



City of Sydney

Sydney Development Control Plan (Harold Park) 2011

February 2011



Prepared by City of Sydney

This DCP was approved by Council on 14 February 2011

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Section 1: Introduction

1.1 Name

This plan is called the *Sydney Development Control Plan (Harold Park) 2011*.

1.2 Commencement

This plan was adopted by Council on 14 February 2011 and came into effect on the day Sydney Local Environmental Plan (Harold Park) 2011 commences.

1.3 Land and development to which this DCP applies

This development control plan (DCP) applies to land covered by the Sydney Local Environmental Plan (Harold Park) 2011, as shown on the **Site Identification Map**.

1.4 Relationship to other planning instruments and development control plans

This DCP has been made in accordance with Section 74C of the *Environmental Planning & Assessment Act 1979* and complements the provisions of the *Sydney Local Environmental Plan (Harold Park) 2010* ("the LEP").

Where there is any inconsistency between this DCP and the LEP, the LEP prevails. The DCP provides more detailed provisions than those in the LEP for development on the site.

The provisions in this DCP provide specific guidance for development on land covered by this DCP, and complement any other applicable DCPs. In the event of any inconsistency between the provisions of this DCP and any other DCP, the provisions in this DCP prevail to the extent of any inconsistency.

In this DCP, 'Consent Authority' means the City of Sydney Council, in its capacity under the *Environmental Planning & Assessment Act 1979*, or the Central Sydney Planning Committee, and 'Council' means the City of Sydney Council in its capacities outside the *Environmental Planning & Assessment Act 1979*, such as a land owner or authority under the *Local Government Act 1993*, or similar.

1.5 Objectives

The objectives of this DCP are to ensure:

- (a) That the future redevelopment of the Harold Park site will result in a model example of ecologically sustainable urban renewal;
- (b) The development of a diverse and high quality residential precinct;
- (c) That the Harold Park site consists of high quality parkland to be used by the general community for active and passive recreation purposes;

- (d) That the heritage significance of the Former Rozelle Tram Depot is conserved and the Tram Sheds are adaptively reused for community, retail and commercial uses that primarily serve the new residential community and support nearby retail centres;
- (e) That new buildings respond to their context in order to minimise their impact on the amenity of neighbouring dwellings and urban character of the surrounding area that primarily serve the new residential community and support nearby retail centres;
- (f) The street network provides attractive tree-lined streets and a pedestrian and bicycle priority access network with significant water-sensitive design elements; and
- (g) That the built form, layout and street network encourages and promotes the use of public transport.

1.6 Information required in a Development Application

A development application is to include all the relevant information as required by the "Application for Development Form". This form is available on the City of Sydney website at www.cityofsydney.nsw.gov.au.

Statement Of Environmental Effects

A Statement of Environmental Effects is required to be submitted with every development application. The purpose of the Statement of Environmental Effects is to demonstrate:

- (1) how the development achieves the objectives and principles of this DCP;
- (2) the impact of the development on the public domain;
- (3) how the development will minimise any environmental impact; and
- (4) how the proposal complies with provisions of the applicable environmental planning instruments, this DCP and any relevant Council codes and policies.

Detailed reports may be required, where relevant, by the consent authority and are to be appended to the Statement of Environmental Effects.

1.7 Maps

The following maps are included in this DCP:

- Map 1. Site identification
- Map 2. Pedestrian and Bicycle Access
- Map 3. Stormwater
- Map 4. Vehicular Access
- Map 5. Height of Building – Storeys
- Map 6. Heritage Significance
- Map 7. Heritage Conservation and Interpretation Guidelines – Tram Depot
- Map 8. Heritage Conservation and Interpretation Guidelines – Harold Park Paceway
- Map 9. Tram Sheds Parking

Section 2: Desired Future Character

2.1 Character Statement

Harold Park will be a high quality and sustainable addition to the local urban fabric. When the precinct is complete about one third of the site will be publicly accessible open space and it will accommodate approximately 2,500 residents and approximately 500 workers.

The site will provide a significant addition to the adjacent network of public open spaces providing places for relaxation and recreation. The adaptive reuse of the heritage Tram Depot will form a local community hub accommodating a range of uses that will serve the local community. A new medium density residential precinct will provide diverse housing that will help meet existing and future local housing demand.

2.2 Principles

The redevelopment of the site is to be in accordance with the following principles:

- (1) Create a significant public park linked to the adjacent network. The open space should be designed to accommodate active and passive recreation uses.
- (2) Provide a legible and coherent structure of streets that complements the existing, adjacent street network and responds to key pedestrian and bicycle desire lines (principally from Ross Street to Jubilee Park), universal access considerations, stormwater management requirements and crime prevention through environmental design principles.
- (3) All streets are to be carefully designed and landscaped to create high quality pedestrian and bicycle priority streetscapes and very low vehicular traffic speeds. New major north-south and east-west streets will provide dedicated bicycle paths and swales.
- (4) North-south public domain will incorporate overland flow paths for stormwater. Swales will be incorporated into the design of north/south street(s) to incorporate water sensitive urban design principles.
- (5) Walking, cycling and public transport use will be encouraged through provision of appropriate infrastructure. Private vehicle use will be discouraged by designing for slow circulation speeds, giving priority to other transport modes at intersections and constraining provision of private vehicle parking.
- (6) Access to the light rail station at Jubilee Park will be enhanced including safe and universal access from the Tram Depot and adjacent public open space.
- (7) Prevent through site traffic movement by restricting direct east to west vehicular connections

- (8) The development shall be a model for ecologically sustainable development including reuse of existing infrastructure (Tram Depot), minimising export of material from the site, minimising greenhouse gas generation throughout the development's lifecycle, minimising water use, maximising water reuse and supporting transit oriented design principles.
- (9) A community hub will be created at the heritage Tram Depot supporting a range of uses that will serve the new and surrounding neighbourhoods, including community, retail and small scale commercial uses.
- (10) The development will provide for a diverse population through an appropriate mix of dwelling types including accessible, adaptable and affordable housing to meet local housing demand.



Figure 1: Illustrative plan (Government Architect's Office)

- (11) The style of the architecture on the site shall be visually recessive and of high quality construction. The development will not create buildings that are visually prominent or act as local landmarks. A variety of building heights and forms should be achieved with a

maximum height of 8 storeys. Buildings above 4 storeys in height should be designed to minimise the visual impact of upper levels. This should be achieved through upper level setbacks, dark recessive colours and materials and minimising the visibility of roof forms and associated plant structures, lift overruns and the like.

- (12) Development at the south end of the site should be predominantly lower in scale and be of maisonette and townhouse typologies.
- (13) The development will maintain and enhance the heritage values of the Tram Depot by promoting the appropriate adaptive reuse of the structures and maintaining and enhancing the curtilage around the Tram Depot including the forecourt and historical formal gardens.
- (14) Imaginative interpretive public domain design will draw on the site's physical attributes and historical use for racing and public transport (tram uses) for design themes.
- (15) The development's urban structure will extend public domain view corridors from streets in Glebe to the east into, through and over the site and design built form with regard to views from the public domain in Forest Lodge and Annandale.
- (16) The open spaces will provide habitat for local indigenous species.



Figure 2: Aerial perspective (Haycraft Duloy Pty Ltd)

Provisions

- (1) The Plan shown at **Figure 1** and described in the *Harold Park Urban Design Study* (Government Architect's Office, May 2010) is consistent with the objectives, desired future character, principles and controls of this DCP. Changes to the plan will be considered where they demonstrate an improved public benefit and design excellence having regard to:
 - (a) The matters for consideration in the design excellence provision of the Sydney LEP (Harold Park) 2011;
 - (b) The objectives, character statement and principles of this DCP;
 - (c) The degree to which any alterations may enhance or detract from public enjoyment of the public benefits associated with the development.

Section 3: Local Infrastructure

Objectives

- (a) Create a neighbourhood with a strong definition of streets and public places that gives Harold Park a sense of place and encourages community identity and pride.
- (b) Align new streets with streets in the surrounding neighbourhoods to provide view corridors and visually connected access paths.
- (c) Connect new public open space with the adjacent open space network.
- (d) Maximise public use of new public open space through design, location and access.
- (e) Provide an accessible and safe environment for pedestrians and cyclists that links with both existing street and public open space access networks.
- (f) Distribute uses on the site in such a way as to minimise the necessity for short car trips.
- (g) Provide a high quality public domain including significant tree plantings on streets and in the public open space.
- (h) Provide a new major public open space extension of the Jubilee, Federal and Bicentennial Parks parklands comprising at least 3.8ha that can accommodate a range of passive and active recreation opportunities.
- (i) Ensure that the design of publicly accessible open space provides for a variety of both passive and active uses, and can evolve over time to respond to community needs.
- (j) Adaptively reuse the existing Tram Depot structures for a mixture of community, cultural, retail and commercial uses within the existing building envelope and provide a high quality landscape setting that enhances the building's presence and heritage values.
- (k) Provide a high quality south to north separated pedestrian and cycle connection from Ross Street to Jubilee Park.
- (l) Provide a high quality west to east pedestrian connection from the intersection of Minogue Crescent and The Crescent to Toxteth Road.
- (m) Remodel the site's land form to provide direct overland flow paths, accessible paths of travel and usable public open space.
- (n) Create a new accessible path of travel from the Tram Depot forecourt to the Jubilee Park Light Rail Station.
- (o) Remove the existing concrete structure overhanging the Johnston's Creek Canal.
- (p) Provide footpath widening and significant street tree planting to Minogue Crescent and The Crescent.

- (q) Provide habitat along the eastern edge of the site for local indigenous species.



Figure 3: Indicative layout of public park (excluding Tram Sheds) (Government Architect's office)

3.1 Ground Levels and Excavation

Provisions

- (1) The landform of the site is to be altered to provide an overland flow path from the south to the north and to provide a proportion of usable public open space which supports a range of active recreational uses.
- (2) The new streets should maximise accessibility and avoid the requirement for staircases and ramps in the public domain by being designed with consistent gradients.

3.2 Public Domain

Provisions

- (1) Public parkland is to be a minimum of 3.8ha of usable area and is to:
 - (a) provide for a range of passive and active recreation opportunities that may include a one hectare sports field, a community garden, heritage interpretation, public art and informal and passive recreation space;
 - (b) be a predominantly consolidated area in which divisions by roads are minimised;
 - (c) be located and designed so that it is clearly identifiable as public space and encourages public use;
 - (d) be located so that it is visible in its entirety from the Tram Depot building and forecourt or The Crescent/Minogue Crescent;
 - (e) have clearly defined pedestrian entrances and paths, appropriate seating, and zones for activities that are clearly defined and encourage use;
 - (f) maximise access for people with mobility difficulties, through appropriate design and location of paths and entrances;
 - (g) the public open space is to primarily feature soft landscaping except for civic spaces, pathways, and small areas ancillary to activity areas;
 - (h) not be constrained by contaminated land restrictions or property easements;
 - (i) provide a flooding and stormwater overland flow path from the southern part of the site to Johnston's Canal where appropriate;
 - (j) provide for deep soil planting and not be built over below ground level car parking;
 - (k) provide a curtilage and access to the Tram Depot consistent with the Heritage Map in the LEP and **Heritage Conservation and Interpretation Guidelines – Tram Depot Map**;
 - (l) provide legible pedestrian and cycle connections between Ross Street, Jubilee Park and the Jubilee Park Light Rail Station; and
 - (m) provide public stairs that link the site to Toxteth Road and Maxwell Road, adjacent to the Tram Sheds.

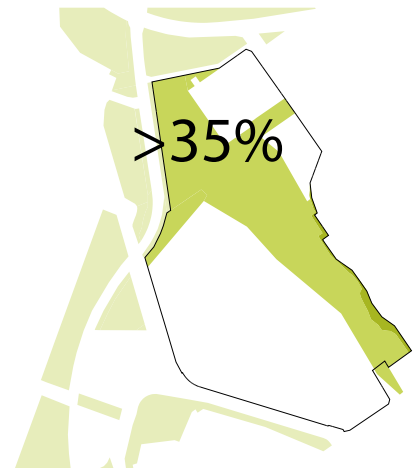


Figure 4: At least 35% of the site is to be usable public parkland. The location of open space may vary where it demonstrates an improved public benefit.



Figure 5: Open space should extend and connect to the existing open space network.



Figure 6: Open space should provide for an overland flow path and water sensitive urban design.

- (2) The layout of public open space is to be generally consistent with that shown in **Figure 3** and described in the *Harold Park Urban Design Study* (Government Architect's Office, May 2010). Alterations to that layout will be considered where they demonstrate an improved public benefit and design excellence having regard to:
- (a) The matters for consideration in the design excellence provision of the Sydney LEP (Harold Park) 2011;
 - (b) The objectives, character statement and principles of this DCP;
 - (c) The degree to which any alterations may enhance or detract from public enjoyment of the public benefits associated with the development.
- (3) The one hectare site for active recreation should be a multipurpose facility allowing for a range of sporting codes, school activities and community sports activities.
- (4) Natural features, such as cliff lines and rocky outcrops, are to be retained.
- (5) Publicly accessible open space is to be designed to maximise the safety and security of all users, in particular by:
- (a) providing open sightlines and landscaping that allows high levels of public surveillance by users and residents;
 - (b) clearly distinguishing private and publicly accessible open space;
 - (c) providing external lighting (in accordance with AS1158) that makes any potential 'hiding spots' visible; and
 - (d) encouraging pedestrian use through the design of entrances and paths.
- (6) All publicly accessible open space is to be designed to maximise the amenity of users by ensuring:
- (a) 50% of publicly accessible open space is to receive at least four hours direct sunlight between 9am and 3pm on 21 June.
 - (b) shade from strong sun is available between September and March, for at least 20% of the area used for passive recreation; and
 - (c) protection from strong winds is provided to any space that is open to winds from the south.
- (7) Landscape design is to be of the highest quality and use appropriate indigenous species, landmark sculptural elements, stone, stainless steel, high quality precast concrete elements and high quality pavement design consistent with the materials and elements identified in the City of Sydney Public Domain Manual.

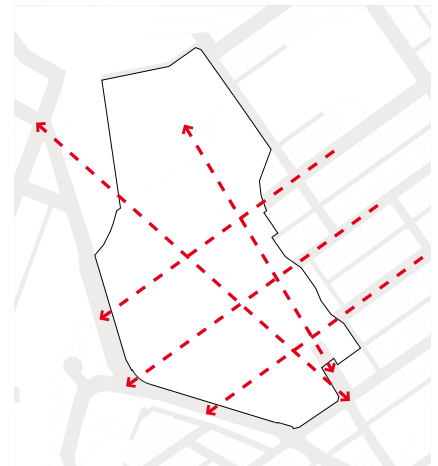


Figure 7: Open space and new street network should visually and physically connect to the surrounding street network.

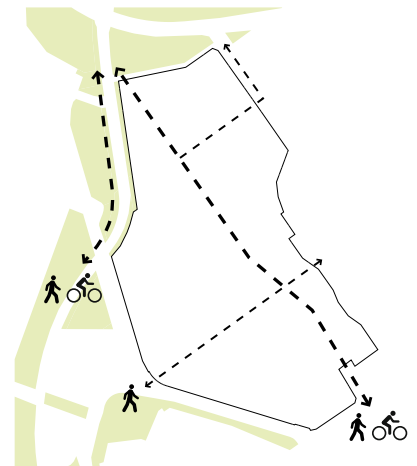


Figure 8: Pedestrian and bicycle desire lines for connections to surrounding area, open space, public transport and new development.



Figure 9: New street network should connect to the surrounding area.

- (8) Public open space is to provide a continuous tract of native vegetation for habitat corridors between major open spaces and water bodies to encourage native fauna, in particular for the Superb Fairy-Wren. The habitat corridor should be consistent with the habitat requirements in the *Superb Fairy-Wren Habitat in Glebe and Forest Lodge* report.

Note: The Superb Fairy-Wren Habitat in Glebe and Forest Lodge report is available on the City of Sydney website at http://www.cityofsydney.nsw.gov.au/Environment/documents/BlueWrens_report-web.pdf

- (9) Generally, water used for irrigation of publicly accessible open space is to be drawn from recycled water or harvested rainwater and stormwater sources.
- (10) The design of publicly accessible open space is to include:
- (a) native drought-tolerant plants and grasses;
 - (b) water retaining media mixed into soil; and
 - (c) where irrigation is required, sub-surface drip irrigation systems controlled by timers using soil moisture or rainfall sensors.
- (11) Suitable soil depth, drainage and irrigation is to be provided for all landscaping built on structures.
- (12) Landscape design is to be compatible with flood risk, for example, where dense planting, fences and walls are proposed they are not to be located on a flow path.
- (13) Landscaping, plant species and structures such as walls are to be designed and constructed to withstand temporary flood inundation.

3.3 Street Network and Access

Provisions

- (1) The new vehicle, pedestrian and cycle network is to:
- (a) Be visually and physically integrated with the surrounding street network;
 - (b) Maximise permeability and public access through the site;
 - (c) Provide legible and coherent connections through and within the site (**Figure 7**);
 - (d) Restrict through traffic movements through the site and surrounding suburbs;
 - (e) Facilitate access to and support the adaptive reuse of the Tram Depot;
 - (f) Prioritise pedestrian and cycle movements;
 - (g) Minimise the division of parklands with roads;

- (h) Ensure the safety of pedestrians, cyclists and park users;
- (i) Provide connections to and promote the use of public transport;
- (j) Allow for passive surveillance of the public domain; and
- (k) Provide a hierarchy of new local streets consistent with their function.











- KEY**
-  Primary vehicular access - signalise intersection subject to RTA warrants
 -  No vehicular access
 -  Vehicle path of travel
 -  Tram Shed vehicular access - preferred
 -  Tram Shed vehicular access - secondary/alternative
 -  Shared pedestrian and bicycle path
 -  Separated pedestrian and bicycle path
 -  Site boundary

Figure 10: Preferred access plan and street layout (Government Architect's Office and City of Sydney)

- (2) Any vehicle, pedestrian and cycle network that varies from that shown in **Figure 10** and as generally described in the *Harold Park Urban Design Study* (Government Architect's Office, May 2010) is to demonstrate an improved public benefit and design excellence having regard to:
- (a) The matters for consideration in the design excellence provision of the Sydney LEP (Harold Park) 2011;
 - (b) The objectives, character statement and principles of this DCP;
 - (c) The degree to which any alterations may enhance or detract from public enjoyment of the public benefits associated with the development.
- (3) New streets are to be constructed to the satisfaction of Council in accordance with **Figures 11 to 13** (street section diagrams).
- (4) The new street network is to maintain access to existing dwellings on the eastern side of Ross Street.
- (5) Vehicle access to the site is to be consistent with the **Vehicular Access Map** and be provided to the satisfaction of the Consent Authority.
- (6) Pedestrian and bicycle access is to be provided as shown in the **Pedestrian and Bicycle Access Map** and **Figure 8** and to the satisfaction of Council.
- (7) The intersection at Minogue Crescent and The Crescent is to be the main vehicular access to and from the development and the road network shall focus site traffic to that intersection.
- (8) The intersection at Minogue Crescent and The Crescent is to be signalised subject to meeting the warrants for signals in accordance with the RTA's *Traffic Signal Design: Section 2 – Warrants*. Where a signalised intersection is not possible at the Minogue Crescent/The Crescent intersection alternative access arrangement may be considered provided it does not result in adverse and unacceptable traffic impacts as a result of the type and location of the access.
- (9) The applicant shall provide right turn storage lanes at the Minogue Crescent and The Crescent intersection where required by the consent authority.
- (10) Vehicle access to the Tram Sheds should in the first instance be provided from the new internal road network to the south west of the Tram Sheds. Access from Nelson Street should only be provided as an alternative or secondary access (see **Figure 10**).
- (11) Parking to support the adaptive reuse of the Tram Depot may be provided within adjacent development. There is to be no access to parking from Maxwell Road where that parking serves non-residential uses in the Tram Depot.

- (12) On grade parking to support the adaptive reuse of the Tram Sheds may be provided in locations identified on the **Tram Sheds Parking Map** provided that:
- (a) The consent authority has considered the effect of providing parking within the Tram Sheds on the structure and heritage significance of the Tram Sheds to be unacceptable based on an assessment undertaken by a qualified engineer with experience in heritage buildings;
 - (b) Parking is provided in Area C only when Areas A and B have been exhausted for parking;
 - (c) Any parking in Area C is laid out so that:
 - i) The length of the parking area along the western elevation of the Tram Sheds is minimised; and
 - ii) The majority of Area C is open space and maintains continuity with other open space;
 - (d) It is demonstrated that it is necessary to the viable adaptive reuse of the Tram Sheds;
 - (e) It provides for an appropriate level of safety and amenity for park users;
 - (f) It is sympathetic to the setting of the Tram Sheds;
 - (g) It maintains an appropriate level of connectivity throughout the site including between any public open space, the Tram Sheds and the Light Rail Station;
 - (h) The design and landscaping of any on-grade parking is of the highest quality to reduce the visual impact on the park setting; and
 - (i) Includes best practice water sensitive urban design measures to treat runoff.
- (13) Vehicular access from Maxwell Road or Victoria Road may only provide access for occupants of a residential development that directly adjoins Maxwell Road.
- (14) Applicants are to assess the structural capacity of the Johnston's Creek Bridge and the public road connecting to Nelson Street to carry necessary traffic, including any heavy vehicles needed to service the Tram Sheds, and are to undertake any upgrades to Johnston's Creek Bridge necessary to service uses in the Tram Sheds, at no cost to Council, prior to the occupation of the Tram Sheds.
- (15) Where the public road from Nelson Street towards the Tram Sheds is used for vehicular access the applicant is to identify and carry out works to manage potential safety conflicts between vehicles and users of the park.

- (16) Provide indented bus bays and upgraded bus stops on The Crescent and Minogue Crescent where required by the consent authority. Where the road reserve is insufficient to accommodate the required bus bays they are to be provided wholly or partly on the site.
- (17) A Traffic Operations Plan is to be submitted with a development application and implemented prior to issue of the occupation certificate. The Traffic Operations Plan is to include measures to:
 - (a) calm traffic and implement a maximum speed of 40km per hour for all streets;
 - (b) prioritise the pedestrian and cycle access throughout the site with:
 - i) kerb extensions at intersections;
 - ii) continuous raised footpath thresholds at major intersections;
 - iii) tight corner radii; and
 - iv) opportunities for tree plantings;
 - (c) discourage inappropriate through traffic;
 - (d) manage potential vehicle and pedestrian conflict at the interface of parks, shared zones, schools and streets; and
 - (e) manage access to the Tram Sheds by heavy vehicles for servicing of relevant uses.

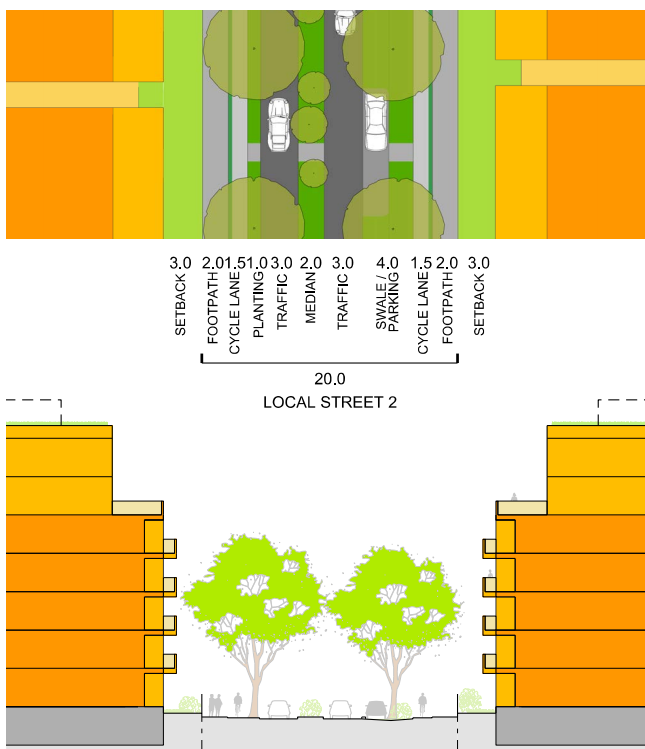


Figure 11: Primary Street – with cycleway

Right of Way: 20 metres

Carriageway: 1 travelling lane in each direction. 2m wide median with low planting

Cycle Lane: 1.5m dedicated cycle lane in each direction separated from carriageway by 1 metre of planting or swale

Footpath: 2 metres each side

Swale: 4 metre swale with street trees and intermittent parking bays

Landscape Character: Street trees are planted at intervals of 15m to provide shade for footpaths and to visually narrow the carriageway. Consideration should be given to differentiating between streets, for example by using different street tree species.

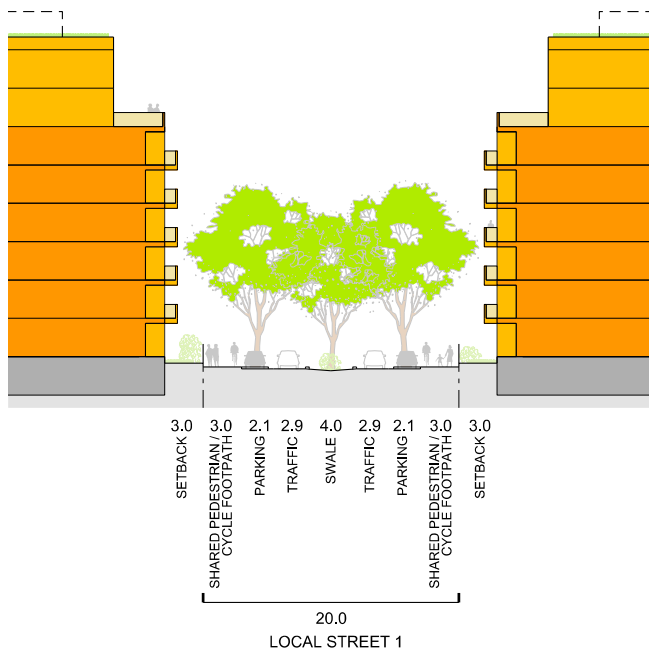


Figure 12 Primary Street – no cycleway

Street Setbacks: 3 metres

Right of Way: 20 metres

Carriageway: 1 travelling lane and 1 parking lane in each direction.

Cycle Lane: Shared pedestrian / cycle footpath

Footpath: 3 metres each side

Swale: 4 metre swale with tree planting

Landscape Character: A boulevard treatment with trees planted in parking bays and in the swale at intervals of 2 parking spaces to provide shade for footpaths and to visually narrow the carriageway.

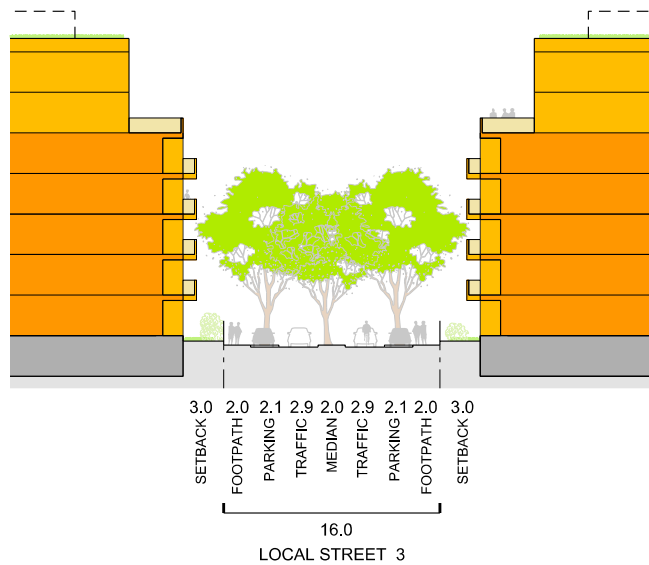


Figure 13: Secondary Street

Right of Way: 16 metres

Carriageway: 1 travelling lane and 1 parking lane in each direction. 2m wide median with street trees

Cycle Lane: On street

Footpath: 2 metres each side

Landscape Character: Street trees are planted in parking bays at intervals of 2 parking spaces to provide shade for footpaths and to visually narrow the carriageway.

Consideration should be given to differentiating local streets from each other, for example by using different street tree species.

(18) Pedestrian and bicycle access throughout the site, including connections from roads to public open space, is to be designed to:

- (a) be direct and accessible to all;
- (b) be easily identified by users;
- (c) have a public character;
- (d) include signage advising of the publicly-accessible status of the link and the places to which it connects;

- (e) be clearly distinguished from vehicle accessways, unless they are purpose built shareways;
 - (f) allow visibility along the length of the link to the public domain at each end;
 - (g) align with breaks between buildings so that views are extended and the sense of enclosure is minimised;
 - (h) include materials and finishes (paving materials, tree planting, furniture etc.) integrated with adjoining streets and public spaces and be graffiti and vandalism resistant;
 - (i) include landscaping to assist in guiding people along the link while enabling long sightlines;
 - (j) be well lit to safety standards (AS1158 pedestrian lighting) with use of metal halide (white) lighting, giving regard to highlighting any unique architectural or public art features;
 - (k) be open to the sky along the entire length; and
 - (l) be accessible 24 hours a day.
- (19) Connections from the east-west streets to public open space or where roads are closed to vehicular access are to allow for:
- (a) public access whether or not the land is public; and
 - (b) are to be designed so that the access is clearly public and encourages pedestrian and cycle traffic to and from the open space and the adjoining public roads.
- (20) All streets are to accommodate stormwater flows and appropriate water sensitive urban design elements and which are to be designed and implemented to the satisfaction of Council.
- (21) All roads, footways and street lighting are to be designed and constructed in accordance with Council's standard policies, specifications and design codes and relevant Australian Standards.
- (22) Where works are proposed to change or create roads, footways, stormwater drains or public domain, the applicant is to submit with a development application:
- (a) detailed levels and longitudinal and cross sections for all roads and footways;
 - (b) detailed designs demonstrating how the proposed development will connect into the existing Council stormwater system; and
 - (c) detailed design demonstrating the function and capacity of any rain gardens or swales.

(23) Street trees are to be planted along all new roads.

Note: Refer to the Council's Street Tree Master Plan for a list of appropriate tree species. The Street Tree Master Plan is available at www.cityofsydney.nsw.gov.au

(24) New streets are to integrate essential services underground and within the street reservation.

(25) Street furniture is to be compatible with the range of street furniture in the Public Domain Code and relevant Council public domain plans including street lights, street signs (as appropriate), bicycle parking stands, bus shelters, seating, and rubbish bins.

(26) New streets and lanes 6m or wider and pedestrian paths and cycleways within the public domain are to be dedicated to Council.

Note: Dedication of lesser streets, share ways, laneways and walkways is to be at the discretion of the consent authority, but remain subject to minimum conditions that the public right of way be maintained.

3.4 Staging

Objectives

- (a) Ensure that the redevelopment of the Harold Park neighbourhood is coordinated in an orderly manner by a stage 1 development application or similar to ensure the activities of the adjacent sites/ neighbours are not adversely impacted upon.
- (b) Address stormwater management at the outset of construction works, thus ensuring adjacent areas are not adversely affected.
- (c) Ensure that development can occur independently, without the reliance upon infrastructure from adjacent sites.
- (d) Ensure that gross floor area and built form is appropriately distributed across the site.
- (e) Address traffic and vehicular access matters for site so that impacts on local roads can be managed.
- (f) Ensure that any land to be dedicated for a public benefit under a planning agreement is consistent with the objectives for that land and the planning agreement.

Definitions

For the purposes of this DCP:

A **stage 1 development application** means a staged development application within the meaning of section 83B of the *Environmental Planning and Assessment Act 1979* for the land to which this DCP applies.

Provisions

- (1) A stage 1 development application should be approved for the land prior to undertaking any development. Nothing in this clause prevents or restricts an applicant from making and pursuing any development application concurrently with, or subsequent to the stage 1 development application, provided that the development application is consistent with the stage 1 development application.
- (2) A staging plan consistent with the objectives of this section of the DCP is to be provided with any stage 1 development application to the satisfaction of the Consent Authority.
- (3) The open space is to be provided at final design levels and dedicated to Council prior to the issuing of any occupation certificates or in accordance with a planning agreement for the site.

Section 4: Heritage

4.1 Harold Park Paceway

Statement Of Significance

The Harold Park Paceway is of historical significance for its use as a place for horse racing since 1890; as arguably the oldest continuously operating paceway track in NSW (since 1902); as the first track in NSW to have a tote betting system (in 1917); and one of the first racetracks to have night-time racing.

Due to almost continual and substantial redevelopment and upgrading of the Paceway facilities, there are few remaining structures dating from the early to mid 20th century, and therefore the historical significance of the Paceway is generally not demonstrated in the physical fabric of the place.

The significance of heritage elements on the Paceway Precinct is shown on the **Heritage Significance Map**.

Objectives

- (a) To ensure the history of the Paceway Precinct is interpreted to the public.
- (b) To ensure all structures within the Paceway Precinct are archivally recorded in accordance with NSW Heritage Council guidelines.
- (c) To ensure that the Paceway cutting is visible and its significance can be interpreted.

Provisions

- (1) An Interpretation strategy is required to accompany a Development Application involving the Paceway Precinct and should be consistent with the guidelines provided in the **Heritage Conservation and Interpretation Guidelines – Harold Park Paceway Map**.
- (2) The Interpretation Strategy is to include an implementation plan linking interpretation works to particular development applications and which are to be implemented to the satisfaction of the Consent Authority prior to the issue of an occupation certificate.
- (3) A development consent condition on any DA approval for the site will require Archival Recording in accordance with NSW Heritage Council guidelines, of all structures proposed for demolition.
- (4) The Lillie Bridge Branch is to be archivally recorded before and during any realignment works. If original timber components of the branch are discovered the proponent is to contact Sydney Water's Heritage Adviser (Archaeology).

4.2 Former Rozelle Tram Depot

Statement Of Significance

The former Rozelle Tram Depot was an important component of the Sydney tramways system which was in its period one of the largest and most sophisticated public tramway systems in the world. The Rozelle Tram Depot, originally the second largest depot in the Sydney tramway system, provides dramatic evidence of the size, significance, operation and organisation of the tramways system, having had 650 staff at its operational peak.

The Tram Sheds are of aesthetic and technical significance as an austere and functional application of the Federation Free Style with impressive industrial-scale size and massing (both exterior and interior), using modular design units and concepts. The tram sheds feature strongly detailed parapets and encircling walls, mostly set within an impressive cutting, and a large and impressive interior with decorative structural elements. The attached Federation Queen Anne style Office & Amenities Block is a well designed building which provides a domestic scale contrasting with the tram sheds. The Water Tank adjacent to Maxwell Road is of heritage significance as part of an early Grinnell automatic fire sprinkler system, which saved the Tram Depot from fire in 1919.

The Rozelle Tram Depot as a whole is rare as the largest and most complete of three remaining intact Sydney tram depots. The integrity of the fabric of the Rozelle Tram Depot is rare, retaining internal structure and fittings, offices, water tank and forecourt. The forecourt and tram accessway are essential to the significance of the site as they illustrate the operation of the whole site as a tram depot with its systems and processes. The Rozelle Tram Depot should be conserved, adaptively reused and interpreted.

The significance of heritage elements of the Former Rozelle Tram Depot is shown on the **Heritage Significance Map**.

Objectives

- (a) To ensure conservation and retention of the former Tram Depot including the tram sheds, curtilage, the administration building, four nominated trams and the water tank.
- (b) Ensure that the adaptive reuse of the Tram Depot conserves its heritage values.
- (c) To facilitate a range of uses that support the conservation of the Tram Depot, allow for the appreciation of its heritage significance, and make it a hub of the Harold Park redevelopment.
- (d) To ensure that adaptive reuse and development within the heritage curtilage respects the heritage significance of the Tram Sheds building and its setting.
- (e) To facilitate public access to the site and the interior of the sheds.
- (f) To ensure the history of the Tram Depot is interpreted to the public.

- (g) To ensure the significant view of the western elevation of the tram shed from The Crescent along the former Canal Road is retained and enhanced.
- (h) To ensure the tram forecourt is developed and interpreted in a manner which enables appreciation of its significance and historic function.
- (i) To ensure the tram forecourt provides an appropriate setting for the interpretation of the history of the Tram Depot.

Provisions

- (1) A development application for adaptive reuse of the Tram Depot is to include:
 - (a) An updated Conservation Management Plan including a Schedule of Conservation Works and Ongoing Maintenance Strategy;
 - (b) A Structural Engineering Report, prepared by a suitably qualified and experienced heritage architect and engineer, assessing the current condition of the Tram Sheds and informing the Schedule of Conservation Works;
 - (c) An Interpretation Strategy based on the guidelines provided on the **Heritage Conservation and Interpretation Guidelines – Tram Depot Map**; and
 - (d) The Schedule of Conservation Works, Ongoing Maintenance Strategy and the Interpretation Strategy are to be implemented to the satisfaction of Consent Authority prior to the issue of an occupation certificate.
- (2) The Tram Sheds, consisting of the 1909 and 1904 sheds and the 1904 office and amenities building, are to be retained, conserved and adaptively reused.
- (3) Compatible uses of the Tram Sheds include but are not limited to community uses, commercial uses (e.g. offices, professional consulting rooms) and retail uses (e.g. shops, supermarket). Uses should allow for public access.
- (4) Adaptive reuse of the Tram Sheds is to be consistent with an updated and adopted Conservation Management Plan, **Heritage Conservation & Interpretation Guidelines - Tram Depot Map** and the following:
 - (a) The gross floor area of development within the Tram Sheds should not exceed 11,000m²;
 - (b) Maintain overall building form, parapet and sawtooth roof, including skylights, structure, lighting and internal columns;
 - (c) In the 1904 Shed – conserve the existing internal structure and at least 3 adjacent bays (front to rear). Mezzanine shall not exceed 35% of the floor plate of the 1904 Shed and is to stand off the existing internal structure;

- (d) In the 1909 Shed – Mezzanines shall not exceed 75% of the floor plate of the 1909 Shed. Location of the mezzanines is to allow for the interpretation of the length and height of the space. Internal columns may be removed, repaired and reinstated in their original locations;
- (e) Basement parking may be provided under the 1909 Shed provided any structural works do not compromise the ongoing conservation of the building; and
- (f) Adaptive reuse of the 1904 office and amenities (ancillary) building should enable interpretation of the original room layout. Community and/or commercial office uses are preferred.

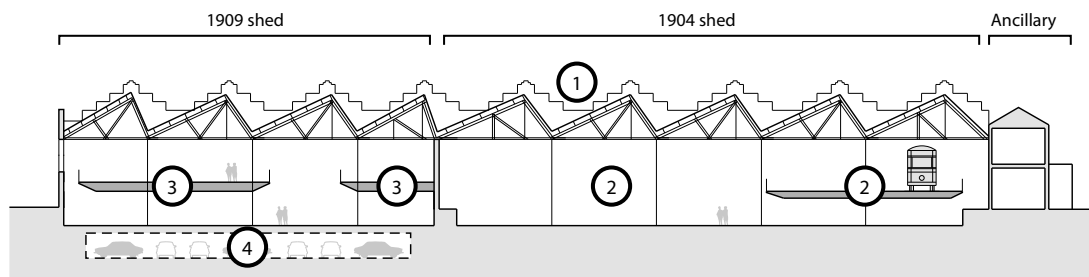


Figure 14: Adaptive Reuse of the Tram Sheds

1. Maintain the overall form of the Sheds including the roof and the structure
 2. 1909 Shed with indicative mezzanine layout
 3. 1904 Shed with indicative mezzanine layout
 4. Potential basement parking
- (5) The main western elevation of the Tram Sheds should be largely open to reinstate and interpret the original character and function of the elevation, with existing steel doors removed and, where necessary, replaced with glazed infill. Active uses should be implemented along the western frontage.
 - (6) New openings should be minimised on the northern and southern elevations of the Tram Sheds. New openings may only be provided as necessary to support a viable adaptive reuse of the Sheds. New openings are to maintain character of the elevations as a secondary elevation and respond to the rhythm and scale of the building, including its bays and articulation.
 - (7) Underground parking is permitted below the 1909 Shed provided:
 - (a) access is discreet and does not detract from the heritage significance of the building; and
 - (b) it does not compromise the structural integrity or reduce the heritage value of the structure above. Development applications will require the submission of a report from an appropriately qualified and experienced structural engineer to confirm structural adequacy.

- (8) Access from the Tram Sheds to the Jubilee Park Light Rail Station may be provided in the north eastern corner of the 1909 Sheds and may include a lift overrun, stairs and escalators, as required, provided there is no impact to significant fabric, new openings in the northern or eastern elevations are sympathetic to the character of the building and any new structures are not visually intrusive.
- (9) Solar panels may be installed on the roof of the Tram Sheds.
- (10) Proposals for subdivision (including strata subdivision) of the Tram Sheds should not impact upon the future conservation and adaptive reuse provisions of this DCP.
- (11) At least one of the following Trams is to be retained, conserved and interpreted within the Rozelle Tram Depot and its curtilage: Tram R 1753 (c. 1934); Tram R 1923 (c.1935); Tram R 1995 (c.1951); and Tram R1 2050 (c.1952). The other three Trams may be relocated where the consent authority is satisfied that the relocation:
- is necessary for and will enable the conservation of a Tram;
 - provides for the adaptive reuse or interpretation of a Tram; and
 - includes suitable arrangements to ensure the security and protection of a Tram.
- (12) A Schedule of Conservation Works and an Ongoing Maintenance Strategy for the Trams is to be submitted with any development application for the Tram Sheds and implemented to the satisfaction of Consent Authority prior to issue of an occupation certificate for the Tram Sheds. The Schedule of Conservation Works is to identify any procedures, process or arrangements for the conservation of the Trams, to the satisfaction of the Consent Authority, including any proposals for the temporary or permanent relocation of the Trams to facilitate the conservation of the Tram Sheds or the Trams.
- (13) The bus and remaining two trams within the Tram Sheds (not associated with the Rozelle Tram Depot) are to be offered, respectively, to the Tempe Bus & Truck Museum (due for relocation to Leichhardt bus depot) and the Loftus Tram Museum. This may form a condition of consent for any development approval for the site.
- (14) The Water Tank adjacent to Maxwell Road may be dismantled and moved for the purposes of providing vehicle access but is to be reinstated and conserved.
- (15) The Tram Depot forecourt is to be retained as an open area in a unified form which:
- allows interpretation of its former industrial character;
 - retains significant views to the west elevation of the tram sheds; and
 - encourages active uses.

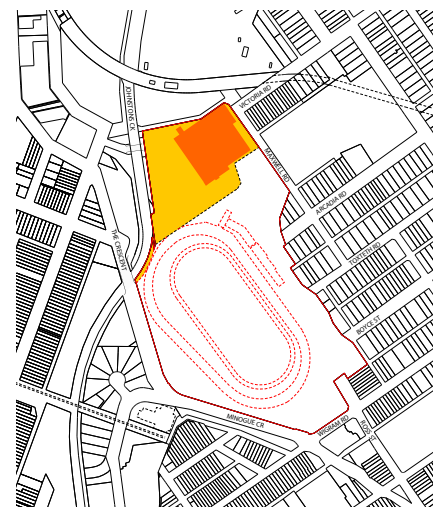


Figure 15: Significant curtilage of the Tram Depot.

- (16) The Tram Depot forecourt may accommodate soft and hard landscaping, removable, retractable or temporary shade structures adjacent to the Tram Sheds and lighting so as not to obstruct views to the west elevation of the tram sheds.
- (17) New buildings within the heritage curtilage of the Tram Depot (the former marshalling yard) are to be limited to two storeys in height and will only be permitted in the location of former buildings as shown on the **Heritage Conservation and Interpretation Guidelines - Tram Depot Map**.
- (18) The locations of former buildings within the heritage curtilage of the Tram Depot are the preferred locations for any new structures.
- (19) The original tram accessway from The Crescent is to be defined and interpreted as an accessway, with the tramway fencing adjacent to Johnston's Creek being retained and conserved.

Section 5: Building Use, Form and Design

5.1 Land Uses

Objectives

- (a) To create a neighbourhood hub based on transit orientated development principles and support the adaptive reuse of the Tram Sheds.

Provisions

- (1) The preferred location for non-residential uses is, in order of priority, within the Tram Sheds and then in close proximity to the Tram Sheds and light rail station.
- (2) Where the floor space for non-residential uses exceeds that which is permitted by the heritage controls of this DCP to be located within the Tram Sheds, that additional non-residential floor space should be located within close proximity to the Tram Sheds and the light rail station.

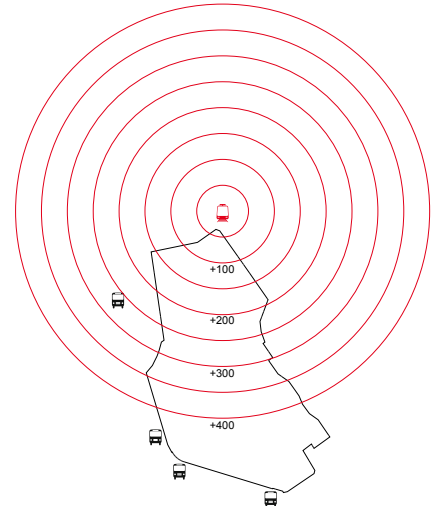


Figure 16: The location of non-residential uses should be based on principles of Transit Oriented Development.

5.2 Centres Hierarchy and Retail Uses

Objectives

- (a) Ensure development supports the viability and vibrancy of centres identified in the State Government's Subregional Strategies.
- (b) Provide adequate and appropriate retail development to meet the needs of workers and residents.
- (c) Ensure that retail development does not have an adverse impact on one or more centres that undermines the quality of any centre or its role in the economic or social life of the community.

Provisions

- (1) Where the gross floor area of all retail premises exceeds 7,500m² or the gross floor area of a proposed supermarket exceeds 2,000m² the consent authority may require the applicant to prepare an Economic Impact Assessment to demonstrate that the proposed development:
 - (a) is consistent with the objectives of this DCP and this section of the DCP;
 - (b) will not have a significant impact on the viability or vitality of nearby centres identified in a Subregional Strategy;
 - (c) is consistent with wider planning strategies applying to the Glebe, Annandale and Forest Lodge areas;
 - (d) results in a 'net community benefit'; and
 - (e) will maintain and support the function and role of existing centres identified in Subregional Strategies.

A Net Community Benefit Test should be undertaken in accordance with guidelines in the Department of Planning's Centres Policy.

5.3 Building form and layout

Objectives

- (a) Minimise the apparent height of development when viewed from Minogue Crescent, The Crescent and Wigram Road.
- (b) Ensure new development does not significantly impact on the privacy of surrounding developments.
- (c) Ensure new development does not significantly impact on the solar access of surrounding developments.
- (d) Provide best practice environmental design and active and passive ESD systems.
- (e) Provide a diversity of building characters within the same street block to create visual variety.
- (f) Ensure that the grain, rhythm and palette of materials used in the design of new buildings respond to the character of the surrounding area.
- (g) Provide a range of dwelling types and sizes to house a diverse population including accessible and adaptable dwellings.
- (h) Provide a built form that relates to the scale of the public domain and creates strong definition for streets and public places.
- (i) Ensure that proposed buildings do not obstruct public views along streets.
- (j) Provide neighbourhood services near public transport nodes.
- (k) Ensure the use of high quality façade design and finishes through-out the neighbourhood in particular where built form is viewed at the termination of a vista.

Provisions

- (1) The layout of development blocks and buildings should be consistent with the following principles:
 - (a) buildings should address the street and be aligned with streets to form broken perimeter blocks;
 - (b) full height gaps should be provided between buildings for visual connections between street and private open spaces within blocks;
 - (c) buildings should step down in height toward the west and south adjacent to existing smaller scale development;
 - (d) achievement of maximum gross floor area and compliance with maximum building depth and sunlight access standards; and
 - (e) building separation for visual and acoustic privacy.



Figure 17: In principle, the height of buildings is equivalent to the height of surrounding development.

- (2) The built form layout is to be generally consistent with that shown in **Figure 18** and described in the *Harold Park Urban Design Study* (Government Architect's Office, May 2010). Alterations to that layout will be considered where they demonstrate an improved public benefit and design excellence having regard to:
- The matters for consideration in the design excellence provision of the Sydney LEP (Harold Park) 2011;
 - The objectives, character statement and principles of this DCP;
 - The degree to which any alterations may enhance or detract from public enjoyment of the public benefits associated with the development.

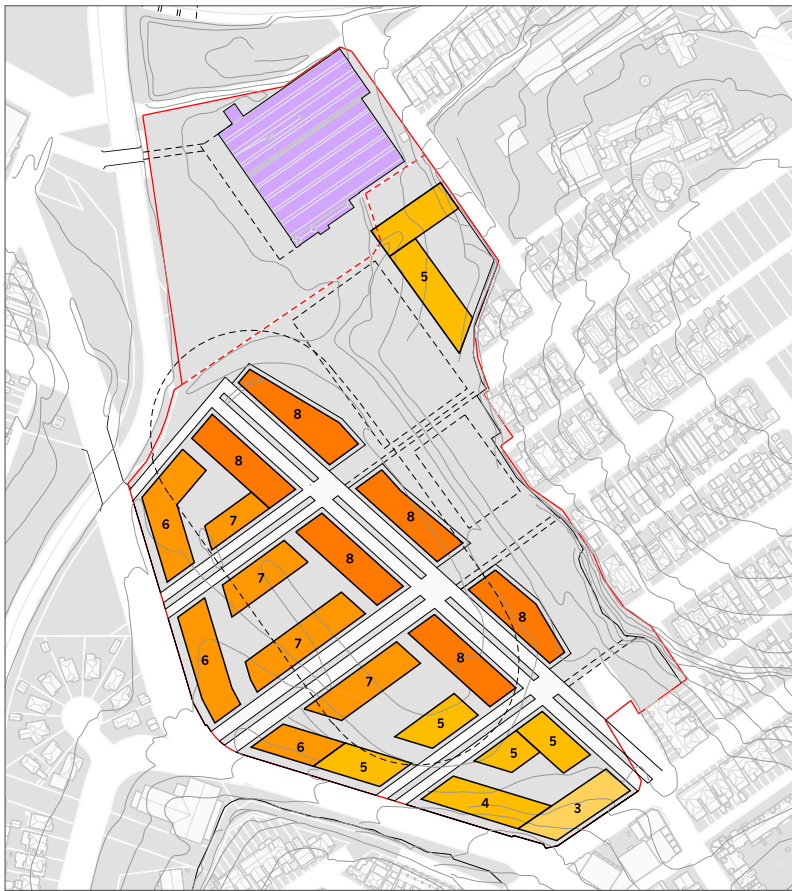


Figure 18: Indicative built form layout. (Government Architect's Office)

- Any stage 1 development application or application for subdivision is to identify how the permitted gross area is to be distributed throughout the site including any floor space allocated for affordable housing and the amount of BASIX Bonus floor space to be claimed for each building.
- The ground floor level is to be as close as possible to the ground level of the adjacent public domain at any point. The maximum height in metres of the ground level above the flooding planning level is 1 metre (see **Figure 19**).

- (5) The maximum height in storeys for a building is shown on **Height of Buildings – Storeys Map** (also see **Figure 19**).

Note: The absolute maximum height of a building is set by the relevant provision of the LEP and expressed as an Australian Height Datum Reduced Level (RL). All DCP controls are within this height limit.

Refer to Section 6.3 Stormwater and Water Sensitive Urban Design for Flood Planning Levels.

- (6) The minimum setback from the public domain or street frontage boundary is the *Primary Building Setback* and is 3 meters (see **Figure 20**).

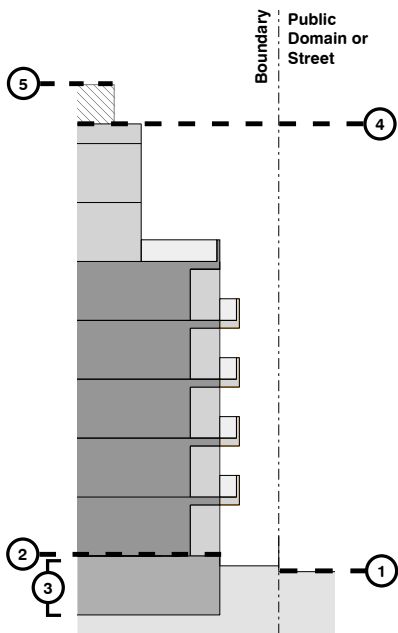


Figure 19: Building Height Controls

1. Future public domain level
2. Ground floor level – should be within 1m of the flood planning level
3. Basement level
4. Maximum building height
5. Maximum building height plus building services (less than LEP Height of Buildings control)

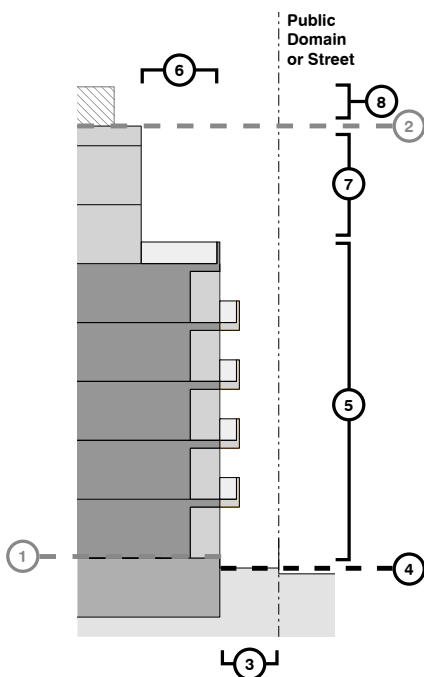


Figure 20: Building Form Controls

1. Ground floor level
2. Maximum Building Height
3. Primary Building Setback
4. Primary Building Setback Ground Level
5. Street Frontage Height
6. Secondary Building Setback
7. Building form above Street Frontage Height
8. Building services

- (7) Development is to be in accordance with Table 1 which shows the relationship between the *height of building in storeys* (as shown on the **Height of Buildings Map**) and the height of buildings in metres, street frontage height and secondary building setbacks.

Table 1: Height of buildings

Height of building in storeys above ground level (excluding semi-basement levels)	Maximum building height in metres (including parapets but exclusive of building services) (Figures 19 and 20)	Street frontage height in storeys (Figures 20)	Maximum Street frontage height in metres (Figures 20)	Minimum secondary building setback* for buildings (Figures 20)
8 storeys	25.5m	6 storeys	20m	4m
7 storeys	22.5m	5 storeys	17m	4m
6 storeys	19.5m	5 storeys	17m	3m
5 storeys	16.5m	4 storeys	14m	3m
4 storeys	13.5m	3 storeys	11m	3m
3 storeys	10.5m	3 storeys	10.5m	0m
2 storeys	7.5m	2 storeys	7.5m	0m
1 storeys	4.5m	1 storeys	4.5m	0m

* The *secondary building setback* is the minimum setback from the public domain or street frontage boundary for all storeys above the street frontage height.

- (8) A secondary building setback is not required for any building that directly fronts public open space with a width greater than 25 meters.
- (9) The ground level of the area between the primary building setback and the public domain or street boundary should not be greater than 1 metre above the ground level of the adjacent public domain.
- (10) Buildings are to be built to the Primary Building Setback for at least 65% of the length of each street frontage (see **Figures 21** and **23**).
- (11) Balconies, sun shading devices and architectural features below the street frontage height may extend up to 1 metre beyond the primary building setback provided the sum of the length of all such features, measured parallel to the street frontage, does not exceed 65% of the length of the elevation at any floor level (see **Figures 21** and **23**).

- (12) Balconies, screens and retractable sun shading devices at the first level above the street frontage height may occupy an area equal to the plan of the floor immediately below (see **Figure 21**).
- (13) Sun shading devices may extend up to 300mm beyond the secondary building setback (see **Figure 21**).

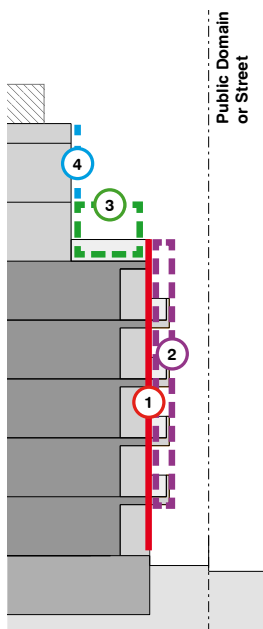


Figure 21: Building Alignment and Articulation - Section

1. Primary building setback (red) – buildings are to be built to at least 65% of the setback along the street or public domain frontage.
2. Area for balconies, sun shading devices and architectural elements - up to 1 metre past primary building setback.
3. Area for balconies, screens and retractable shading devices at the first level above the Street Frontage Height - equal to the plan of the floor immediately below.
4. Area for sun shading devices on levels above the street frontage height - up to 300mm past the secondary building setback.

- (14) Roof forms, plant and lift overruns are to be designed to be simple compact forms that are visually unobtrusive.
- (15) Provision of additional unroofed communal open space on roof tops is encouraged.
- (16) All development along Minogue Crescent, The Crescent and the new public open space are to be of the highest architectural quality and reflect the importance of the entry views they relate to and the scale of spaces that they have frontages to.
- (17) To achieve diversity and interest in the architectural character of the development:
 - (a) Architectural expression within each development block and on each street or public domain frontage of a development block should be varied and present as group of buildings rather than one building designed by a single designer or company;
 - (b) At least two architectural or design firms should be used within each street block; and
 - (c) Buildings designed by the same architectural or design company should not be adjacent or opposite to each other.



Figure 22: Walsh Bay Apartments (Mirvac)
Example building design showing setback upper storeys, defined street wall and articulated façade.

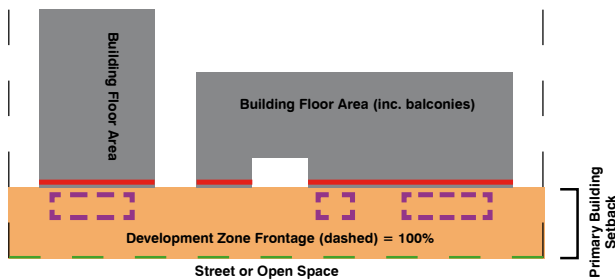


Figure 23: Building Alignment and Articulation – Plan

The sum of the length of the red lines should equal at least 65% of the length of the green dashed line at each storey for each street or public domain frontage.

The sum of the linear length of the purple dashed lines, measured parallel to the street or public domain frontage (the green dashed line), may not exceed 65% of the total length of the red lines.

5.4 Application of NSW Residential Flat Design Code 2002

Objective

- (a) Ensure development is consistent with the NSW Residential Flat Design Code 2002 (RFDC).

Provision

- (1) In addition to the provisions within this DCP, the 'designing the controls', 'control checklists' and 'rules of thumb' within the RFDC are adopted by this DCP for residential flat development. Applicants are required to use the RFDC and this DCP when preparing their development proposal.

5.5 Building typology, design and dwelling mix

Objectives

- (a) Ensure the provision of a range of housing types and flexibility in building design and dwelling layout to accommodate future changes in use and internal configurations;
- (b) Ensure development contains a suitable mix of dwellings that encourages social diversity within the development and addresses the needs for potential residents and households.
- (c) Encourage the provision of courtyards in suitable locations which supplement, and are visually connected to, the public open space network of Harold Park; and
- (d) Ensure that buildings exhibit high design quality, minimise overshadowing of neighbouring buildings, and public and private open spaces.

Provision

- (1) The dominant dwelling type in the south eastern portion of the site is to be row houses and maisonettes.

Note: A maisonette is a 4 storey, 2 dwelling development with 2 strata title owners.

- (2) The minimum floor to ceiling height (clear of obstruction) of any parking levels above ground is to be 3.3m to facilitate the conversion of above ground car parking to other uses.

- (3) To enable a flexible use of buildings, the floor to ceiling height of mixed use buildings – measured from the finished floor level to the finished ceiling level – is to be 3.6m for the ground floor.
- (4) The floor to ceiling height for habitable spaces of residential developments is to be 2.7m.
- (5) Development that creates more than 20 dwellings is to provide dwellings within the following proportional ranges:
 - (a) Studio dwellings – 5 to 10% of total dwellings;
 - (b) 1-bedroom dwellings – 10 to 30% of total dwellings;
 - (c) 2-bedroom dwellings – 40 to 75% of total dwellings; and
 - (d) 3-bedroom dwellings or larger - 10 to 30% of total dwellings.
- (6) Up to 20% of affordable housing dwellings may be up to 10% smaller than the size specified in the Residential Flat Design Code. Minimum unit size is subject to amenity and demonstrated usable furniture layout.
- (7) New development is to include a variety of internal designs that will allow adaptation to different uses over time by:
 - (a) internal walls that are can easily be removed;
 - (b) locating services so that they do not impede the future conversion of the unit into a different configuration; and
 - (c) incorporating the ability to separately occupy parts of individual units over time.
- (8) Dwellings comprising two or more bedrooms may be configured as two adjacent apartments provided:
 - (a) both apartments are accessed from a shared private lobby or have dual access;
 - (b) where a strata plan exists, both apartments are contained within a single strata unit; and
 - (c) in the case of a heritage item, it does not impact on significant fabric or spaces.
- (9) Regular building breaks are to be provided along the street frontage to encourage visual permeability and to provide a visual connection to any courtyard.
- (10) Courtyards are to be designed and landscaped to:
 - (a) enhance views from residential apartments and create recreational opportunities;
 - (b) be the focal point of a site and incorporate public art and water features where appropriate;



Figure 24: Maisonette type dwellings
Victoria Park (Turner Associates)

- (c) where the courtyard is private and does not facilitate a public through route, be highly visible from the public domain through frequent building entrances or building separation; and
- (d) in residential buildings the primary private communal open space for the development should be between 25% and 30% of the site area except for buildings that are located immediately adjacent to public open space and the public open space can reasonably provide for the communal open space needs of the development.

5.6 Safety and design

Objective

- (a) Minimise opportunities for criminal and anti-social behaviour.

Provisions

- (1) Building design is to maximise opportunities for casual surveillance of the public domain and any semi-public or common open space, particularly adjacent to public open space.
- (2) Ground floor dwellings adjacent to public open space are to have an “address” or “front door” that is visible and directly accessible from the pedestrian paths within the public open space.
- (3) Active spaces within buildings are to be located to maximise casual surveillance of the public domain.
- (4) Surveillance is to be provided to internal communal spaces in residential developments (such as playgrounds, clothes lines, barbeque and mail box areas) where they are not visible from a public street. These areas are to be located to be visible from inside some of the dwellings of that development. Windows of living rooms and kitchens should be located for surveillance of such areas.
- (5) A high level of surveillance is required from upper levels of building adjacent to public open space.
- (6) The detailed design of the external areas of the ground floor is to minimise blind-corners, recesses and other areas which have the potential for concealment.
- (7) Building entries are to be clearly visible, unobstructed and easily identifiable from the street, other public areas and other development.
- (8) Where practicable, lift lobbies, stairwells and corridors are to be visible from public areas by way of glass panels or openings.
- (9) The design of individual unit entries is to allow an occupant to view a visitor without opening the door.

- (10) Ground floors of non-residential buildings, the non-residential component of mixed use developments, and the foyer areas of residential buildings, are to be designed to enable surveillance opportunities from outside to inside the building at night. These areas are to be adequately illuminated.
- (11) Lighting is to be provided to all pedestrian paths between public and semi-public or communal areas, parking areas and building entries.
- (12) Development is to clearly delineate by way of design and/or signage those parts which are open to public access; semi-public and/or communal; and private.
- (13) Where dwelling units have individual main entries directly from a public or semi-public space, the entry is to include a clearly defined transitional space (such as a porch, verandah or awning) between public and private areas.
- (14) Public spaces are to include signage indicating the direction of pathways and facilities, including taxi ranks, bus stops, communal facilities and community facilities, where appropriate.
- (15) In circumstances where designs for passive surveillance alone cannot achieve the objective of this provision, a development is to incorporate physical features that limit access to legitimate users and obstruct opportunities for access by others including but not limited to:
 - (a) physical barriers such as grills, bars, fences, and locked gates; and
 - (b) security devices such as intercoms, entry phones, keypads, security cards or other electronic access.
- (16) The design of building details, including the provision of fencing, drainpipes and landscaping, is to be such that illegitimate access is not facilitated by the inadvertent provision of foot or hand-holds, concealment and the like.

5.7 Sun access

Objectives

- (a) Ensure new developments do not result in a deterioration of direct sunlight access to public spaces and neighbouring properties; and
- (b) Establish standards for daylight and direct sunlight access in new developments, particularly living areas and open space.

Provisions

- (1) Development must result in:
 - (a) neighbouring developments receiving whichever is the lesser of:
 - i) at least three hours of direct sunlight to 50% of the primary private open space and into living rooms between 9am and 3pm on 21 June; or

- ii) the existing levels of direct sunlight between 9am and 3pm on 21 June;
 - (b) proposed apartments receiving a minimum of two hours of direct sunlight between 9am and 3pm on 21 June onto at least 1m² of living room windows and to at least 50% of the required minimum area of private open space; and
 - (c) 30% of required common open space receiving at least two hours of direct sunlight between 9am and 3pm on 21 June; and
- (2) The development application is to include solar diagrams that, as a minimum, demonstrate compliance with the above provision and include plans and elevations showing the shadows of the proposal at each hour between 9am and 3pm on 21 June.
 - (3) Where the consent authority considers that the level of daylight access to living rooms of proposed dwellings may be inadequate, the applicant may be required to provide a Daylight Report.
 - (4) Daylight may be accessed by way of lightwells provided the lightwell:
 - (a) is consistent with the building separation and daylight access requirements of the RFDC;
 - (b) does not provide the only source of daylight to a habitable room;
 - (c) is fully open to the sky;
 - (d) where enclosed on all sides, is directly connected with the ground to facilitate ventilation;
 - (e) where shared with other uses such as indoor atria, voids over entry lobbies or indoor planted areas, do not generate undue noise or visual privacy effects; and
 - (f) provides a reasonable outlook from windows in dwellings and does not include exposed services installations.
 - (5) Shading devices are not to substantially reduce potential for daylighting or views.
 - (6) Glazing is to contain in-built thermal control properties. Extensive glazing that is unprotected from mid-summer sunlight is to be avoided. Reliance upon high performance tinting or glazing as a mid-summer sun control device is not appropriate.
 - (7) Landscaping as a sun control is to be carefully considered and may include:
 - (a) wide canopied deciduous trees, vines and pergolas to the north of a building that provide shade and reduce glare during warm months and allow solar penetration during cool months; and

- (b) deciduous vegetation to the west and east of buildings to prevent glare, reduce heat intake and the effects of prevailing winds.

5.8 Reflectivity

Objectives

- (a) Ensure that building materials do not lead to hazardous, undesirable or uncomfortable glare to pedestrians, motorists, occupants of surrounding buildings and others;
- (b) Ensure significant increased heat-loading is not imposed on other buildings.

Provisions

- (1) The placement, orientation and configuration of building facades, and the facade materials used are not to result in glare that threatens safety or causes discomfort to pedestrians, motorists and others.
- (2) Light reflectivity from building materials used on facades is not to exceed 20%.

Note: The consent authority may require as part of the development application, the submission of a report that analyses potential glare and reflectivity from a proposed building design if it is considered that the proposal may not comply with this provision.

5.9 Acoustic privacy

Objectives

- (a) Achieve and maintain minimum standards of acoustic privacy in residential dwellings; and
- (b) Ensure acoustic impacts on surrounding uses are mitigated in noise generating developments.

Provisions

- (1) An acoustic assessment, prepared by a specialist with qualifications and experience necessary to render them eligible as a full member of the Australian Acoustical Society (AAS), Institution of Engineers Australia (IEA), or the Australian Association of Acoustical Consultants (AAAC), is to be submitted with all development applications. The assessment is to address, at a minimum:
 - (a) impacts on acoustic privacy of proposed residential uses from any surrounding noise sources such as road traffic and commercial and retail uses;
 - (b) impacts on acoustic privacy of surrounding residential uses from any proposed commercial and retail uses; and

- (c) the impact of the development on the surrounding area, through mechanical services, earthworks, excavation and construction phases of development.

Note: Development adjacent to a road that may have daily vehicle movements of more than 40,000 vehicles, the development proposal must also comply with *State Environmental Planning Policy (Infrastructure) 2007*.

- (2) Where possible, noise is to be attenuated at its source, with applications demonstrating that proposed attenuation measures:
 - (a) have the consent of relevant parties associated with that noise source; and
 - (b) will endure for the life of the development proposal.
- (3) Dwellings are to be constructed so that in a naturally ventilated situation the repeatable maximum LAeq (1 hour) level does not exceed:
 - (a) for closed windows and doors:
 - i) in bedrooms between 10pm and 7am, 35dB; and
 - ii) in main living area at any time, 45dB.
 - (b) for open windows and doors:
 - i) in bedrooms between 10pm and 7am, 45dB; and
 - ii) in main living area at any time, 55dB.
- (4) Where natural ventilation of a room cannot be achieved, the repeatable maximum LAeq (1hour) level when doors and windows are shut and mechanical ventilation/ air conditioning is operating in a dwelling it is not to exceed:
 - (a) in bedrooms between 10pm and 7am, 38dB; and
 - (b) in main living area at any time, 48dB.
 - (c) These levels are to include the combined measured level of noise from both external sources and the ventilation system operating normally.
- (5) To limit the transmission of noise to and between dwellings, all floors are to have a weighted standardised impact sound pressure level ($L'_{nT,w}$) less than or equal to 55 where the floor separates a habitable room and another habitable room, bathroom, toilet, laundry, kitchen, plant room, stairway, public corridor, hallway and the like.
- (6) The overall design and layout of dwellings is to include, where appropriate:
 - (a) a limit on window size and number where oriented towards an intrusive noise source;

- (b) seals at entry doors, to reduce noise transmission from common corridors or outside the building;
- (c) minimisation of the number of party (shared) walls with other dwelling units;
- (d) using storage, circulation zones, and non habitable rooms within a dwelling to buffer noise from external sources;
- (e) double or acoustic glazing;
- (f) operable screens to balconies; and
- (g) continuous walls to ground level courtyards, where there would be no conflict with streetscape, security or other amenity requirements.

5.10 Building façades, entrances and articulation

Objectives

- (a) Ensure that the appearance of new development defines and enhances the public domain through design measures such as building modulation and massing, articulation, use of materials, distinctive design features and the planning of active and inactive spaces.

Provisions

- (1) Buildings are to be designed to face the street, and to enhance the public domain through entrances, transparent glass, internal uses at ground level, public art, good quality finishes and well resolved architectural design.
- (2) Where a development comprises a number of buildings and results in a different orientation, a majority of the overall development is to face the street.
- (3) Building façades are to be articulated into smaller elements or distinctive treatments, at a scale or grain that reflects:
 - (a) different uses and/or components of the building;
 - (b) the location of the building relative to pedestrian or outdoor recreation activity;
 - (c) building entries; and
 - (d) the ground floor, lower floors, top floor and roof.
- (4) Extensive expanses of blank glass or solid wall are to be avoided and, where it is unavoidable at ground level, must not exceed 30% of the total linear length of the ground level façade measured parallel to the boundary.
- (5) Where development exposes the blank wall of an adjoining building or incorporates a party wall that will be visible from the public domain, a visually interesting treatment is to be applied to that wall.

- (6) Dwellings, individual dwelling layouts and other high use spaces within the development are to be planned and located to provide the passive surveillance of the street and public open space.
- (7) Buildings with multiple vertical circulation cores are to have multiple common entries along the street.
- (8) Ground floor dwelling units facing the street and public domain are to have individual entries from the street.
- (9) Entrances to dwellings and or the associated transitional spaces are to be designed to encourage personalisation of the space.
- (10) Basement access entries for all development are to be located on minor streets.
- (11) Entries to basements should be minimised in size and visual impact from the public domain.
- (12) Vehicle crossovers should maximise pedestrian safety and minimise crossing distances and be separated from pedestrian entries.
- (13) Underground parking areas are to protrude no more than 1.2m above the level of the footpath or adjacent public domain and are to be:
 - (a) integrated into the landscape and building design; and
 - (b) not have car ventilation grills on the street frontage unless completely screened by landscaping in a garden bed with a minimum plan depth of 1m.
- (14) Any ground floor car parking areas are to be internalised, such that other uses front the street.

5.11 Active frontages

Objective

- (a) Identify locations where ground level active frontages are desirable, and ensure the design is appropriate to the location and use, and does not detract from the visual appeal and amenity of the streetscape.

Provisions

- (1) Non-residential ground floor frontages adjacent to the public domain, including streets and public open space, are to have active uses.
- (2) Units along an active frontage are to be diverse and appropriate to their location, to accommodate a range of uses including retail, cafes and restaurants and have an average width of 5m to 8m.

- (3) The street frontage is to be predominantly clear glazing. Translucent/tinted glazing or films are not permitted above a height of 1.2m above the footpath level. The sill height is to match surrounding sill heights and be no more than 1.2m above the adjacent street paving.
- (4) Solid non-transparent roller shutters are not permitted. Where security grills or screens are required, they are to be installed at least 1m behind the glazing line and of lattice design with an openness to allow viewing of the interior and internal lighting to spill onto the footpath.

5.12 Landscaping and Setbacks

Objective

- (a) To ensure that the landscaping and design of setbacks is integrated with the building layout and design and that it is of high quality and appropriate to its location.

Provisions

- (1) Landscaping is to be of the highest quality, and use appropriate indigenous species, stone, high quality precast concrete elements and high quality pavement design.
- (2) A Landscape Plan prepared by a qualified Landscape Architect is to be submitted with the development application that shows the:
 - (a) planting schedule with numbers and species of plants (botanical and common names);
 - (b) number and name (botanical and common names) of mature trees on site;
 - (c) type and detail of paving, fencing, irrigation and other details of external areas of the site; and
 - (d) response to other requirements of this provision.
- (3) Natural features, such as cliff lines and rocky outcrops, are to be retained and exposed.
- (4) Landscaping should limit the use of turf and uses plant species with low water needs, include native plant species, and select and position trees and shrubs to maximise control of sun and winds.
- (5) Pathways are to have a minimum separation of 1m from walls and planting is to be established in the separation area.
- (6) Suitable soil depth, drainage and irrigation is to be provided for all landscaping built on structures.
- (7) Landscaping within floodways or overland flow paths is to utilise scour protection techniques to minimise soil erosion.

- (8) Within a floodway or high hazard area, the design of landscape garden beds, and the selection of plants, is to be appropriate to the expected force of floodwaters.

5.13 Private open space

Objectives

- (a) To ensure private open space, of adequate size and dimension, is provided to accommodate needs of occupants.
- (b) To ensure that private open space maximises use in conjunction with other living areas, sun light access and passive surveillance of public domain and common open spaces.

Provisions

- (1) Private open space is to have a northern aspect where practicable.
- (2) Private open space is to be directly accessible from the living area of the dwelling and capable of serving as an extension of the living area.
- (3) Private open space for ground floor dwellings is to be located at ground level, where possible, with a maximum gradient of 1 in 20 (ie. 5%).
- (4) Private open space may be in the form of courtyards, decks and/or balconies and is to be provided for at least 75% of dwellings in a development.
- (5) Up to 25% of dwellings in a development may have 'juliet' balconies or a floor to ceiling window to living rooms with a balustrade to the window. This does not apply to 3 bedroom dwellings.
- (6) The private open space is to have the following minimum consolidated area and dimensions for all dwelling sizes in a development:
- (a) ground level dwellings: 25m² with 4m minimum dimension;
and
- (b) upper level units: 10m² with 2m minimum dimension.

5.14 Common open space

Objectives

- (a) Ensure residential developments incorporate suitable common open space to supplement private open space.
- (b) Ensure common open space is designed to maintain safety, amenity, privacy and sun light access to users and neighbouring developments.

Provisions

- (1) An area of common open space under common title is to be provided that occupies a minimum 25% of the development block area and has a minimum dimension of 6m except for buildings immediately adjacent to public open space.
- (2) The calculation of the required area of common open space excludes driveways, parking areas, essential access paths greater than 1.2m wide, indoor gymnasiums and outdoor clothes drying areas.
- (3) Common open space may be located on elevated gardens or roof tops provided that the area and overall design is useful for the recreation and amenity needs of residents, and does not exceed 30% of the common open space required for residential developments, or 66% for mixed use developments.
- (4) The common open space is to be located and designed to achieve good amenity for the dwellings in terms of solar access, natural air flow and ventilation, and outlook.
- (5) Common open space is to be located and designed to:
 - (a) be seen from the street between building separations;
 - (b) complement existing neighbouring developments;
 - (c) provide for active and passive recreation needs of residents and children (including teenagers); and
 - (d) provide landscaping, composting and worm farms for vegetation waste.
- (6) Unpaved soft landscaped area is to comprise a minimum of 50% of the total area of common open space.
- (7) The common open space is to be designed to:
 - (a) present as a private area for use by residents only;
 - (b) include passive surveillance from adjacent internal living areas and/or pathways;
 - (c) have a northerly aspect where possible; and
 - (d) be separate to any public thoroughfares.
- (8) Common open space is to provide a secure area with good solar access and appropriate facilities for clothes drying.

5.15 Deep soil

Objective

- (a) Ensure developments incorporate deep soil areas of sufficient size and dimension to accommodate trees and other significant landscaping elements.

Provisions

- (1) The minimum amount of deep soil is to be 10% of the development block area.
- (2) An area of the deep soil is to be consolidated and have a minimum area of 100m² and minimum dimension of 10m, except for buildings that front public open space.
- (3) All remaining deep soil areas are to have a minimum dimension of 2.5m.
- (4) Where site conditions allow, the deep soil is to be consolidated as one area to assist the ease of drainage and to allow for effective deep soil planting.
- (5) Where underground parking is proposed, it is to be generally limited to the building footprint.

5.16 Green roofs

Objectives

- (a) Encourage green roofs and walls to improve air quality, amenity, ambient air temperature, building insulation, bird habitat, and aesthetic quality of the urban environment; and
- (b) Ensure any habitable green roof areas, such as private or common open space, are designed to minimise any potential adverse impacts.

Provisions

- (1) Green roofs are encouraged on all buildings (including alterations and additions) with a gross floor area over 2,000m². The size of the green roof, inclusive of any area for solar panels or the like, is to be for buildings with a gross floor area of:
 - (a) 2,000 to 4,999m²—20% of roof space;
 - (b) 5,000 to 9,999m²—30% of roof space;
 - (c) 10,000 to 14,999m²—40% of roof space;
 - (d) 15,000 to 19,999m²—50% of roof space; and
 - (e) 20,000m² or greater—60% of roof space.
- (2) Any green roof area is to be planted with Australian native plants (preferably endemic to the Sydney region) over a minimum substrate depth of 120mm.
- (3) Green roofs are to be located in accessible, serviceable and visible parts of the roof, such as the roof of lower parts of a development with varying heights.
- (4) Habitable green roof areas designed for use as recreation facilities are to have a high standard of finish and design. A detailed description and plan of roof top design is to be submitted with the development application (as part of landscape plan).

- (5) The design of any habitable green roof area is to address:
- (a) visual and acoustic privacy,
 - (b) safety,
 - (c) security,
 - (d) roof maintenance and servicing; and
 - (e) wind effects

5.17 Fences

Objective

- (a) Maintain passive surveillance between public and private spaces, make a positive contribution to the character of the street and, where relevant, be appropriate to the style of the building.

Provisions

- (1) The height of a fence is not to exceed:
- (a) for a front fence or a side fence in front of the front building line:
 - i) constructed with solid masonry: 900mm above footpath level (excluding the height of any retaining wall); and
 - ii) constructed with open or transparent materials: 1200mm above footpath level (excluding the height of any retaining wall), and 1500 mm for any associated posts and piers.
 - (b) for a side fence behind the front building line or a rear fence:
 - i) 1800mm above ground level.
- (2) The height of the fence is to step to follow any change in level along the property boundary.
- (3) Fencing is to be designed so that sight lines between pedestrians and vehicles exiting the site are not obscured; and gates do not open over the public roadway or footpath.
- (4) Where a property is located on a corner, a higher side fence will be permitted if required for privacy and/or security.
- (5) Fences are generally not to be constructed in a location that would obstruct overland flow paths of flood waters. Where it is unavoidable, a fence in an overland flowpath must not be solid and is to be designed to allow unimpeded flow of flood waters and associated debris and to withstand associated forces.

Note: Examples of suitable fences across overland flow paths include 'bottom-up' fences, mesh fences, or picket-style fences.

5.18 Tree management

Notes: Other policies that apply to the management of trees within the City of Sydney include the: Urban Tree Management Policy; Street Tree Master Plan and Register of Significant Trees.

All tree pruning should be undertaken in accordance with Australian Standard 4373–2007, Pruning of Amenity Trees.

Objectives

- (a) To ensure the protection of trees within and adjacent to development sites.
- (b) To maximise a healthy tree canopy coverage across the City.
- (c) To ensure all applications are assessed on the basis of best practice tree management principles.

Provisions

- (1) Development consent or a permit is required for all works to a tree with any of the following criteria:
 - (a) a height of 5m or more;
 - (b) a canopy spread of over 5m;
 - (c) a single trunk diameter of more than 200mm, measured at a height of 1.4m above ground level; or
 - (d) a multi-trunk species with any trunk diameter exceeding 150mm, measured at a height of 1.4m above ground level.
- (2) No development consent or permit is required for works (pruning, maintenance, removal and replacement) to trees within the public domain undertaken by Council.
- (3) Except where listed on Council's Register of Significant Trees, works (pruning, maintenance, removal and replacement) do not require either a development consent or permit for the following trees:
 - (a) *Ailanthus altissima* (Tree of Heaven);
 - (b) *Bamboo sp* (all species and cultivars);
 - (c) *Citrus sp* (all varieties);
 - (d) *Cotoneaster sp* (Cotoneaster);
 - (e) *Eriobotrya japonica* (Loquat);
 - (f) *Ficus elastica* (Rubber Tree);
 - (g) *Gleditsia triacanthos* - not cultivars (Wild Honey Locust);
 - (h) *Lagunaria Patersonia* (Norfolk Island hibiscus);
 - (i) *Ligustrum sp* (Privet);

- (j) *Morus species* (Mulberry);
 - (k) *Musa species* (Banana);
 - (l) *Nerium oleander* (Oleander);
 - (m) *Olea europaea var. Africana* (African Olive);
 - (n) *Robinia pseudacacia -not cultivars* (False Acacia);
 - (o) *Salix sp* (Willow);
 - (p) *Schefflera actinophylla* (Umbrella Tree); and
 - (q) *Syagrus romanzoffianum* (Cocos Palm).
- (4) Except where listed on the Council's Register of Significant Trees, development consent or a permit is not required for works (pruning, maintenance, removal and replacement) to the following trees that are less than 10m in height and have a diameter less than 300mm measured at a height of 1m:
- (a) *Cinnamomum camphora* (Camphor Laurel);
 - (b) *Celtis sinensis* (Chinese Nettle Tree);
 - (c) *Celtis occidentalis* (American Nettle Tree);
 - (d) *Erythrina x sykesii* (Coral Tree); and
 - (e) *Liquidambar styraciflua* (Liquidambar).
- (5) Neither a development consent nor permit is required for the removal of dead and/or imminently dangerous trees where it can be demonstrated by the landowner that pruning or removal is the only reasonable option to avoid an immediate threat of injury or damage to life or property.
- (6) Where a tree is pruned or removed under provision (5) above:
- (a) it is to be demonstrated that the pruning or removal works were undertaken to the minimum extent necessary to manage that threat;
 - (b) the owner is to have recorded the condition that details the cause of the danger, supported by a report from a qualified Arborist (Minimum AQF Level 3 Arboriculture), including photographs of the tree;
 - (c) in the event of tree removal, the Arborist report is forwarded to the City immediately following the removal; and
 - (d) in the event of pruning, the Arborist report is made available to the City on request for a period of 3 months after the pruning works.

Notes: "Imminently Dangerous" includes but is not restricted to obvious instability of the root plate, evidence of soil heave or cracking, loss of structural roots, root decay, structural defects that are imminently hazardous (for example, included branch attachment that is splitting), internal cracking, storm damage.

"Australian Qualifications Framework (AQF)" is a national framework for all education and training qualifications in Australia. The AQF for the Arboricultural Industry is listed below:

- (a) AQF Level 2 – Tree Worker
- (b) AQF Level 3 – Trade Arborist
- (c) AQF Level 4 – Supervising Arborist
- (d) AQF Level 5 – Consulting Arborist

When a permit is required for removal or pruning of trees, Council's application form must be completed. This form includes a _____ where the works/activities must be described and a drawing of the site that includes the location of the proposed works/activity in the context of its surrounds.

Following assessment of either the Development Application or the permit application, the Council or consent authority may request additional information to support the application.

Excepting those activities not requiring approval, a person who removes or prunes a tree without approval shall be guilty of an offence and liable for prosecution. A court, in addition to imposing a financial penalty on the guilty person, may require the person to replace the damaged or destroyed tree/s and maintain such tree/s until maturity.

- (7) An Arborist Report is to be included within the Statement of Environmental Effects that accompanies all development applications:
 - (a) for tree removal or pruning; or
 - (b) where development works will potentially affect trees on the site itself and on neighbouring properties.
- (8) An Arborist Report may be required to assist the determination of tree removal or pruning Permit Applications and is to provide an objective, balanced assessment based upon the tree's health, condition, other site considerations and the type of works proposed.
- (9) All Arborist Reports are to be prepared by a suitably qualified and experienced arborist with a minimum qualification of a Diploma of Horticulture (Arboriculture) (AQF 5) or equivalent unless otherwise stated and in accordance with any report guidelines or requirements of the Consent Authority.

Note: Significant trees are listed on the City of Sydney's Register of Significant Trees. This document is at www.cityofsydney.nsw.gov.au/Environment/TreeManagement/default.asp

5.19 Small scale and other cultural activities

In accordance with clause 3.43(3) of the *Environmental Planning and Assessment Act 1979* this Development Control Plan adopts the provisions of the *Sydney Development Control Plan 2012* in sections 4.4.9 *Small scale and other cultural activities*.

Section 6: Environmental Management

6.1 Ecologically Sustainable Development

Objectives

- (a) To promote the use of renewable energy sources and materials to reduce the use of resources, pollution and waste resulting from development activity.
- (b) To encourage improved environmental performance through the voluntary use of industry recognised building rating tools.
- (c) To encourage energy and water efficiency and water recycling in non BASIX affected development.

Note: Residential development is addressed by BASIX. The provisions of this DCP in relation to reducing greenhouse gas emissions, reducing potable water use, or improving the thermal comfort in the use of a dwelling, do not apply to BASIX affected development.

Provisions

- (1) All development is encouraged to use environmental rating tools, such as Green Star, to demonstrate the degree to which it is ecologically sustainable development.

Note: For more details on the Green Building Council of Australia's Green Star rating tools visit www.gbca.org.au

- (2) Electricity sub-metering is to be provided for any significant end uses that will consume more than 10,000 kWh/a.
- (3) All new fittings and fixtures for amenities in all non-residential development, the public domain, public and private parks, and community facilities are to be installed to the following minimum Water Efficiency Labelling Scheme (WELS) standards:
 - (a) for showerheads—3 Star
 - (b) for water tap outlets—6 Star
 - (c) for urinals—5 Star
 - (d) for toilet cisterns—4 Star

Note: For more details on the Water Efficiency Labelling Scheme, see the WELS website at www.waterrating.gov.au/

- (4) Where a non-residential building, the public domain, a public or private park or a community facility is serviced by a dual reticulation system for permitted non-potable uses such as toilet flushing, irrigation, car washing, fire fighting and certain industrial purposes, the development is to provide connections for the system.

- (5) Separate meters should be installed on separate units of occupancy in commercial buildings over 5000m² GFA. i.e. separate tenant areas within a shopping centre.
- (6) Separate meters should be installed for the make-up lines to cooling towers, swimming pools, on the water supply to outdoor irrigation and other major uses.
- (7) Rainwater harvested from the roof, stored in rainwater tanks can be used for toilet flushing, washing clothes, car washing, swimming pools, water features, cooling tower make up water and irrigation.
- (8) Rainwater tanks are to be designed, installed and operated in accordance with:
 - (a) NSW Health Guideline, Use of Rainwater Tanks Where a Public Water Supply is Available, (GL2007_009) June 2007;
 - (b) Sydney Water Guidelines for Rainwater Tanks on Residential Properties;
 - (c) Australian Standard 3500: Plumbing; and
 - (d) Sydney Water's Backflow Prevention Policy and the New South Wales Code of Practice: Plumbing and Drainage where it is on a non-residential property.
- (9) Recycled water schemes for development that is not a single residential dwelling are to be designed and operated in accordance with NWQMS Australian Guidelines for Water Recycling: Managing Health and Environmental Risks 2006.
- (10) Where greywater is reused in a residential dwelling, all taps that use the reclaimed water are to be clearly labelled with signs that state: "Not Suitable for Drinking", in accordance with AS1319.
- (11) Any sewer mining is to be undertaken in accordance with the Sydney Water Sewer Mining Policy, October 2008 and NWQMS Australian Guidelines for Water Recycling: Managing Health and Environmental Risks 2006.

6.2 Waste facilities and minimisation

Objectives

- (a) Ensure the collection and disposal of waste from within developments is healthy, efficient, minimises disruption to amenity, and is conducive to the overall minimisation of waste generated.

Provisions

- (1) Waste facilities, services and plans are to be provided in accordance with the *City of Sydney Code for Waste Minimisation in New Developments 2005*.

Notes: Council's Code for Waste Minimisation in New Developments 2005 provides indicative waste and recycling generation rates for various uses. This policy also establishes the design and construction specifications for waste storage areas, and the typical dimensions of collection vehicles.

The relevant appropriate location of waste collection and storage should be analysed at an early stage in the design process and will generally comprise in other areas, the accommodation of vehicles on-site if practicable, or alternative arrangements whereby storage areas are provided adjacent to a point in the street where collection can stand safely.

Additional information on the provision of waste management facilities in multi-unit residential developments can be found in the NSW Department of Environment, Climate Change and Water's *Better Practice Guide for Waste Management in Multi-Unit Dwellings* available at <http://www.environment.nsw.gov.au/>

- (2) Where a recycling chute system is not installed the waste service compartment or room on each floor is also to include space for containers for the intermediate storage of recyclables.
- (3) Space for composting and worm farming is to be available for all residents in a communal facility or in small private court yards. Composting facilities are to be sited on an unpaved earth surface.
- (4) Kitchens, office tearooms and the like in non-residential buildings are to be designed with sufficient space for the interim storage of recyclable, organic and waste for landfill, in separate receptacles.
- (5) Storage facilities for separated waste (paper, containers and organic waste) are to be included in all commercial developments and indicated on the plans.
- (6) Where communal composting areas are proposed they should preferably be managed by a gardener or caretaker and located:
 - (a) in an accessible and visible area to increase awareness so that it is well maintained;
 - (b) having regard to the location of dwellings on site and on adjacent properties and the potential for the area to generate odours; and
 - (c) so that potential run-off is away from site drainage points.
- (7) In addition to the standard provision for wastes and recyclables, premises are to allocate sufficient space for the separate storage of:
 - (a) recyclable electronic goods;
 - (b) reusable items such as crates, pallets, kegs and the like so that storage in a public place is avoided; and
 - (c) liquid wastes (oils etc), for which these storage areas must be bunded, and drained to a grease trap, in accordance with the requirements of Sydney Water.

6.3 Stormwater and Water Sensitive Urban Design

Objectives

- (a) To ensure an integrated approach to water cycle management through the use of water sensitive urban design principles and that new development is not subjected to undue flood risk nor exacerbate the potential for flood damage or hazard to existing development and to the public domain.

Definitions

For the purpose of this DCP:

Annual Exceedance Probability (AEP) means the chance of a flood of a given or larger size occurring in any one year, usually expressed as a percentage. For example, if a peak flood discharge of 500m³/s has an AEP of 5%, it means that there is a 5% chance (that is one-in-20 chance) of a 500m³/s or larger events occurring in any one year (see also Average Recurrence Interval).

Average Recurrence Interval (ARI) means the long-term average number of years between the occurrence of a flood as big as or larger than the selected event. For example, floods with a discharge as great as or greater than the 20-year ARI flood event will occur on average once every 20 years. ARI is another way of expressing the likelihood of occurrence of a flood event.

Baseline Annual Pollutant Load means the expected post-development pollutant load that would be discharged from the site over the course of an average year if no stormwater reuse or treatment measures were applied.

Floodplain means Land adjacent to a river or creek that is periodically inundated due to floods. The floodplain includes all land that is susceptible to inundation by the probable maximum flood (PMF) event.

Floodway means a flow path (sometimes artificial) that carries significant volumes of floodwaters.

Local drainage systems means all gutters, pipes, culverts, open channels, swales and other stormwater infrastructure draining flows generated within the site.

Major drainage systems mean "overland" drainage routes, which can include roads and recreational areas.

Minor drainage systems mean all gutters, pipes, culverts, open channels, natural creeks and other stormwater infrastructure.

Planning Flood means the appropriate design flood event for a development which is applied in the setting of conditions for different land uses dependent upon risk to life and property.

Probable Maximum Flood (PMF) means the largest flood that could conceivably occur at a particular location, usually estimated from probable maximum precipitation. The PMF defines the extent of flood prone land, that is, the floodplain.

Water Sensitive Urban Design (WSUD) means any alternative to the traditional conveyance approach to stormwater management that aims to mitigate environmental impacts on water quantity, water quality and receiving waterways, conventionally associated with urbanisation. WSUD integrates urban planning and design, social and environmental amenity of the urban landscape and stormwater management with stormwater conveyance by reducing peak flows, protection of natural systems and water quality, stormwater reuse and water conserving landscaping.

6.3.1 Water Sensitive Urban Design (WSUD)

Provisions

- (1) Wherever possible, applicants should take an integrated approach to water cycle management for the development and address water conservation, efficiency, stormwater management, drainage and flooding through a coordinated process.
- (2) A suitably qualified engineer with experience in stormwater, drainage and WSUD is to assess the site requirements for the proposed development, and prepare the required site stormwater, drainage and WSUD plans in accordance with the provisions of this DCP, the **Stormwater Map** and with best practice sustainable water management techniques.
- (3) Where possible, water used for irrigation of public and private open space is to be drawn from reclaimed water or harvested rainwater sources. Possible sources include harvested stormwater, treated greywater & wastewater.
- (4) Rainwater should be harvested from the roof of the Tram Sheds and used for appropriate end uses in the Tram Sheds and the irrigation of any nearby parks and gardens. Rainwater harvesting should aim to meet 90% of non-potable water demand in non-residential development.
- (5) Any stormwater harvesting systems are to be implemented as per NWQMS Australian Guidelines for Stormwater Harvesting 2009 and all harvested stormwater must be treated prior to re-use to be 'fit for purpose'.
- (6) Where possible, rainwater tanks should be installed for all non-residential developments, including major alterations and additions, and plumbed to appropriate end uses.
- (7) Where filtration and bio-retention devices are proposed, they are to be designed to capture and provide temporary storage for stormwater.



Figure 25: Example of water sensitive urban design in the public domain (top) and within the street reservation (below).

- (8) Swales and rain gardens are to be incorporated into open space, and road and footpath design in accordance with best practice sustainable water management techniques.
- (9) Post-development pollutant load is to be reduced in accordance with the following standards:
 - (a) litter/vegetation larger than 5mm—90% reduction on the Baseline Annual Pollutant Load;
 - (b) total suspended solids—85% reduction on the Baseline Annual Pollutant Load;
 - (c) total phosphorous—65% reduction on the Baseline Annual Pollutant Load; and
 - (d) total nitrogen—45% reduction on the Baseline Annual Pollutant Load,
- (10) The Stormwater Quality Assessment is to be prepared by a suitably qualified engineer with experience in WSUD and include:
 - (a) Modelling of pollutant load standards with an industry standard water quality model;
 - (b) The design of WSUD measures used to achieve the post-development pollutant load standards; and
 - (c) Maintenance schedules of any proposed WSUD measure that requires maintenance and/or full replacement including the likely recycling disposal location of any wastes that may be generated.

Note: WSUD techniques include (but are not limited to) street tree planter bio-retention systems, rain garden bio-retention systems, bio-retention swale systems and gross pollutant traps.

6.3.2 Stormwater and drainage

- (1) A suitably qualified engineer with experience in drainage design is to assess the site drainage requirements for the proposed development, and prepare the required site drainage plan in accordance with the **Stormwater Map**. The drainage plan is to address:
 - (a) the hydrology of the locality and its relationship to the drainage system;
 - (b) the distribution of soil types and the scope for on-site infiltration;
 - (c) any expected rise in ground water level due to development;
 - (d) the role of the principal landscape components on the site for water conservation and on-site detention;

- (e) the scope for on-site stormwater detention and retention, including the collection of water for re-use;
 - (f) how any detrimental impacts on the existing natural hydrology and water quality are proposed to be minimised;
 - (g) how pedestrian safety is to be ensured; and
 - (h) integration of drainage management responses and open space areas.
- (2) The post development run-off from impermeable surfaces (such as roofs, driveways and paved areas) is managed by stormwater source measures that:
- (a) contain frequent low-magnitude flows;
 - (b) maintain the natural balance between run-off and infiltration;
 - (c) remove some pollutants prior to discharge into receiving waters;
 - (d) prevent nuisance flows from affecting adjacent properties; and
 - (e) enable appropriate use of rainwater and stormwater.
- (3) The existing stormwater culvert (Lille Bridge Branch) is not to be built over with private development and may be realigned so that it is below the public domain. Applicants should consult with Sydney Water on any proposed upgrade and or realignment of the branch.
- (4) The minor drainage systems is to provide adequate conveyance of flow for events up to and including the 20% AEP.
- (5) A major drainage system is required to manage overland flows generated both from the site and from areas in the catchment upstream
- (6) Local drainage systems are to be designed to convey all local catchment flows up to the 5% AEP for all other properties. This may either be connected to stormwater treatment measures and/or the major drainage system and minor trunk drainage system.
- (7) Where Lillie Bridge Branch stormwater channel is to be deviated or realigned the minimum capacity of the new stormwater system shall be the 20 ARI flood plus overland flow path capable of safely conveying floodwaters up to the 100 year ARI flood.
- (8) The development proposal is to show how the major drainage system is designed to address any site specific conditions, and how it connects into the downstream drainage system.
- (9) All drainage systems are to be designed in a manner that ensures that personal safety and the integrity of property is not compromised.

- (10) The discharge of minor local flows by proposed development to the kerb is not permitted where a direct connection can be made to an existing or proposed stormwater system, unless it can be demonstrated that there is sufficient capacity within the existing gutter and the resulting velocity and depth within the gutter remains below 400mm.
- (11) Where connection is proposed to the existing stormwater infrastructure, there must be minimal impact (less than 10%) on the capacity of the infrastructure. The development proposal is to show the level of impact on the existing stormwater infrastructure as a result of the proposed new connection.
- (12) On-site detention is not required for the development

Notes: The site is located at the bottom of the sub-catchment to Johnson's Creek and drainage of flows both generated on-site and from the areas upstream is to be provided.

Storm water drains are only designed to accept rainwater. Other concentrated matters in the stormwater system may result in pollutants entering natural waterways. The management of stormwater and other drainage within a site should maximise opportunities to 'hold and use the rain where it falls'. Reference should be made to Council's Code of Standard Requirements for the Discharge of Stormwater from Private Properties, Council's Stormwater Pollution Policy 'The Muck Stops Here', and Sydney Coastal Council's Stormwater Pollution Control Code for Local Government.

6.3.3 Flooding & Flood Study

- (1) The development of the site shall:
- (a) not significantly adversely affect flood behaviour resulting in detrimental increases in the potential flood affectation of other development or properties;
 - (b) incorporate appropriate measures to manage risk to life from flooding;
 - (c) not significantly adversely affect the environment or cause avoidable erosion, siltation, destruction of riparian vegetation or a reduction in the stability of river banks or watercourses, and
 - (d) is not likely to result in unsustainable social and economic costs to the community as a consequence of flooding.
- (2) As part of any stage 1 development application a site-specific flood study is to be submitted by the applicant and prepared by a suitably qualified and experienced hydrologist.
- (3) The flood study must be prepared in accordance with the NSW Floodplain Development Manual 2005, which is to include, but not be limited to:
- (a) a detailed topographical survey that defines flow paths, storage areas, and hydraulic controls; and

- (b) flood modelling that uses appropriate hydrological and hydraulic techniques, and incorporating boundary conditions.
- (4) The flood study is to show pre development and post development scenarios, and at a minimum is to include the following information:
 - (a) water surface contours;
 - (b) velocity and depth product contours;
 - (c) delineation of flood risk precincts; and
 - (d) flood profiles for the full range of events for total development including all structures and works (such as revegetation and physical enhancements).
 - (5) The potential impacts of climate change are to be assessed to ensure development allows for the possible affect of climate change in the next 100 years. The flood modelling of the climate change scenario shall include:
 - (a) Rainfall intensity increase of 10% for the 100yr ARI; and
 - (b) Application of projected sea level rise, as per current NSW Department of Planning Guidelines.
 - (6) Where the Climate Change scenario in (5) affects the 100yr ARI flood level then the flood planning levels are to adopt the climate change scenario for planning purposes.
 - (7) A site-specific flood study is to assume the 'worst case scenario' conditions for blockages to pipes, culverts and other infrastructure items, such that:
 - (a) kerb inlets are assumed to be 50% blocked;
 - (b) sag pits are assumed to be 100% blocked; and
 - (c) culverts and bridges with an open area less than six metres, measured on the diagonal, are assumed to be 50% blocked.

6.3.4 Flood planning levels – Residential Development

- (1) Habitable floor levels in residential development and tourist and visitor accommodation are to be above the 1% AEP event with an additional 500mm freeboard.
- (2) If the depth of flow in the 1% AEP is less than 250mm, then the freeboard equals 2 times flow depth (for example, 200mm flow depth = 400mm freeboard) but not less than 300mm.
- (3) Non-habitable floor levels (such as above ground garage or laundry) are to be above the 1% AEP event.
- (4) Housing for the elderly and for people with disabilities is to be above the Probable Maximum Flood (PMF) level.

6.3.5 Flood planning levels - Commercial and industrial developments

- (1) The floor level of commercial developments is to be above the 1% AEP.
- (2) The floor level of industrial developments is to be above the 1% AEP.

6.3.6 Flood planning levels - schools and child care centres

- (1) Schools and child care centres are to be located on land above the PMF level.

6.3.7 Flood planning levels - tourist and visitor accommodation

- (1) Habitable floor levels are to be above the 1% AEP event with an additional 500 mm freeboard.
- (2) Non-habitable floor level is to be above the 1% AEP event.

6.3.8 Flood planning levels - Critical facilities

Note: Critical facilities includes hospitals and ancillary service; communication centres; police, fire and SES stations; major transport facilities; sewerage and electricity plants; any installations containing infrastructure control equipment; any operational centres for use in a flood.

- (1) Access points and floor levels to critical facilities are to be above the PMF level.

6.3.9 Flood planning levels - Recreation areas

Note: Recreational areas include sports fields, children's playgrounds and outdoor sport/recreation equipment.

- (1) Recreation areas may be located where there is low hazard as a result of the 1% AEP.

6.3.10 Flood planning levels – Carparks

- (1) Entrances, vents and openings to an underground/basement garage or carpark with a single property owner with not more than 2 car spaces is to be a minimum level of 500 mm above the 1% AEP.
- (2) Entrances, vents and openings to an underground/basement garage or carpark with more than 2 car spaces is to be a minimum level of 500 mm above the 1% AEP or a level that is determined based on a review of the PMF, whichever is the higher.
- (3) Above ground car parks are to be provided above the 1% AEP level.

- (4) Basement Carparks - A secondary exit (such as a stairwell) should also be provided which exits to a sheltered area above the PMF or 100 year plus 0.5 metre, whichever is the higher.

6.3.11 Development in a floodplain, floodway or high hazard area

- (1) For development that is partly within a defined floodway or high hazard area the development application is to demonstrate that the floodway and/or the high hazard floodwaters can be appropriately accommodated such that the floodway or high hazard area is limited to roads, or other suitable overland flow paths.
- (2) The design of development in a floodway or high hazard area is to be able to withstand:
- (a) hydrodynamic pressure from the approach velocity of the floodwaters in the event nominated in the flood planning levels;
 - (b) hydrostatic pressure from the peak water level generated by the event nominated in the flood planning levels; and
 - (c) the impact loading due to flood-borne debris.
- (3) Where buildings are proposed to be located within an overland flow path the Consent Authority may require an assessment of the structural soundness of proposed buildings and foundations during potential flood events and which is to be prepared by a suitably qualified and experienced structural engineer and at a minimum address impacts from hydrostatic pressure, hydrodynamic pressure, impact of debris, and buoyancy forces.
- (4) Flood compatible materials are to be used to construct any part of a building or structure lower than the nominated Flood Planning Level.
- (5) All services associated with the development are to be flood proofed to the nominated Flood Planning Level or the Probable Maximum Flood Level, whichever is higher. Flood proofing is to be undertaken using a combination of measures sufficient to ensure that the structure and building contents are able to withstand the forces due to the ingress or passage of floodwaters, including debris.
- (6) All flood sensitive equipment is to be waterproofed to the nominated Flood Planning Level or the Probable Maximum Flood, whichever is higher.
- (7) Any proposed development on a floodplain is required to:
- (a) provide evacuation points that allow people to relocate to a flood-free area (i.e. above the PMF or Flood Planning Level, whichever is the greater); and
 - (b) provide warning signs for areas of high hazard/ and or floodway, with directions to the nearest evacuation location.

- (8) Where a proposed pedestrian footpath or other pedestrian corridor is located within a floodway and/ or high hazard area, sufficient evacuation routes must be located along the corridor or footpath to allow for evacuation from the floodway and/or high hazard area.
- (9) A minimum of 2 evacuation routes are required for any open space area. Where an open space passive or active recreational area is located within a floodway and/ or high hazard area, sufficient evacuation routes must be located within the open space area to allow for evacuation from the floodway and/or high hazard area.
- (10) No children's play equipment, or children's fenced off open space recreation areas, are to be located within a floodway and/ or high hazard area.
- (11) All underground car parks are to provide at least one additional pedestrian exit (other than the main entry point). This exit must allow for vertical evacuation to a freely accessible area above the PMF or the Flood Planning Level, whichever is the higher.

Section 7: Vehicle and Bicycle Facilities

7.1 Managing transport demand

Objective

- (a) Ensure that the transport demand generated by development is managed in a sustainable manner.

Provisions

- (1) All development applications are to include a 'Transport Impact Study' addressing the potential impact of the development on surrounding movement systems, where the proposed development is:
- (a) a non-residential development of more than 1,000m² GFA;
 - (b) a residential development of 25 or more new dwellings; or
 - (c) likely to generate significant traffic impacts according to the consent authority.
- (2) The stage 1 development application and applications for subdivision are to include a site wide 'Green Travel Plan' to outline initiatives for walking, cycling and the use of public transport. The Green Travel Plan should address different transport needs and patterns for residential and non-residential uses. Where relevant, initiatives are to be implemented prior to the issue of an Occupation Certificate.
- (3) All development applications are to include a 'Transport Access Guide', and a strategy for its future availability to residents, employees and visitors, unless the proposed development is for:
- (a) individual dwelling houses;
 - (b) a residential development of fewer than 25 new dwellings;
 - (c) a non-residential developments less than 1,000m² GFA; or
 - (d) a business employing fewer than 10 people at any given time.

Note: Refer to the City's Transport and Parking Guideline for further information on the requirements of particular reports including the Transport Impact Studies, Green Travel Plans and Transport Access Guides.

7.2 Vehicle parking

Objective

- (a) Ensure any car parking facilities provided, ancillary to other land uses, are for a variety of vehicle types, are equally apportioned, and include car share, motorcycle, and accessible parking facilities.

Note: Applicants should refer to the relevant provisions of the LEP when determining the maximum number of car parking spaces permitted for a development.

Provisions

7.2.1 Residential flat buildings

- (1) For developments under a strata subdivision:
 - (a) car parking spaces are to be allocated to dwelling units and be a part lot on the dwelling unit title on the strata plan;
 - (b) the number of car parking spaces allocated to a dwelling unit should not exceed the 'per unit' rate used to calculate the maximum permitted spaces in the LEP; and
 - (c) no part of the common property is to be used for the parking or storage of vehicles or boats except for:
 - i) visitor car parking spaces, which are to be used only by visitors to the building;
 - ii) car share parking spaces, which are to be used in accordance with provisions of this DCP.
- (2) Where owners, tenants or occupiers of a property are restricted from participation in the Council's 'resident parking scheme' the conditions of consent are to include details of the restriction and the signage required to advise tenants of the restriction.

7.2.2 Visitor parking spaces

- (1) All visitor parking spaces, which are time-limited car parking spaces for the exclusive use of people visiting a site, are to be:
 - (a) when part of a strata subdivision, retained as common property by the Owners Corporation of the site, and at no time are to be allocated, sold or leased to an individual owner/occupier;
 - (b) grouped together in the most convenient locations relative to car parking area entrances, pedestrian lifts and access points; and
 - (c) separately marked and clearly sign-posted.
- (2) Development applications are to indicate how visitor parking is to be accessed, including arrangements for access (intercoms, etc.) if visitor parking is accessed through a security gate.

7.2.3 Motorcycle parking spaces

- (3) In all buildings that provide car parking spaces, the area equal to one car parking space for every 100 car parking spaces provided, or part thereof, is to be provided as separate parking for motorcycles.
- (4) Area provided as parking for motorcycles is to be included in the maximum number of car parking spaces permitted by the LEP, at a rate of five motorcycle parking spaces, or part thereof, per car parking space.

- (5) The design and layout of motorcycle parking is to comply with the requirements of Australian Standard AS/NZS 2890.1 - 2004 Parking facilities Part 1: Off-street car parking.
- (6) Each motorcycle parking space is to be designated and located so that parked motorcycles are not vulnerable to being struck by a manoeuvring vehicle.

7.2.4 Car share parking spaces

- (1) Residential development must provide at least one car share parking space, which is car parking space for the exclusive use of car share scheme vehicles, for every 90 dwellings. Car share parking spaces are included in the maximum number of car parking spaces permitted for a development in the LEP.
- (2) Commercial development must provide at least one car share parking space, which is one car parking space for the exclusive use of car share scheme vehicles, for every 50 car spaces provided. Car share parking spaces are included in the maximum number of car parking spaces permitted for a development in the LEP.
- (3) The number of car share parking spaces required is to be rounded to the nearest whole number if it is not a whole number.
- (4) All car share parking spaces are to be:
 - (a) retained as common property by the Owners Corporation of the site, and not sold or leased to an individual owner/occupier at any time;
 - (b) made available for use without a fee or charge;
 - (c) publicly accessible at all times and visible from the public domain wherever possible;
 - (d) located together in the most convenient locations relative to car parking area entrances and pedestrian lifts or access points;
 - (e) located in a well lit place that allows for casual surveillance;
 - (f) located adjacent to a public road and integrated with the streetscape through appropriate landscaping where the space is external;
 - (g) signed for use only by car share vehicles; and
 - (h) made known to building occupants and car share members through appropriate signage which indicates the availability of the scheme and promotes its use as an alternative mode of transport.
- (5) Car share parking spaces to be publicly accessible at all times so that scheme members do not require specific security access to the space. A development application is to demonstrate how the car share parking space is to be accessed, including arrangements for access if car share parking is accessed through a security gate.

- (6) A covenant is to be registered with the strata plan advising of any car share parking space. The covenant is to include provisions that the car share parking space(s) cannot be revoked or modified without prior approval of Council.
- (7) Residents of new developments in which a car share parking space is provided are not eligible for resident parking schemes.

Note: It is recommended that an applicant discusses the provision and operation of car share spaces with the operators of such schemes prior to submission of a development application.

7.2.5 Accessible car parking spaces

- (1) In residential developments, the proportion of car parking spaces provided that are accessible car parking spaces, which are car parking spaces for the exclusive use of a person with a mobility impairment, is to be not less than the proportion of dwellings in the development that are adaptable or accessible dwellings. Accessible car parking spaces are included the maximum number of car parking spaces permitted for a development in the LEP.
- (2) For every 20 visitor car parking spaces provided in a development, or part thereof, one visitor car parking space is to be an accessible visitor car parking space. Accessible visitor car parking spaces are included in maximum number of visitor car parking spaces permitted for a development in the LEP.
- (3) A child care centre that proposes to provide car parking spaces, at least one car parking space is to be an accessible car parking space. Accessible car parking spaces are included the maximum number of car parking spaces permitted for a development in the LEP.

Notes: Accessible car parking spaces must also be provided in accordance with the Building Code of Australia.

For seniors housing developments, accessible parking must be provided in accordance with State Environmental Planning Policy (Seniors Living) 2004.

- (4) Accessible parking is not required in car parking areas where a parking service is provided and direct access to any of the car parking spaces is not available to the general public or occupants.
- (5) For residential developments under a strata plan, accessible car parking spaces are to be allocated to adaptable or accessible units, or as visitor parking. Accessible car parking spaces allocated to adaptable or accessible dwelling units are to be a part lot to that unit's title in the strata plan.
- (6) Accessible parking is to be designed in accordance with the relevant provisions of:
 - (a) Australian Standard 1428.1-2001 Design for access and mobility. Part 1: General requirements for access - New building work;

- (b) Australian Standard 1428.2-1992 Design for access and mobility. Part 2: Enhanced and additional requirements - Buildings and facilities; and
 - (c) Australian Standard 2890.1-2004 Parking facilities. Part 1: Off-street car parking.
- (7) Designated accessible car parking facilities are to be:
- (a) located at the closest point to each accessible public entrance;
 - (b) linked to an accessible entrance to the building or to a wheelchair accessible lift by a continuous accessible path of travel, and preferably under cover;
 - (c) a minimum length of 5.5m and have a minimum vertical clearance of not less than 2.5m; and
 - (d) a minimum width of 3.8m. An overlap allowance of a maximum of 500mm may apply when, parallel to the parking space, there is an adjoining walkway or similar surface which is:
 - i) at the same level as the car parking space;
 - ii) firm and level, with a fall not exceeding 1 in 40 in any direction;
 - iii) not another car parking space; and
 - iv) not less than 1m in width.
- (8) Both the designated parking space and the continuous accessible path of travel are to be clearly signposted.
- (9) The signage for the accessible parking space is to be painted on the surface of the paved space and signposted at a height of not less than 1.5m centrally located at the end of the space.
- (10) The provision of accessible parking is to be signposted at the entrance of the car park.
- (11) Where there are a total of 5 or less car parking spaces the designated spaces are not required to be signed to restrict their use only for people with disabilities.

7.3 Bicycle parking and associated facilities

Objective

- (a) Encourage a greater proportion of trips to be made by bicycle, by ensuring parking and appropriate facilities such as change rooms, showers and secure areas for bike parking are provided in all developments.

Provisions

- (1) Developments must provide, at a minimum, parking for bicycles at the rates outlined in Table 2: Bicycle Parking Rates

Table 2: Bicycle Parking Rates

Proposed use	Resident or employee bicycles	Customer or visitor bicycles
Residential		
Residential accommodation (unless specified below)	1 per dwelling	1 per 10 dwellings
Home occupation or home industry	1 per dwelling	1 per dwelling
Seniors housing or a hostel	1 per 10 staff and 1 per 20 self-contained dwelling units	1 per 30 dwellings
Boarding house	1 per 6 rooms	1 per 6 rooms
Commercial		
Commercial Premises	1 per 150m ² GFA	1 per 400m ² GFA
Retail premises (except restaurants)	1 per 25m ² public area	2 plus 1 per 100m ² over 100m ² GFA
Restaurant	1 per 100m ² public area	2 plus 1 per 100m ² over 100m ² GFA
Community		
Child care centre	1 per 10 staff	2 per centre
Medical centre	1 per 5 practitioners	1 per 200m ² GFA
Professional consulting rooms	1 per 5 professionals	1 per 200m ² GFA
Information or education facility	1 per 1,000m ² GFA	1 per 200m ²
Art Gallery or Museum	1 per 1,000m ² GFA	1 per 200m ²
Place of public worship	-	Greater of 1 per 15 seats or 1 per 40m ² GFA

- (2) Where a proposed use is not included in Table 2: Bicycle Parking Rates, an applicant is to provide bicycle facilities to accommodate Council's mode share target for trips by bicycle as described in the 'Bicycle Strategy and Action Plan 2007-2017'.
- (3) Where the calculated number in Table 2: Bicycle Parking Rates is not a whole number, the minimum number of bicycle parking spaces is the nearest whole number.
- (4) Bicycle parking facilities are to be designed and provided in accordance with the relevant Australian Standards.

- (5) Where a dwelling in a residential development has a basement storage area on title that is large enough to accommodate a bicycle and is no smaller than a Class 1 bicycle locker, no additional bicycle parking is required for that dwelling.
- (6) Where bicycle parking for tenants is provided in a basement, the bicycle parking area is to be located:
 - (a) on the uppermost level of the basement
 - (b) close to entry/exit points; and
 - (c) subject to security camera surveillance where such security systems exist.
- (7) Access to any bicycle parking area is to be:
 - (a) a minimum of 2.2m wide to allow passage of a pedestrians and bicycles to pass each other (access ways can be shared with vehicles within buildings);
 - (b) at grade and located near a major public entrance;
 - (c) accessible via a ramp;
 - (d) clearly identified by signage; and
 - (e) accessible via appropriate security / intercom systems.
- (8) For non-residential uses, the following facilities for bicycle parking are to be provided at the following rates:
 - (a) 1 personal locker for each bicycle parking space provided;
 - (b) 1 change room for up to and including 10 bicycle parking spaces provided;
 - (c) 2 change rooms with separate male and female facilities where 11 or more bicycle parking spaces are provided;
 - (d) 1 shower for up to and including 10 bicycle parking spaces provided;
 - (e) 2 showers where between 11 and 20 bicycle parking spaces are provided; and
 - (f) 2 additional showers for each additional 20 bicycle parking spaces or part thereof.

Note: Showers are to be provided in both male and female change rooms.

- (9) Storage, change room and shower facilities are to be located close to the bicycle parking area, entry/exit points, and within an area of security camera surveillance where there are such building security systems.

7.4 Service vehicle loading spaces

Objective

- (a) Ensure sufficient space is provided for service vehicles to load and unload equipment, and carry out any service work required.

Provisions

- (1) Separate service vehicles loading spaces, which are spaces for the exclusive use of service vehicles visiting a development, are to be provided in addition to all other parking requirements and are not to be shared with space provided for any other purpose.
- (2) The minimum number of service vehicle loading spaces required for new development is:
- (a) For residential accommodation:
- i) 1 space for the first 50 dwellings, or part thereof; plus
 - ii) 1 space for every subsequent 100 dwellings, or part thereof.
- (b) For shops:
- i) 1 space for every 350m² of gross floor area, or part thereof, for the first 2,000m²; plus
 - ii) 1 space for every 8,00m² of gross floor area, or part thereof, thereafter.
- (c) For other uses:
- i) 1 space for 1,750m² of gross floor area, or part thereof, or to meet needs.
- (d) For mixed use developments, the total number of service vehicle loading spaces is calculated on a pro rata basis of spaces required for the different uses within the building.
- (3) The total requirement identified above may be reduced for developments with a gross floor area in excess of 50,000m², where it can be demonstrated to the satisfaction of the consent authority that the proposed uses are complementary in terms of servicing demand.

Note: Servicing demand should be demonstrated through the submission of a Parking and Access Report with a development application. Refer to Transport and Parking Guideline for further information on Parking and Access Reports.

- (4) Service vehicle loading spaces are to be:
- (a) used only by service providers, but not for the storage of goods or equipment;
 - (b) clearly signed and designated;
 - (c) located near vehicle entry points and near lifts;

- (d) screened from the street where possible; and
 - (e) located completely within the boundary of the site, clear of parked vehicles and through traffic.
- (5) The design and provision of service vehicle loading spaces are to be in accordance with AS2890.0 – 2002 and sufficient to accommodate the type of vehicle which will be used to service the development.

Note: Where justified, the consent authority may vary the type of service vehicle as defined by AS 2890.2-2002 Off-street parking Part 2: Commercial vehicle facilities.

7.5 Parking area design

Objectives

- (a) Ensure any parking provided is of a standard and dimension that enables the use of a parking area as intended;
- (b) Limit visual intrusion of car parking areas on public domain; and
- (c) Provide for landscaping in any open car parking areas.

Provisions

- (1) The design, layout, signage, line marking, lighting, and physical controls relating to parking areas and spaces are to comply with the relevant Australian Standards.
- (2) Where design and site constraints dictate, the provision of spaces to a smaller standard will be considered provided such spaces:
 - (a) have a minimum dimension of 2.3m wide by 5m long;
 - (b) in residential buildings where car parking spaces are on a strata title, are not allocated for use by residents, and are limited to no more than 1 space per 5 visitor parking spaces;
 - (c) in other developments, are limited to no more than 1 space per 20 overall car parking spaces; and
 - (d) are clearly identified for use by 'small cars' by signs, colour coding or both.
- (3) Car parking areas are to:
 - (a) be well lit, visible, and avoid hidden and enclosed areas to allow for casual surveillance;
 - (b) include, where hidden and enclosed areas such as staircases and lift lobbies cannot be avoided, mirrors or similar devices;
 - (c) be well ventilated;
 - (d) provide natural rather than mechanical ventilation where practicable; and
 - (e) be subordinate in appearance to the main building.

- (4) Car parking spaces are not to be located in areas used for the manoeuvring of service vehicles.
- (5) Where at, or above-ground, parking cannot be avoided, such as in flood prone areas, the car parking structure:
 - (a) is to be located to the rear or side of buildings and not visible from the street and public domain;
 - (b) is to be incorporated into the building and screened by other uses;
 - (c) when visible from the exterior of the building, is to be designed with materials, details, proportions and landscaping to complement the building and adjoining buildings; and
 - (d) is to be designed for flexible use, including appropriate floor to ceiling heights allowing future conversion to another use.

7.6 Vehicle access and interface with public domain

Objectives

- (a) Limit the impacts of vehicle entrances and car parking areas on the public domain and street network; and
- (b) Ensure parking areas are designed to integrate with the rest of the building façade and reflect the local character.

Provisions

- (1) Vehicle entrances to a development block are to be generally located on secondary or minor streets and away from major pedestrian and bicycle routes where possible.
- (2) Vehicular entrances to a development is not to be located where the safety of users of the access way and the street system is likely to be compromised. Vehicular access is not to be located:
 - (a) within 10m of an uncontrolled intersection (including intersections with laneways);
 - (b) within 25m of the property boundary adjacent to a signalised intersection;
 - (c) within 60m of the approach side of an intersection on a state road and within 30m on its departure side;
 - (d) within 12m of a 'stop' or 'give way' sign or hold line at intersections;
 - (e) opposite a busy side road for a distance of 6m beyond the alignment of the property boundaries adjacent to that side road;
 - (f) opposite a busy driveway for a distance of 6m beyond the alignment of the driveway edges;

- (g) within 15m of the alignment of an intersection where the proposed vehicle access is to be used by service vehicles;
 - (h) within 30m of the alignment of an intersection where the proposed vehicle access is used by service vehicles to access 3 or more loading spaces;
 - (i) within 2m of other access driveways or within 1m of any common boundary, except where access is off a laneway;
 - (j) within 20m of the approach to, and 10m of the departure from a pedestrian crossing; or
 - (k) to a designated arterial or sub-arterial road when an alternate access can be provided.
- (3) Vehicle entrances are to be designed so that vehicles do not queue or reverse across pedestrian crossings or footpath.
- (4) The design, layout, signage, line marking, physical controls and sight distances associated with all access driveways to off-street parking areas and queuing areas are to comply with the relevant Australian Standards.
- (5) Vehicular access is to be designed to give priority to pedestrians and bicycles by:
- (a) maintaining the grade of the footpath;
 - (b) continuing the type of footpath material; and
 - (c) minimising the area of footpath required for the kerb ramp.
- (6) Vehicle ramps are to be located inside the building and are not to be visible from the public domain.
- (7) Vehicle access and egress is to be a single crossing with a maximum width of 3.3m over the footpath, and perpendicular to the kerb alignment.
- (8) Vehicle access is to be designed to avoid reversing movements into or out of a public street for all developments other than dwelling houses.
- (9) All queuing for parking areas is to occur on-site and not on adjoining public streets.
- (10) On-site parking may be refused where the required access arrangements would have an adverse impact on on-street parking.
- (11) Porte cocheres are not permitted.
- (12) Service vehicle access is to be combined with parking access and provided in accordance with other controls for vehicular access in this DCP.

Section 8: Social Sustainability

Objectives

- (a) To ensure that development is socially sustainable and outline relevant matters to be addressed in Social Sustainability Plans.
- (b) To ensure that the development of the affordable and seniors housing site to be dedicated under the Planning Agreement is to the satisfaction of Council.

Provisions

- (1) A Social Sustainability Plan is to be included within the Statement of Environmental Effects that accompanies the stage 1 development application or a development application for subdivision.
- (2) The Social Sustainability Plan is to be prepared by a suitably qualified social planner and is to, where appropriate, demonstrate that the development proposal addresses matters in Table 3: Social Sustainability Requirements. The Social Sustainability Plan is to include a strategy for implementing the recommendations of the Plan in association with the development of particular development blocks and prior to the issue of occupation certificates for those developments.
- (3) Land to be developed for affordable or seniors housing and which is to be dedicated through the planning agreement is to be identified in a Stage 1 Development Application and is to be located such that:
 - (a) Has the capacity to developed, in compliance with the controls in this DCP, for a 5,000m² residential flat building and a 500m² residential care facility for people with a disability;
 - (b) It has good access to public transport, services and public open space;
 - (c) Integrated with other development on the site; and
 - (d) Has the potential for direct vehicular access from an existing or proposed public road.
- (4) The development of the affordable or seniors housing site is to investigate the inclusion of residential care facility for people with an intellectual disability and low support needs based on the Abbeyfield model for such housing.

Table 3: Social Sustainability Requirements

Social Need/Issue	Development Requirement
Social Equity and Integration	<ul style="list-style-type: none"> • Pedestrian/bicycle facilities, public open space and public recreation facilities and public domain areas are to meet universal access guidelines. • Site boundaries should not create a physical barrier and/or 'gating' of the site. • Create a visual and physical link from the proposed park to Jubilee Oval
Affordable Housing	<ul style="list-style-type: none"> • Provide for affordable housing
Housing for Range of Households	<ul style="list-style-type: none"> • Provide a mix dwellings • Provide for residential aged care and associated services on site
Local Employment	<ul style="list-style-type: none"> • Provide for a vocational training/skills development as part of development construction program
Public Transport Access and Healthy Living	<ul style="list-style-type: none"> • Provide improved pedestrian/bicycle access and infrastructure to Jubilee Park light rail station from Harold Park site, existing/proposed bus network and links to Forest Lodge, Annandale and Glebe.
Open Space and Recreation	<ul style="list-style-type: none"> • Provide public open space including a public park suitable for a range of passive and unstructured active recreation. • Provide Improvements to the Liveable Green Network along Johnston's Creek. • Ensure increased biodiversity as part of public open space.
Community Facilities	<ul style="list-style-type: none"> • Provide community facilities to meet needs of Harold Park residents. • Develop the Tram Sheds to include provision for community uses such as a Men's Shed or Artist Studios.
Arts/Cultural Development	<ul style="list-style-type: none"> • Implementation of a Public Art Plan which recognises the site's indigenous heritage, and history as the Harold Park Paceway and Former Rozelle Tram Depot.
Fresh Food Access	<ul style="list-style-type: none"> • Provide fresh food opportunities such as a community garden that supports local access to fresh food and encourages home gardening.

Section 9: Maps

Map 1. Site identification

Map 2. Pedestrian and Bicycle Access

Map 3. Stormwater

Map 4. Vehicular Access

Map 5. Height of Building – Storeys

Map 6. Heritage Significance

Map 7. Heritage Conservation and Interpretation Guidelines – Tram Depot

Map 8. Heritage Interpretation Guidelines – Harold Park Paceway

Map 9. Tram Sheds Parking Map