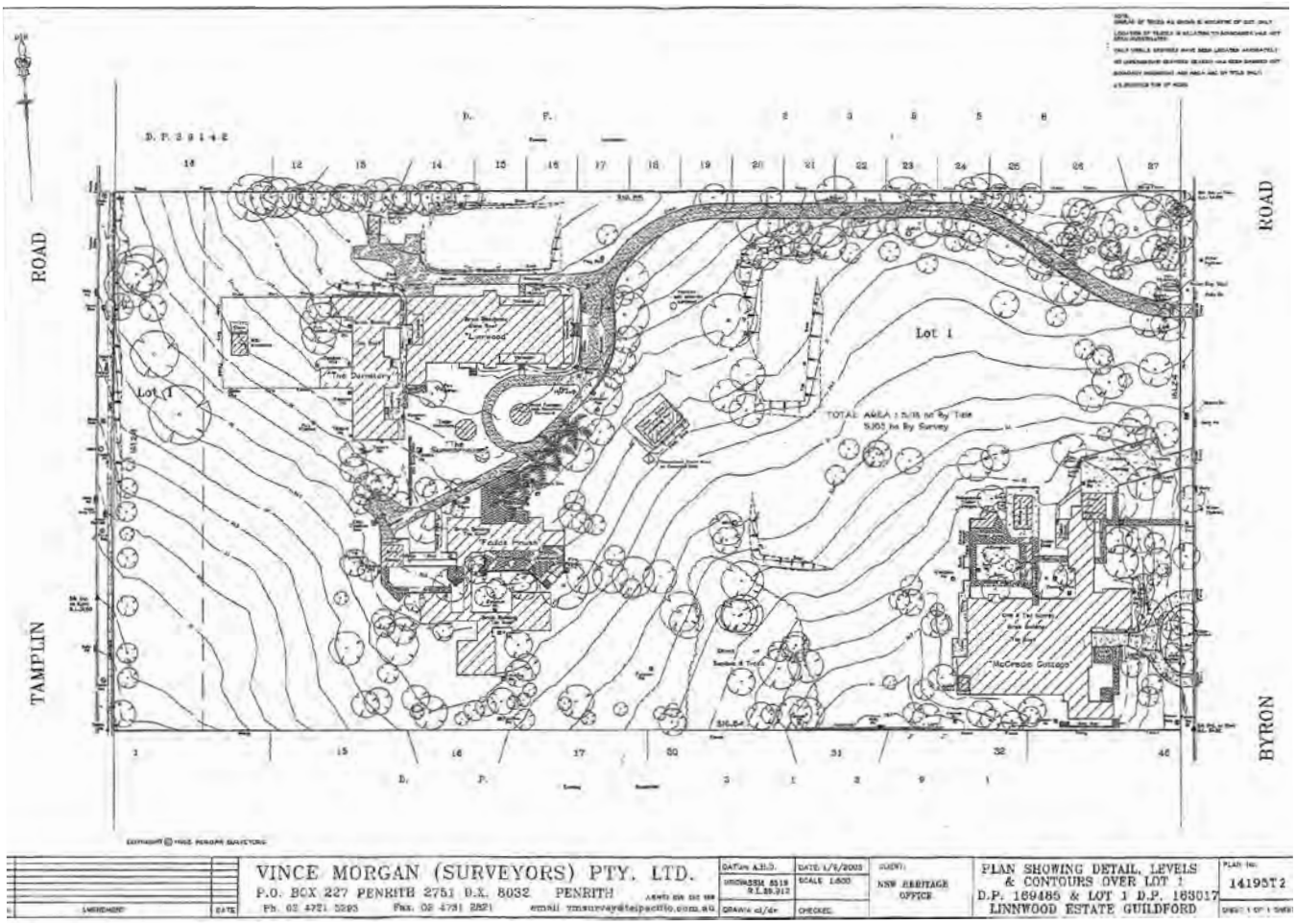

Figure 1- The original Linnwood Estate allotment, pre subdivision

The Estate comprises of several buildings which are classified as of State heritage significance. These buildings are located in the central and eastern sections of the site and comprise of the McCredie Cottage, "Linnwood" the original house, dormitory extensions and Faulds House.

This section of the DCP applies to the western portion of the estate or Lot 10, as shown in Figure 2. The DCP is intended to guide the development on the site to ensure that the recognised heritage significance and the cultural setting of the Estate's heritage items are conserved.

Development must also be consistent with the recommendations of the Linnwood Conservation Plan (2004); available at Council. The Linnwood Conservation Plan was prepared for the entire Linnwood Estate including the subdivided Lot 10.

Tamplin Road Reserve

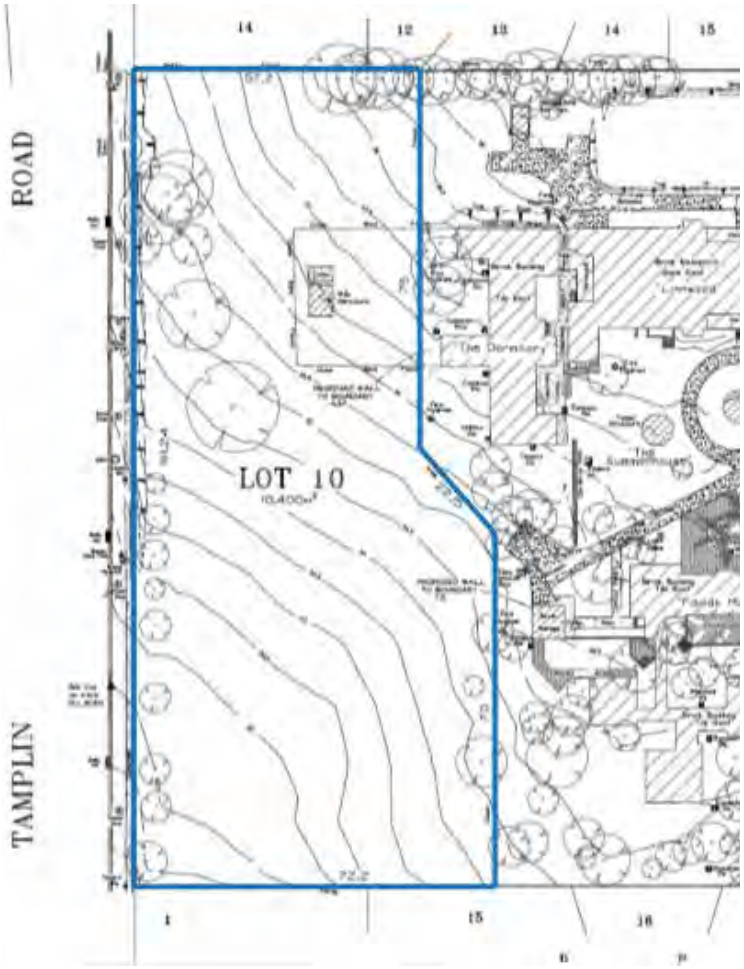

Figure 2: Lot 10, the proposed subdivided lot, outlined in blue

1. Objectives

O1. Minimise any negative impact on the State heritage significance of the Linnwood Estate;

O2. Identify an appropriate heritage curtilage to protect key view corridors;

O3. Maintain and improve the setting of the existing significant trees;

O4. Provide a visual buffer to the Linnwood Estate's heritage items; and

O5. Ensure any proposed development is planned and developed in an environmentally responsive manner and is consistent with the Conservation Policy recommendations of the Linnwood Conservation Plan.

2. Setbacks

Development Controls

C1. Setback controls as outlined below and in Figure 4:

C2. Development shall be setback a minimum of 6.0 metres from the principal street frontage, Tamplin Road;

C3. The minimum side setback from the south eastern and north western boundaries of the site must be at least 1.0 metre (refer to Figure 4); and

C4. The minimum rear setback from the north eastern boundary must be in accordance with Figure 4.

3. Height

Development Controls

C1. Development shall have a maximum height of 2 storeys;

C2. Any future development must ensure that the heritage items are not subject to any unreasonable overshadowing.

4. Roof Form

Development Controls

C1. The roof form of any future development shall have regard to the style, form, pitch and bulk of the existing heritage items;

C2. Materials to be used shall include terracotta or slate tiles. These materials must be of a dark uniformed colour (such as black, dark grey or olive); and

C3. New roof shapes shall be of a 'hipped' style, with a pitch similar to the dormitory building and Faulds House.

5. Heritage

Development Controls

C1. The laundry building, as shown in Figure 4 and addressed in the Linnwood Conservation Plan, may be demolished due to its poor physical condition. Any demolition, will be subject to Council approval;

C2. Any future development must retain the six existing trees, as illustrated in Figure 4 and within the Linnwood Conservation Plan. These trees are from the original local eucalypt woodland,

known as Cumberland Forest and are of historic significance;

C3. Create a heritage curtilage as shown in Figure 4. This curtilage area is recognised by the Conservation Plan to ensure the current view corridor to the Linnwood Grounds is preserved;

- **a)** No buildings are to be built within the designated heritage curtilage. Only recreational structures are allowed and may be in the form of open gazebos, BBQ facilities, tables or benches.
- **b)** A 2.0 metre setback must be incorporated along the south eastern and south western boundaries of the curtilage area as outlined in Figure 4;
- **c)** Palisade fencing must be used along the north eastern boundary of the curtilage area in order to retain the view corridor (see Figure 4);
- **d)** Subject to Council approval existing trees and shrubs within this curtilage area may be removed and this curtilage area may be planted with low density vegetation and ground covers only;
- **e)** This curtilage area must be used as a communal open space only; and
- **f)** The curtilage area should incorporate heritage interpretive panel(s) in accordance with the Linnwood Conservation Plan. Details should be provided as part of any future development approval.

C4. C7. The curtilage area and dimensions are outlined in Figure 4 and should be read in conjunction with Figure 3, which identifies the three (3) features which delineate the view corridor which in turn defines the curtilage area.

- **a)** The size of the curtilage area should be approximately 40 sqm;
- **b)** 'Boundary A' of the curtilage area, as illustrated in Figure 4, must be aligned with the three (3) key architectural points in Figure 3.
- **c)** A clear view corridor must be retained between these three (3) key features, as they are of historical importance. These features include the following and as illustrated in Figure 3:

(1) The south eastern entry to the porch of 'Linnwood' the original house;

(2) The most eastern corner of the dormitory building; and

(3) Parallel to the existing pathway drawn from the south western corner of Faulds house.

Figure 3: Architectural Features

Tamplin Road Reserve

6. Colours and Material

Development Controls

C1. New buildings are to incorporate a colour scheme and appropriate materials which will minimise intrusive elements and will contribute to the cohesiveness of the surrounding area.

C2. Colours and materials must be compatible with the character of the existing streetscape and should not detract from the original heritage items within the Linnwood Estate in particular the "Linnwood" House and Fauld House;

C3. To encourage the use of traditional construction materials, the following is recommended:

- Brown or dark red bricks; or
- Brickwork which is rendered in a soft colour scheme.

C4. Full details of colours and materials should be provided with any future DA.

7. Pedestrian Walkway

Development Controls

C1. Create a shared pedestrian walkway from Tamplin Road to the designated heritage curtilage area as shown in Figure 4. This pathway will provide common access to the heritage curtilage area and also a common view corridor for occupants of the development.

a) This pathway shall be a private pathway for use by the occupants of the new development only;

b) This pathway must be a least 1.0 metres wide;

c) A minimum building setback of 1.0 metre, either side of the pathway, must be implemented; and

d) The area contained in this setback may consist of low density vegetation and ground covers only.

C2. The location of the pathway is flexible and can be altered in accordance with the future development of the land, however the pathway must connect the curtilage area to Tamplin Road, and provide common access for all occupants of the development; and

C3. Future built form must be separated into at least 2 building blocks on either side of the pedestrian walkway. This will allow the construction of the shared pedestrian pathway.

8. Fences

Development Controls

C1. Front fences and gates along Tamplin Road, should be of a Palisade style as they are appropriate to the existing character of the heritage items.

a) Palisade fences have panels of cast iron with shaped tops, connected by a horizontal rail; and

b) Front Fences should be a maximum of 1500 mm high.

C2. Palisade fencing must also be used along the north eastern boundary of the curtilage area, in order to retain the view corridor into the Linnwood Estate.

C3. Boundary fences along the side and rear boundary of the site should be constructed using timber materials.

a) Side and rear boundary fences should be a maximum of 1800mm high.

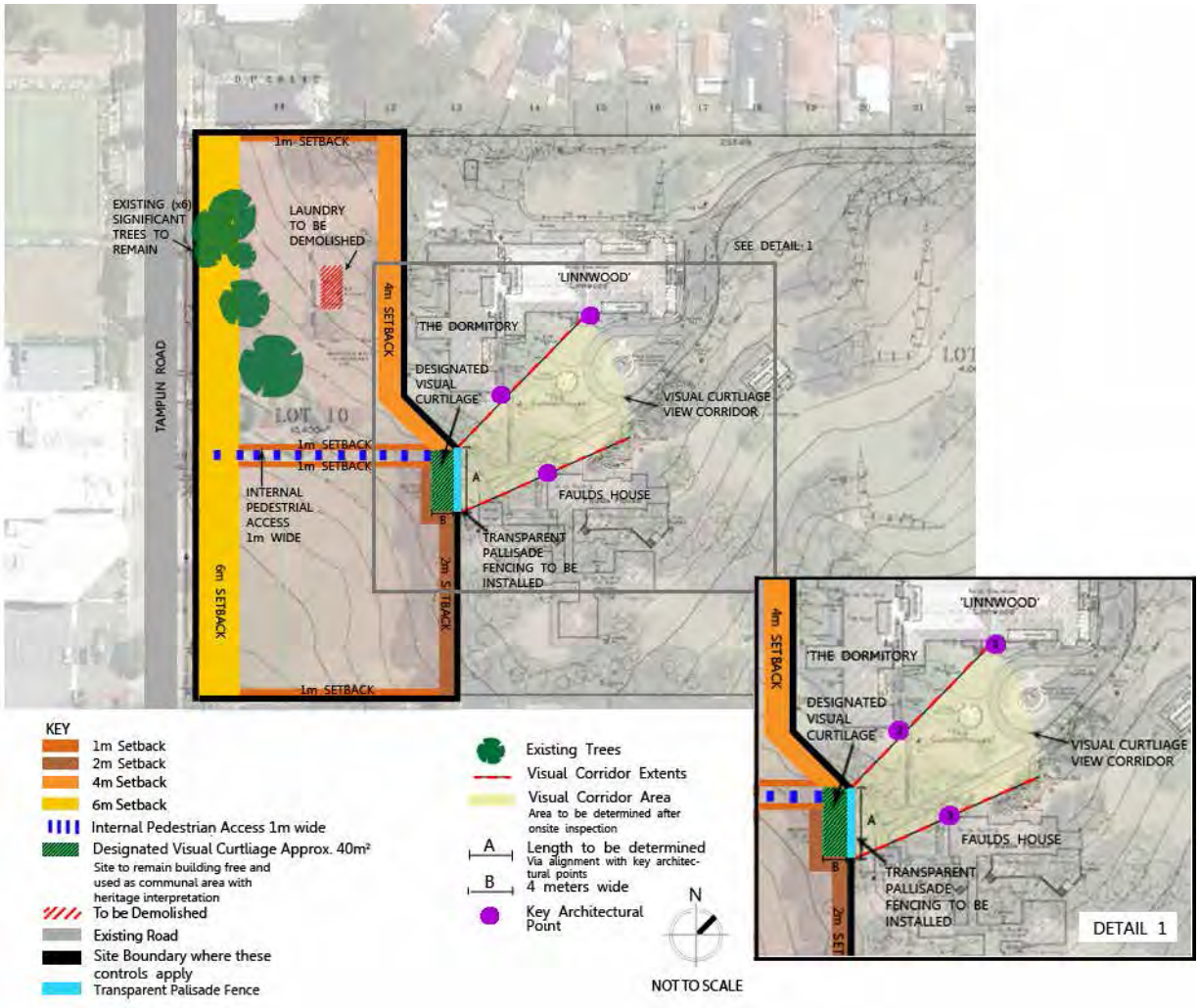

Figure 4: Lot 10, the proposed subdivided- identifying the sites's development controls

Definitions

Holroyd Development
Control Plan 2013

Holroyd City

Definitions

A

AADT means annual average daily traffic.

Access ramp for the disabled means an inclined platform designed to allow wheelchair access and access for people with impaired mobility, by connecting different height levels.

Accredited certifier in relation to matters of a particular kind, means a person who is accredited under section 109T [of the Environmental Planning & Assessment Act] in relation to those matters.

Activity means

- the erection of a building,
- the carrying out of work in, on, over or under land,
- the use of land or of a building or work and
- the subdivision of land,

and includes any act, matter or thing for which provision may be made under section 26 of the Environmental Planning & Assessment Act, 1979 and which is prescribed for the purpose of this definition, but does not include:

- any act, matter or thing for which development consent under part 4 of the Environmental Planning & Assessment Act, 1979 is required or has been obtained; or
- any act, matter or thing that is prohibited under any environmental planning instrument.

Adjoining land means land that abuts an application site or is separated from it only by a pathway, driveway or similar thoroughfare.

Advertisement means a sign, notice, device or representation in the nature of an advertisement visible from any public place or public reserve or from any navigable water.

Advertised development means development, other than designated development, that is identified as advertised development by the regulations, an environmental planning instrument or a development control plan.

Advertising structure means a structure used, or to be used, principally for the display of an advertisement.

Aerial means an antenna supported by insulators above the ground and directly exposed to the weather.

Adaptation means the modification of a heritage item to suit a proposed compatible use.

Air conditioning unit for a dwelling means a mechanical unit specifically designed to alter the temperature of the air within a dwelling or a significant part of a dwelling.

Aesthetic significance means an item that has visual or sensory appeal, landmark qualities and/or creative or technical excellence.

Aisle means, in relation to car parks and the like, an area of pavement used by vehicles to gain access to parking spaces.

Amenity means qualities of usefulness, comfort and pleasure in items and areas of the environment.

Amusement Centre means a building or place (not being part of a pub or registered club) used principally for playing:

- billiards, pool or other like games, or
- electronic or mechanical amusement devices, such as pinball machines, computer or video games and the like.

Amusement Device means a electronic or mechanical machine or device used or played for amusement or recreation, whether paid or unpaid, and includes pinball machines, computer or video games and the like.

Ancillary development means an access ramp, awning, blind or canopy, balcony, deck, patio, pergola, terrace or verandah that is attached to a dwelling house, carport that is attached to a dwelling house, driveway, pathway or paving, fence or screen, garage that is attached to a dwelling house, outbuilding, rainwater tank that is attached to a dwelling house, retaining wall, swimming pool or spa pool and child-resistant barrier.

Annual Exceedance Probability (AEP) is the chance of a flood of a given or larger size occurring in any one year, usually expressed as a percentage, e.g. if a peak flood discharge of 10m³/s has an AEP of 5%, it means there is a 5% chance (that is one-in-20 chance) of a 10m³/s or larger event occurring in any one year (see ARI).

Average Recurrence Interval (ARI) means the long-term average number of years between the occurrence of a flood as large as, or larger than, the selected event, e.g. floods with a discharge as great as, or greater than, the 100 year ARI design flood will occur on average once every 100 years. ARI is another way of expressing the likelihood of occurrence of a flood event.

Antenna means a television, radio or other aerial designed to receive radiated electromagnetic radiation.

Any building containing one or more dwellings means any building which may contain one or more dwellings, but is not specified in the Holroyd Local Environmental Plan 1991, and includes buildings commonly known as apartments, units, flats and the like.

Any innominate use containing one or more dwellings means any use which may contain one or more dwellings, but is not specified in the Holroyd Local Environmental Plan 1991, and includes buildings commonly known as apartments, units, flats and the like.

Approval means consent or authorisation given by an appropriate authority.

Archaeological assessment means a study undertaken to establish the archaeological significance (research potential) of a particular site and to propose appropriate management actions.

Archaeological significance means a category of significance referring to scientific value or research potential, that is, the ability to provide information through investigation.

Archaeological site means an area of land:

- shown on the Heritage Map as an archaeological site, and
- the location and nature of which is described in Schedule 5, and
- that contains one or more relics.

Arch means a structure, usually curved and constructed of wedge shaped blocks, forming the head of an opening and supporting the wall above.

Architrave means the decorative moulded trim around the frame of a window or door.

Attic means any habitable space, but not a separate dwelling, contained wholly within a roof above

the ceiling line of the storey immediately below, except for minor elements such as dormer windows and the like.

Attached dual occupancy means a dwelling or dwelling house attached to another dwelling or dwelling house by a single common wall.

Australian Height Datum (AHD) is a common national surface level datum approximately corresponding to mean sea level.

Australian Heritage Commission is an independent statutory authority that is responsible to the Commonwealth Minister for the Environment. It administers the Australian Heritage Commission Act and maintains the Register of the National Estate.

Available Floor Space means that floor space which is not required for or used in connection with the use of any part of the premises for any purpose other than the use of Amusement Devices.

Aviary means an enclosure, usually of wire mesh construction, for the keeping of birds, other than poultry and pigeons, for domestic purposes.

Awning means a fixed or retractable covering to shelter persons or protect parts of a building from the effects of sun and rain, usually erected above a window, door, balcony or deck.

Awning sign (under awning) means a sign attached to the underside of an awning (other than the fascia or return end), which: -

- is a maximum of 2.5 metres in length, 0.5 metres in depth and 0.08 metres in width;
- is erected at a horizontal angle no less than 2.6m to the ground;
- is erected at a right angle to the building to which it is attached; and
- does not project beyond the edge of the awning.

B

Balcony means a balustraded platform with access from a floor level.

Baluster means one of a row of short pillars supporting a rail or coping.

Balustrade means a rail or coping and the row of balusters beneath it.

Barbecue means an outdoor facility for domestic cooking over a flame fuelled by gas, wood or coals.

Bargeboard means a sloping board at the end of a gable that covers the roof construction.

Base means the lower portion of a structure or feature.

Basic rainwater tank means a tank which is connected to outdoor taps only (other than one emergency tap near the water meter) for garden watering and car washing.

Bay window means a curved or faceted window projecting from a building.

Bearing wall means a wall giving vertical support to loads applied from above, such as a roof.

Bed and Breakfast means tourist and visitor accommodation comprising a dwelling (and any ancillary buildings and parking) where the accommodation is provided by the permanent residents of the dwelling and

- meals are provided for guests only, and
- cooking facilities for the preparation of meals are not provided within guests' rooms, and
- dormitory-style accommodation is not provided.

Blind aisle means an aisle closed off at one end.

Boarding-house means a building –

- that is wholly or partly let in lodgings, and
- that provides lodgers with a principal place of residence for 3 months or more, and
- that may have shared facilities, such as a communal living room, bathroom, kitchen or laundry, and
- that has rooms, some or all of which may have private kitchen and bathroom facilities, that accommodate one or more lodgers,

but does not include backpackers' accommodation, a group home, a serviced apartment, seniors housing or hotel or motel accommodation.

Brick means a unit of walling material usually made in the shape of a small square of fired clay.

Brothel has the same meaning as in the Environmental Planning and Assessment Act, 1979 .

Building has the same meaning as in the Environmental Planning and Assessment Act, 1979.

Building works include part of a building and any structure or a part of a structure.

Bus shelter means a structure, usually consisting of a roof and seating, located at or near a bus stop, for the convenience and shelter of persons waiting for buses

Bypass of a pump means having the mains water supply connect into a tank water supply using a solenoid device to detect an absence of power to the pump and switch to the mains supply.

C

Cabana means a covered pool side shelter and/or change room

Canopy means an ornamental roof-like covering or projection, either suspended or supported on brackets, corbels or columns, over a door, window, niche or balcony.

Capacity means a total number of marked parking spaces provided within a car park.

Capping means a building element that caps or rests on top of another.

Carport means a roofed, open or semi-enclosed structure for the shelter of motor vehicles, attached to, adjacent to or near a dwelling.

Car space means an area of pavement of suitable dimensions which is designed and marked for the parking of a car with adequate clearance for access to and from the car.

Cavity wall means a brick wall laid in two separate skins close together and connected by ties.

Certifying authority means a person who is authorised by or under section 85A [of the Environmental Planning & Assessment Act] to issue complying development certificates and may be the council or an accredited certifier.

Child care centre means a building or place used for supervision and care of children that:

- provides long day care, pre-school care, occasional child care or out-of-school-hours care, and
- does not provide overnight accommodation for children other than those related to the owner or operator of the centre,

but does not include:

- a building or place used for home-based child care, or
- an out-of-home care service provided by an agency or organisation accredited by the NSW Office of the Children's Guardian, or
- a baby-sitting, playgroup or child-minding service that is organised informally by the parents of the children concerned, or
- a service provided for fewer than 5 children (disregarding any children who are related to the person providing the service) at the premises at which at least one of the children resides, being a service that is not advertised, or
- a regular child-minding service that is provided in connection with a recreational or commercial facility (such as a gymnasium), by or on behalf of the person conducting the facility, to care for children while the children's parents are using the facility, or
- a service that is concerned primarily with the provision of:
- i) lessons or coaching in, or providing for participation in, a cultural, recreational, religious or sporting activity, or
- ii) private tutoring, or
- a school, or
- a service provided at exempt premises (within the meaning of Chapter 12 of the Children and Young Persons (Care and Protection) Act 1998), such as hospitals, but

only if the service is established, registered or licensed as part of the institution operating on those premises.

Cladding means the outer non-load bearing covering of the external walls or roof of a framed building or structure, applied for weather-proofing and/or decorative purposes.

Class means the classification of a building as determined by the Building Code of Australia.

Collection area means the location where garbage, compostable material or recyclable materials are transferred from a building's storage containers to a collection vehicle for removal from the site.

Collection point means the usual (or agreed) point on the footpath/roadway, or onsite, where garbage and recyclables are loaded onto vehicles.

Common property has the meaning ascribed to it by the Strata Titles Act, 1973.

Complying development is development for which provision is made as referred to in section 76A (5) of the Environmental Planning & Assessment Act.

[Note: - In this regard complying development is routine development, which may be certified in its entirety as complying with predetermined standards and policies that will ensure minimum environmental impact. That is to say, the traditional approval of Council will not be required and proponents will be able to obtain a complying development certificate either from Council or an independent accredited certifier in order to proceed with development.]

Complying development certificate (CDC) means a complying development certificate referred to in section 85 of the Environmental Planning & Assessment Act.

Component means the whole or part of a building.

Compost means vegetative material capable of being converted to humus by a biological decay process.

Conservation Management Plan (CMP) means a document prepared in accordance with the requirements of the Department of Planning that sets out the heritage significance of an item, place or heritage conservation area and identifies conservation policies and management strategies that are appropriate to enable that significance to be retained.

Cooking means the process of converting food from a raw state to an acceptable, edible state by the application of energy in the form of heat (and in certain cases other forms of energy) and, without limitation, includes roasting, grilling, barbecuing, frying and the like and includes the reheating of precooked foods.

Coping means a brick or stone covering on top of a wall, usually sloping or pitched, to carry off water.

Cornice means a projecting (protruding) decorative feature along the top of an external or internal wall.

Course means a continuous layer of bricks or stones of the same height in the wall of a building, or a row of slates, tiles or shingles.

Council means Holroyd City Council.

Council activity includes any activity on land owned by or on behalf of Council outlined in Part A Erosion & Sediment Control.

Cove means having a concave curve at the junction of two surfaces - the radius of the curve is to

be not less than 25mm.

Cubby house means a small-scale building structure, usually of simple construction, which is used primarily by children for the purpose of play.

Curtilage means, in relation to a heritage item or conservation area, the area of land (including land covered by water) surrounding a heritage item, a heritage conservation area, or building, work or place within a heritage conservation area, that contributes to its heritage significance.

D

Dampcourse means a protective barrier in a wall, intended to prevent the movement of moisture from the ground into the wall.

Daytime means, for the purposes of acoustic studies, between 7.00am and 10.00pm.

DCP means Development Control Plan.

Dead tree means a tree which exhibits no foliage cover and/or new growth for two successive years.

Deck means a horizontal platform or floor, usually at or slightly above ground level and of timber construction, attached to, or forming part of a building

Deep soil zone means an area of soil of sufficient depth to sustain the proposed trees.

Demolition means the complete or partial dismantling and removal of a building or structure, by pre-planned and controlled methods or procedures.

Demolish means, in relation to a heritage item, or a building, work, relic or tree within a heritage conservation area, wholly or partly destroy, dismantle or deface the heritage item or the building, work, relic or tree.

Design floor level means the level specified in this DCP which applies to the relevant land use type within the relevant Flood Risk Precinct.

Designated development means development that is declared to be designated development by Schedule 3 of the Environmental Planning and Assessment Regulation, 2000.

Detached dual occupancy means a dwelling or dwelling house not attached to another dwelling or dwelling house by a common wall or ceiling or floor or breezeway or carport or any other common structure.

Development has the meaning ascribed to it in section 4 of the Environmental Planning and Assessment Act, 1979.

Development application (DA) means an application under the Environmental Planning and Assessment Act 1979 for consent or permission to carry out development.

Development approval means approval by the consent authority to carry out work on an item or place, usually subject to certain conditions.

Dormer means a projecting (protruding) vertical window in the sloping roof of a house.

Dormer style development means a two storey dwelling in which the roof cavity space is used to contain the second storey.

Dressed means timber or stone which has been machined or cut to a smooth finished surface.

Driveway means a crossing by which vehicles move between the public road carriageway and the car parking facility and vice versa.

Dual feed to a toilet involves running both the tank water supply and the mains water supply to a toilet cistern such that both may be separately turned off or on via a tap.

Dual occupancy means 2 dwellings (whether attached or detached) on one lot of land (not being an individual lot in a strata plan or community title scheme), but does not include a secondary

dwelling.

Dwelling means a room or suite or suite of rooms occupied or used or so constructed or adapted as to be capable of being occupied or used as a separate domicile.

Dwelling-house means a building containing one dwelling.

E

Eaves mean the projecting edges of a roof which overhang the walls.

Ecologically Sustainable Development (ESD) has the same meaning as in the Environmental Planning and Assessment Act 1979.

Effective warning time means the time available after receiving advice of an impending flood and before the floodwaters prevent appropriate flood response actions being undertaken. The effective warning time is typically used to move farm equipment, move stock, raise furniture, evacuate people and transport their possessions.

Elevation means the external face of a building, or a drawing made in projection to show any one face of a building.

Employee means any person or staff engaged in the undertaking of activities relating to the application.

Environmental Planning and Assessment Act 1979 (EP&A Act) is the statutory framework within which the State Government and local government guide and control land use and development.

Erosion means the removal and/or transport of soil or materials from a given area, by the processes of wind, water and or/ gravity.

Erosion & Sediment Control Plan (ESCP) means a plan showing how potential erosion & sedimentation occurring on a given site, as a result of building, development or an activity, will be minimised.

Exempt development means development for which provision is made as referred to in section 76 (2) of the Environmental Planning & Assessment Act 1979

(Note: - In this regard exempt development is minor development where there will be no need to seek any approval from Council, provided that certain preset standards are met.)

Exposed means, in relation to food display, not protected against any likely contamination from customers where related to food display. In relation to construction materials means visible where related to construction material.

Extreme flood means an estimate of the probable maximum flood, which is the largest flood likely to ever occur.

F

Fabric means all the physical material of an item, including the external and internal materials, surroundings, fixtures, contents and objects related to the place which contribute to its heritage significance.

Façade noise level means the sound pressure level experienced from measurements taken within 1 metre of the façade of the building or free field measurements adjusted by a correction of +2.5dB(A) to account for façade reflections.

Face brickwork means brickwork of good quality, with uniform bricks.

Fascia sign means a sign attached to the fascia or return of the awning, which -

- does not project above, below, or extend from, the fascia or return end of the awning; and
- has a maximum area of three (3) square metres.

Family support accommodation means a flat not greater than 50m² in area attached to a detached dwelling-house with internal access between the two on a single lot with shared access and site facilities, primarily for the use of dependent family members including the aged or people with disabilities.

Finial means a carved or moulded ornament, usually spiky, crowning a gable or similar feature.

Finished floor level means, in relation to a building, the level of the top of the floor relative to a known datum expressed in metres.

First flush device means a device that causes the initial run-off of any rain to by-pass the rainwater tank to reduce pollutants entering the tank.

Food preparation area means any room, compartment or place used for the purpose of preparing and serving food for sale for human consumption, and, without limitation, includes preparation and servery areas of coffee lounges, drink bars, delicatessens, provision stores and the like.

Flood means a relatively high stream flow, which overtops the natural or artificial banks in any part of a stream, river, estuary, lake or dam, and/or local overland flooding associated with major drainage (refer Section C6 of FDM) before entering a watercourse.

Flood awareness means an appreciation of the likely effects of flooding and knowledge of the relevant flood warning and evacuation procedures.

Flood compatible building components (flood proofing) means a combination of measures incorporated in the design and/or construction and alteration of individual buildings or structures subject to flooding, and the use of flood compatible materials for the reduction or elimination of flood damage.

Flood compatible material means a material used in building which is resistant to damage when inundated. A list of flood compatible materials is located in Part A.

Flood evacuation strategy means the proposed strategy for the evacuation of areas within effective warning time during periods of flood as specified within the relevant State Emergency Service Operational Plan, the relevant FRMP, by advice's received from the State Emergency Services (SES) or as determined in the assessment of individual proposals.

Flood liable land (being synonymous with flood prone land and floodplain) means the area of land

which is subject to inundation by floods up to and including an extreme flood such as a probable maximum flood (PMF) and indicated on the flood maps held by the Council.

Floodplain means an area of land which is subject to inundation by floods up to and including the probable maximum flood event, that is, flood prone land.

Floodplain Development Manual (FDM) means the document dated 6 May 2005, published by the New South Wales Government and entitled "Floodplain Development Manual: the management of flood liable land".

Floodplain Risk Management Plan (FRMP) means a plan prepared for one or more floodplains in accordance with the requirements of the FDM or its predecessor.

Floodplain Risk Management Study (FRMS) means a study prepared for one or more floodplains in accordance with the requirements of the FDM or its predecessor.

Flood Planning Level (FPL) means the combination of flood level (1% AEP flood) and freeboard (150 or 500mm) selected for planning purposes.

Flood prone land means land susceptible to flooding by the PMF and is synonymous with flood liable land.

Flood risk precinct provides a means of categorising flood prone land, subject to the different levels of potential flood risk. The three categories are defined as low, medium or high flood risk.

Footpath means:

- that part of a road and the airspace above it that is set aside or formed as a path or way for pedestrian traffic, or
- any area such as a town square, plaza, park or other space owned, operated or managed by Council and used for pedestrian movement or recreation by the community, and the airspace above it,

but does not include roadways or other thoroughfares intended predominantly for vehicular traffic or privately owned arcades or plazas.

Frame means a group of structural members or parts in a building, or a group of elements in joinery such as those comprising a door or a window.

Freeboard means a factor of safety expressed as the height above the flood used to determine the design floor level or ground level, to compensate for uncertainties in the estimation of flood levels across the floodplain, such as wave action, localised hydraulic behaviour and impacts that are specific event related, such as levee and embankment settlement, and other effects such as "greenhouse" and climate change.

Frontage means the width of allotment measured at the street alignment.

Fully connected rainwater tank means a tank connected to all outdoor taps, other than one emergency tap near the water meter, all new toilets and a washing machine outlet in all new laundries.

G

Gable means the triangular part of a wall at the end of a pitched roof.

Garden shed means a small building, usually of metal or timber construction, used for the storage of garden implements and the like.

Garbage means refuse or waste material other than trade waste, effluent, compostable material, green waste or recyclable material.

Garbage chute means a duct in which deposited material descends from one level to another within the building, due to gravity.

Garbage and recycling room means a room where garbage and recycling receptacles are stored, awaiting reuse or removal from the premises.

Gazebo means a small lookout tower, structure or summerhouse in a garden, that is usually roofed, and used for outdoor activities or entertainment.

Greenhouse means a building, usually constructed chiefly of glass or other transparent material, for the cultivation or protection of plants that would not survive in outdoor conditions.

Green waste means garden refuse.

Gross Floor Area (GFA) means the sum of the floor area of each floor of a building measured from the internal face of external walls, or from the internal face of walls separating the building from any other building, measured at a height of 1.4 metres above the floor, and includes:

- the area of a mezzanine, and
- habitable rooms in a basement or an attic, and
- any shop, auditorium, cinema, and the like, in a basement or attic,

but excludes:

- any area for common vertical circulation, such as lifts and stairs, and
- any basement:
- (i) storage, and
- (ii) vehicular access, loading areas, garbage and services, and
- plant rooms, lift towers and other areas used exclusively for mechanical services or ducting, and
- car parking to meet any requirements of the consent authority (including access to that car parking), and
- any space used for the loading or unloading of goods (including access to it), and
- terraces and balconies with outer walls less than 1.4 metres high, and
- voids above a floor at the level of a storey or storey above.

Gross Leasable Floor Area (GLFA) means the sum of the areas of each floor of a building where the area of each floor is taken to be the area within the internal faces of the walls, excluding stairs, amenities, lifts, and other public areas but including stock storage area.

H

Habitable room means a room used for normal domestic activities and:

- includes a bedroom, living room, lounge room, music room, television room, kitchen, dining room, sewing room, study, playroom, family room and sunroom;
- excludes a bathroom, laundry, water closet, pantry, walk-in wardrobe, corridor, hallway, lobby, photographic darkroom, clothes-drying room and other spaces of a specialised nature occupied neither frequently nor for extended periods.

Habitable floor area means, for the purpose of flood risk management:

- in a residential situation: a living or working area, such as a lounge room, dining room, rumpus room, kitchen, bedroom or workroom;
- in an industrial or commercial situation: an area used for offices or to store valuable possessions susceptible to flood damage in the event of a flood.

Hazard means a source of potential harm or a situation with a potential to cause loss and, in relation to flooding, means flooding which has the potential to cause damage to the community.

Hazardous industry means a development for the purposes of an industry which, when the development is in operation and when all measures proposed to reduce or minimise its impact on the locality have been employed (including, for example, measures to isolate the development from existing or likely future development on other land in the locality), would pose a significant risk in relation to the locality:

- to human health, life or property, or
- to the biophysical environment.

Hazardous storage establishment means any establishment where goods, materials or products are stored which, when in operation and when all measures proposed to reduce or minimise its impact on the locality have been employed (including, for example, measures to isolate the establishment from existing or likely future development on the other land in the locality), would pose a significant risk in relation to the locality:

- to human health, life or property, or
- to the biophysical environment .

Health care professional means any person registered under an Act for the purpose of providing health care.

Height means, in relation to a building, the distance measured vertically from the top most storey or the ridge/peak of roof of the building to the natural ground level immediately below that point.

Heritage Act 1977 is the statutory framework for the identification and conservation of state heritage within NSW. The Act also describes the composition and powers of the Heritage Council.

Heritage conservation area means an area of land:

- shown on the Heritage Map as a heritage conservation area or as a place of Aboriginal heritage significance, and
- the location and nature of which is described in Schedule 5,

and includes any heritage items situated on or within that area.

Heritage Impact Statement means a document consisting of:

- a statement demonstrating the heritage significance of a heritage item, archaeological site, place of Aboriginal heritage significance or other heritage conservation area, and
- an assessment of the impact that proposed development will have on that significance, and
- proposals for measures to minimise that impact.

Heritage item means a building, work, archaeological site, tree, place or Aboriginal object:

- shown on the Heritage Map as a heritage item, and
- the location and nature of which is described in Schedule 5, and
- specified in an inventory of heritage items that is available at the office of the Council.

Heritage significance means historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic value.

Home industry sign means an advertisement displayed upon the building in which a home industry is undertaken with the consent of Council; or a residence associated with such industry and which:

- has maximum dimensions of 0.5m x 0.5m; and
- serves only to identify the name and occupation of the resident.

Home occupation (sex services) means the provision of sex services in a dwelling that is a brothel, or in a building that is a brothel and is ancillary to such a dwelling, by no more than 2 permanent residents of the dwelling and that does not involve:

- the employment of persons other than those residents, or
- interference with the amenity of the neighbourhood by reason of the emission of noise, traffic generation or otherwise, or
- the exhibition of any notice, advertisement or sign, or
- the sale of items (whether goods or materials), or the exposure or offer for sale of items, by retail,

but does not include a home business or sex services premises.

Home occupation sign means an advertisement displayed upon a dwelling house in which a home occupation is undertaken in accordance with the definition of "home occupation" contained in the Environmental Planning and Assessment Model Provisions and which: -

- has maximum dimensions of 0.5m x 0.5m; and
- serves only to identify the name and occupation of the resident.

I, J, K & L

Identification sign means a sign or an advertisement that serves only to identify the premises or land, on which the sign is situated, the name of the occupier, the activity carried out thereon and directions to access the site.

Illuminated street sign means a sign situated in the street reserve displaying the name of a street, a community message and general advertising panel the size, dimension, height, location and design of which are in accordance with a prior written agreement between Council and the applicant.

Impervious means impermeable to water, moisture or grease.

Injure (a tree) means to damage a tree by ringbarking, cutting down, lopping, topping, pruning, pollarding, removing, injuring or willfully destroying a tree. Injury to a tree also includes poisoning, severing of roots greater than 30mm in diameter, drilling or boring into a part of the tree other than for the purpose of pest treatment or hazard assessment by a qualified professional or by the building up or changing of the soil levels around the tree's root zone area.

Joist means any of the parallel lengths of timber, steel etc used for supporting floors, ceilings etc.

Kitchen means any room, compartment or place used for the purpose of cooking and heating food for human consumption and, without limitation, includes cooking areas of clubs, shops, factories and the like. The minimum area of a kitchen, including food preparation area shall be 20% of the dining room area or 7.5 square metres, whichever is the greater.

LAeq means the value of A-weighted sound pressure level of a continuous steady sound that, within a measurement time interval has the same square sound pressure level as a sound under consideration.

Landscape area means a part of a site used for growing plants, grasses and trees, but does not include any building, structure or hard paved area.

Landuse has the same meaning as activity.

Lintel means a beam across an opening, which supports the wall above.

Local development means development that is not State Significant development and may only be carried out with development consent.

Local overland flooding means inundation by local run-off rather than overbank discharge from a stream, river, estuary, lake or dam.

M, N, O

Maintenance means, in relation to a heritage item or a building, work, archaeological site, tree or place within a heritage conservation area, ongoing protective care but does not include the removal or disturbance of existing fabric, alterations, such as carrying out extensions or additions, or the introduction of new materials or technology.

Major addition to a detached dwelling, or a dwelling within a dual occupancy development, means where the amount of new floor area is greater than the existing floor area to be maintained.

Merit approach means, with regard to development on flood prone land, an approach, the principles of which are embodied in the Flood Management Manual which weighs social, economic, ecological and cultural impacts of land use options for different flood prone areas together with flood damage, hazard and behaviour implications, and environmental protection and well being of the State's rivers and floodplains.

Minimum circulation width means the minimum width of pavement which is unobstructed by any item such as litter bins, telegraph poles, street furniture, tables or chairs so as to permit ease of passage by footpath users.

Mixed use development means a building or place comprising 2 or more different land uses.

Moderate addition to a detached dwelling, or a dwelling within a dual occupancy development, means where the amount of new roof area is greater than 40m², but is not a major addition.

Mortar means the material, typically consisting of various mixtures of sand, lime, cement and water, which bonds the units of a masonry wall.

Multi dwelling housing means 3 or more dwellings (whether attached or detached) on one lot of land (not being an individual lot in a strata plan or community title scheme) each with access at ground level, but does not include a residential flat building.

National Parks and Wildlife Act 1974 provides the statutory framework for the care, control and management of natural areas and Aboriginal relics and sites in NSW.

National Parks and Wildlife Service means the organisation which administers the National Parks and Wildlife Act 1974, which acquires and manages National Parks in NSW.

National Trust of Australia means the community organisation that maintains a register of heritage items and provides advice on heritage issues, which also owns and manages heritage properties throughout the state.

Natural ground level means the ground level of a site before any site works have been undertaken to alter the naturally occurring height and/or contours of the land.

Night time means, for the purposes of acoustic studies, between 10.00pm and 7.00am.

Non-potable use means any use of water for other than drinking, bathing or washing of eating utensils.

Notification means the giving of notice of a development or other application, draft LEP, draft DCP, draft Section 94 Contributions Plan, draft LES or other Council policy by Council. Such notice may be given by:

- a letter with or without plan information to owners and/or occupiers of adjoining and/or opposite land or land which, in Council's opinion may be affected by a proposal;
- a notice erected on the land to which a proposal relates;
- a notice published in a local newspaper; and/or
- public exhibition of the proposal.

Offensive industry means a development for the purposes of an industry which, when the development is in operation and when all measures proposed to reduce or minimise its impact on the locality have been employed (including, for example, measures to isolate the development from existing or likely future development on other land in the locality), would emit a polluting discharge (including, for example, noise) in a manner which would have a significant adverse impact in the locality or on the existing or likely future development on other land in the locality.

Offensive storage establishment means any establishment where goods, materials or products are stored which, when in operation and when all measures proposed to reduce or minimise its impact on the locality have been employed (including, for example, measures to isolate the establishment from existing or likely future development on other land in the locality), would emit a polluting discharge (including, for example, noise) in a manner which would have a significant adverse impact in the locality or on the existing or likely future development on other land in the locality.

Opposite land means land that is directly opposite an application site and is separated only by a road, but does not include land separated by an arterial road, i.e., Great Western Highway, M4 Motorway and Cumberland Highway.

Outbuilding means any of the following:

- balcony, deck, patio, pergola, terrace or verandah that is detached from a dwelling house;
- cabana, cubby house, fernery, garden shed, gazebo or greenhouse;
- carport that is detached from a dwelling house;
- garage that is detached from a dwelling house;
- rainwater tank (above ground) that is detached from a dwelling house;
- shade structure that is detached from a dwelling house; or
- shed.

Outdoor dining means activities which involve the placement of tables, chairs and other ancillary items, such as planter boxes, bollards, umbrellas and barriers, for outdoor dining or socialising purposes.

P, Q

Parapet means a wall built up higher than the eaves line of a roof.

Pergola means an open-roofed framework or trellis, usually of timber construction, supported on brackets, posts, or columns above a path, terrace, patio or deck, and sometimes covered by plant growth.

Pitch means the slope of a roof. This is measured either in degrees above the horizontal, or as a ratio to the vertical rise of the roof to its span.

Place of Aboriginal heritage significance means an area of land shown on the Heritage Map to Holroyd Local Environmental Plan 2013 that is :

- a place that has the physical remains of pre-European occupation by, or is of contemporary significance to, the Aboriginal people. It can (but need not) include items and remnants of the occupation of the land by Aboriginal people, such as burial places, engraving sites, rock art, midden deposits, scarred and sacred trees and sharpening grooves; or
- a natural Aboriginal sacred site or other sacred feature. It includes natural features such as creeks or mountains of long-standing cultural significance, as well as initiation, ceremonial or story places or areas of more contemporary cultural significance.
- Pointed means masonry joints which have been filled with mortar, applied with a trowel or pointing tool.

Pole sign means a sign erected on a pole or pylon independent of any building or structure.

Potentially hazardous industry means a development for the purposes of any industry which, if the development were to operate without employing any measures (including, for example, isolation from existing or likely future development on other land) to reduce or minimise its impact in the locality or on the existing or likely future development on other land, would pose a significant risk in relation to the locality:

- to human health, life or property, or
- to the biophysical environment,
- and includes a hazardous industry and a hazardous storage establishment.

Potentially offensive industry means a development for the purposes of an industry which, if the development were to operate without employing any measures (including, for example, isolation from existing or likely future development on other land) to reduce or minimise its impact in the locality or on the existing or likely future development on other land, would emit a polluting discharge (including for example, noise) in a manner which would have a significant adverse impact in the locality or on the existing or likely future development on other land, and includes an offensive industry and an offensive storage establishment.

Preparation, Prepare and Preparing all mean, with regard to food, the manufacture, processing and treatment of foods for human consumption.

Principle Certifying Authority (PCA) has the same meaning as in Section 81A and Part 4A of the Environmental Planning and Assessment Act 1979.

Principal street means that street to which the property is rated, or the street which provides the sole and/or principal means of access to the site, whichever is determined by Council.

Definitions

Prostitution means the offering by a person of his or her body to a person of the same of different sex for sexual gratification in return for payment and includes:-

- sexual intercourse as defined in Section 61H of the Crimes Act 1900; and
- masturbation by one person on another.

Pruning has the same meaning as in Australian Standard AS 4373-1996 Pruning of Amenity Trees and includes to ringbark, cut down, top or lop parts of a tree, and the severing of roots greater than 30mm in diameter.

Public exhibition means where a development or other application, draft LEP, draft DCP, draft Section 94 Contributions Plan, draft LES, Precinct Plan or Council policy is made available for inspection, by any person, at the office of Council, and such other places to be determined by Council, for a period specified in any notification, in accordance with the Environmental Planning and Assessment Act, 1979.

Public notice means a notice for public information displayed by a public authority giving information or direction about services provided.

Queuing area means the area of an entrance or exit driveway between the property boundary and the service point or access to parking facilities, available for the storage of vehicles.

R

Rafter means one of the beams which gives slope and form to a roof and which supports its outer covering.

Rainwater tank means a tank designed for the storage of rainwater gathered on the land on which the tank is situated.

Real Estate sign means an advertisement in respect of a place or premises to which it is affixed and which contains only a notice that the place or premises is or are for sale or letting, together with particulars of the sale and letting.

Recess means a part of a building that is set back.

Reconstruction means returning a place to a known earlier state and is to be distinguished from restoration by the introduction of new material into the fabric.

Recyclable means capable of being reprocessed into useable material and includes any item collected by Council's Recycling Service.

Reliable access means, during a flood, the ability for people to safely evacuate an area subject to imminent flooding within effective warning time and without a need to travel through areas where water depths increase.

Relic means any deposit, object or other material evidence of human habitation:

- that relates to the settlement of the area of Holroyd City, not being Aboriginal settlement, and
- that is more than 50 years old, and
- that is a fixture or is wholly or partly within the ground.

Render means a coating of mortar or stucco (plaster) applied to the surface of a masonry wall.

Residential component means the whole or part of the development that contains one or more dwellings.

Residential Flat Building (RFB) means a building containing 3 or more dwellings, but does not include an attached dwelling or multi dwelling housing.

Restaurant means a building or place the principal purpose of which is the provision of food or beverages to people for consumption on the premises, whether or not takeaway meals and beverages or entertainment are also provided.

Restoration means returning the existing fabric of a place to a known earlier state by removing or reassembling components without the introduction of new material.

Ridge means a horizontal line in which the tops of the rafters of a roof meet.

Risk means the chance of something happening that will have an impact and is measured in terms of consequences and probability (i.e. likelihood). In the context of this plan, it is the likelihood of consequences arising from the interaction of floods, communities and the environment.

Road closure means the partial or full closure of a road carriageway, so that no vehicular traffic can pass through that part of the street.

Road widening means an increase in the width of the road reserve and/or carriageway by the use and dedication of adjoining lands having frontage to the street.

Roof means the top, weatherproof construction of a building.

S

Section means a drawing representing a building as it would appear if cut through in a plane (section) at right angles to the line of sight.

Sediment means material of varying size, both mineral and organic, that is being, or has been, moved from its site of origin by the process of wind, water and or/ gravity, and comes to rest on the earth's surface either above or below sea level. Fine sediment is a fraction of sediment consisting of silt (particles 0.002 – 0.02mm in diameter) and clay (particles < 0.002mm in diameter).

Sedimentation means the deposition of eroded soil, sediment or other material.

Serviced apartment means a building or part of a building providing self-contained tourist and visitor accommodation that is regularly serviced or cleaned by the owner or manager of the building or part of the building or the owner's or manager's agents.

Sex services means sexual acts or sexual services in exchange for payment.

Sex services premises means a brothel, but does not include home occupation (sex services).

Shade structure means a device which partially or completely covers or shades an area used for the purpose of outdoor dining and includes outdoor umbrellas and sails.

Shingle means a thin, rectangular piece of wood, terracotta or other material, used for covering roofs or walls.

Sign means an advertisement and, unless the context indicates otherwise, includes any advertising structure of which the advertisement is part.

Sill means the lower horizontal part of a window or door opening.

Site area means the area of any land on which development is or is to be carried out. The land may include the whole or part of one lot, or more than one lot if they are contiguous to each other, but does not include the area of any land on which development is not permitted to be carried out under this Plan.

Site coverage means the proportion of a site area covered by buildings. However, the following are not included for the purpose of calculating site coverage:

- any basement;
- any part of an awning that is outside the outer walls of a building and that adjoins the street frontage or other site boundary;
- any eaves;
- unenclosed balconies, decks, pergolas and the like.

Note: For battle-axe lots, Council will exclude the area of the access handle when calculating site coverage.

Site Emergency Response Flood Plan means a management plan prepared and approved by Council which demonstrates the means to minimise the likelihood of flood damage, including demonstrated ability to move goods above flood level within the likely available flood warning time and a requirement for flood drills for larger commercial/industrial premises. This could be in the form of an individual Flood Plan.

Social significance means an item that has a social, spiritual or cultural association with a recognisable contemporary community.

Definitions

Solid construction means construction from brick, concrete, concrete blocks, structural fibrous cement or other similar homogeneous material.

Sound Exposure Level (SEL or L_{AE}) means the time integral (amount of acoustic energy over time) of a noise event compressed or normalised to a one (1) second period and expressed in dB(A).

Source separation means separating waste into like materials for recycling, reuse or collection.

Special Waste means any waste that requires special disposal arrangements as it represents a significant hazard to human health, life, property or the bio-physical environment, including, but is not limited to, explosives, poisons, clinical wastes, radio active substances, declared chemical wastes and quarantine wastes.

Splay corner means an increase in the road reserve and/or carriageway at the intersection of two streets by the dedication of land 3m by 3m at a 45 degree angle to the corner.

Statement of Environmental Effects (SEE) means a series of statements looking at the impact of a particular development proposal will have on a variety of environmental issues. A SEE usually accompanies a development application.

String course means a moulding or projecting band running horizontally across a facade (elevation of a building facing the street).

Storey means any floor containing any habitable room or rooms other than –

- a floor used principally for storage, or
- a floor used wholly or partly for parking;

and includes mezzanines/double-height spaces and habitable rooms in the roof.

Storm blinds means a blind affixed to the outside of a window or other opening for security and/or protection against extreme weather conditions.

Structural root zone (SRZ) means the area surrounding such tree roots as a required to maintain tree stability.

Stud means an upright supporting member of a timber wall frame to which wall coverings and linings are also fixed.

Subdivision means dividing land into parts.

Survey Plan is a plan prepared by a registered surveyor which shows the information required for the assessment of an application in accordance with the provisions of this Policy.

Symmetry means the balance of all parts of a design, on each side of a centre line.

T

Temporary means non-permanent furniture or shade structures that do not involve permanent or cemented in structures and that can be quickly and easily removed during extreme weather conditions or emergencies.

Temporary sign means an advertisement of a temporary nature which: -

- announces any local event of a religious, educational, cultural, political, social or recreational character or relates to any temporary matter in connection with such an event; and
- does not include advertising of a commercial nature other than the name(s) of an event's sponsor(s).

(Note: - Advertisements, such as bill posters, which are not removed by the advertiser within forty eight (48) hour after the advertised event, would not be considered "temporary signs". Temporary signs may include advertisements such as banners, bunting, posters etc.)

Terracotta means unglazed pottery produced from a fine clay, usually of a red colour, and used to make decorative devices, chimney pots and roofing tiles.

The Act means the Environmental Planning and Assessment Act 1979.

Top hamper sign means a sign attached to the transom of a doorway or display window of a building, which: -

- does not extend beyond the building line, or the window above which it is attached;
- is not more than 3.7 metres above the ground; and
- has a maximum height of 600 millimetres and a maximum area of five (5) square metres.

Trade waste means refuse or waste material arising from any trade or industry but excludes liquid waste, demolition waste, contaminated waste, green waste or recyclable waste.

Tree means any woody and soft wooded perennial plant .

Tree Management Plan (TMP) means a plan, as described above, which protects nominated trees on a site during building construction.

Tree Protection Zone (TPZ) means an area to be protected from construction disturbance, being a combination of the root area and the crown area, which also incorporates the structural root zone (SRZ).

Trickle top-up means the slow filling of a rainwater tank from the reticulated drinking water supply to maintain a certain level of water in the tank during times when the rainwater is not sufficient, to minimise effects on the reticulated system and allow for a reasonable re-supply into the tank over a period of several hours.

V, W

Verandah means an open area attached to a building with a roof supported by the building on one side and posts or columns on the other.

Wall sign means either –

- a painted wall sign - a sign painted on a wall or
- a flush wall sign - a sign attached to the wall of a building (other than the transom of a doorway or display window),

which:

- does not extend laterally beyond the wall of the building to which it is attached; and
- does not project above the top of the wall to which it is attached.

Waters means any river, stream, lake, lagoon, swamp, wetlands, unconfined surface water, natural or artificial watercourse, dam or tidal waters (including the sea), or part thereof, and includes water stored artificial works, water mains, water pipes, and water channels, and any underground or artesian water, or any part thereof.

Waste cupboard means a storage area within each dwelling, usually in the kitchen, of a size sufficient to enable source separation of a single days waste into garbage recyclables and compostable material.

Waste storage and recycling area means a designated area or a combination of designated areas upon the site of a building for the housing of approved containers to store all waste material, including recyclable material, likely to be generated by the building's occupants.

Weatherboard means a long, thin board fixed horizontally or vertically, with overlapping edges, as an external wall covering.

Wing means an appendage (addition) to a building.

Wrought iron means malleable (i.e. able to be shaped) iron containing carbon and slag.

Amendment list

Holroyd City

Amendment List

1. Part R- Tamplin Road Reserve **22 July 2015**