E12 Penrith Health and Education Precinct

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E12 Part A Hospital Precinct

12.1 Background

12.1.1 Area included within the Hospital Precinct

This section applies to development on land covered by the Hospital Precinct as shown in Figure E12.1. This section provides specific controls for the Hospital Precinct in addition to the general controls elsewhere in this DCP. In the event of any inconsistency between this section and the rest of the DCP, the requirements of this section prevail.



Figure E12.1 Land to which this section applies

12.1.2 Aims of the controls for the Hospital Precinct

The aim of the controls in this section of the DCP is to provide more detailed provisions for development in the Hospital Precinct that will:

- a) Contribute to the growth and character of Kingswood as a specialised medical precinct;
- b) Deliver a balanced social, economic and environmental outcome; and
- c) Protect and enhance the public domain.

12.1.3 General Objectives

a) To facilitate the revitalisation of Kingswood by promoting redevelopment and urban sustainability;

- b) To promote high quality urban design, architectural excellence and environmental sustainability in the planning, development and management of the Hospital Precinct;
- c) To provide for mixed use, commercial and residential development within the Hospital Precinct which will provide high levels of amenity for occupants;
- d) To encourage medical related uses and research and development opportunities between the Hospital and the University of Western Sydney;
- e) To provide high levels of accessibility within the precinct, connecting significant activity nodes, public open space and surrounding residential areas;
- f) To encourage development within the Hospital Precinct that prioritises the public domain and creates an attractive and vibrant centre;
- g) To encourage integration of the residential and non-residential land uses and improved access to transport facilities;
- h) To achieve an attractive and sustainable precinct; and
- i) To ensure that development within the Hospital Precinct is consistent with the desired future character of each character area.

12.1.4 Character Areas

The Hospital Precinct is located in Kingswood, immediately east of, and in close proximity to, the Penrith City Centre. The location of the Nepean Hospital and the surrounding range of medical services and facilities within its boundaries make this area the primary medical centre for the Penrith LGA. The University of Western Sydney's Kingswood campus as well as TAFE NSW Nepean College is located within close proximity of the Precinct, with many of the services also catering to students of these tertiary institutions. The Hospital Precinct also enjoys good access by public transport, with the Kingswood Railway Station located north east of the Precinct.

The majority of the Hospital Precinct is zoned B4 Mixed Use under Penrith LEP 2010, which provides for an innovative mix of commercial and medical related uses as well as higher density housing to service the needs of medical patients, staff and students.

There are three precincts identified in the Hospital Precinct (see Figure E12.2), all with their own distinct characteristics. Generally, these activity precincts acknowledge and reinforce existing patterns of use in the area and have been identified as having potential to contribute to the precinct's demands for growth in health and medical related uses and the related demands for key worker and student accommodation in an accessible location, with close proximity to the Nepean Hospital, the University of Western Sydney, local services and public transport.

The intended character of each of these precincts is identified below and will be used to inform and guide future development.

A. Commercial Mixed Use

This precinct includes the existing shopping strip located adjacent to the Great Western Highway, Wainwright Lane located to the south and the northern end of Bringelly Road.

The location of the existing retail strip adjacent to the Great Western Highway offers businesses high visibility as well as strong public transport linkages as a result of the proximity to the Kingswood Railway station. There are existing pedestrian linkages from the station to the Nepean Hospital which will be reinforced to ensure pedestrian safety and comfort. Additional linkages will be encouraged to provide a more direct route for pedestrians and cyclists. Development in this area will be required to respond to potential impacts to amenity caused by the proximity to major transport corridors through building design, layout and materials. Mixed use developments will provide active ground floor uses and high quality building and public domain design outcomes to create a comfortable pedestrian environment that reduces the noise and traffic impacts. The ground floor tenancies will accommodate retail businesses. The lot orientation of this area may require applicants to demonstrate adequate solar access can be provided to the public domain. Consistent landscape treatment will be provided along the Great Western Highway.

Bringelly Road will provide the second tier of development opportunities south of the primary commercial and retail strip. The reduced building heights and generous pedestrian verges in this part of the precinct will allow for a more human scale streetscape that is supportive of active uses that encourage the community to gather and enjoy the public domain. High order landscaping elements will be incorporated on the Bringelly Road/ Northern Road intersection to create an embellished eastern gateway to the Hospital Precinct.

Bringelly Road is largely developed with medium density residential dwellings in the form of residential flats and two storey townhouses. There is opportunity for this area to adopt a higher density residential form along Rodgers Street and Bringelly Road.

The north western part of the Commercial Precinct offers three frontages to the Great Western Highway, Parker Street and Barber Avenue and is a major gateway site to the whole Hospital Precinct. Development within this part of the precinct will be encouraged to incorporate high quality architectural design standards and landscaping, fitting for its location as the gateway to the Hospital Precinct.

B. Medical Mixed Use

This precinct is adjacent to the Nepean Hospital and offers the most dynamic environment to further develop the Hospital Precinct into a specialised medical precinct. This precinct encourages development that would support the operation of the hospital, such as medical offices, pharmacies, short-term accommodation, convenience stores and other forms of retail that will meet the needs of visitors and people using the medical services offered within the precinct.

Medium to high density development will be developed in a similar nature to the existing institutional scale development present within the precinct. Building heights will be 4-6 storeys and will incorporate ground floor active uses with commercial and residential uses located above. The western vista will be a key consideration when designing development within this Precinct.

Development along Somerset and Derby Street is encouraged to take advantage of the potential for these streets to offer a high quality entrance to the Hospital Precinct, with continuous landscaped themes and high quality architectural design. A high quality public realm will be achieved by providing generous pedestrian zones and activating ground floor frontages.

Orth Street should be treated as a major connector between the hospital and the main area of local community space located on Bringelly Road to the east. This connection will accommodate pedestrians and cyclists with a generous, landscaped southern verge.

C. Residential Edge

Development within this precinct should ensure there are pedestrian and cycle linkages from Stafford Street to Derby Street. The existing open space pocket on Stafford Street offers potential to be connected through to Derby Street which would add another public space in close proximity to the Hospital.

Development in this precinct will step down in bulk and scale to provide a transition to the surrounding residential areas located south and east of the Hospital Precinct and will ensure that impacts in terms of visual amenity and overshadowing are minimised.



Figure E12.2 Character areas

12.2 Land use controls

12.2.1 Mixed use development controls

A. Background

Mixed use developments can provide a variety of uses and activities, to ensure that the Hospital Precinct outside the working day, adding vibrancy and life to the streets. Different uses within the same building are encouraged with retail and commercial activity at ground level, and residential uses, requiring privacy and noise mitigation, located above street level. Residential developments overlooking street life provide active visual surveillance and contribute to a sense of security within an area.

The development of mixed use buildings within the Hospital Precinct, with active uses at the street frontage, is a significant strategy designed to revitalise the precinct and encourage medical related uses.

B. Objectives

a) To encourage a variety of mixed use developments in the Hospital Precinct;

- b) To encourage medical based uses and facilities to locate in close proximity of the hospital;
- c) To create additional jobs to support the hospital and local community;
- d) To provide increased density to allow hospital workers to live close to work;
- e) To create lively streets and public spaces night and day within the Hospital Precinct;
- f) To increase the diversity and range of shopping and recreational activities for workers, residents and visitors;
- g) To enhance public safety by increasing activity in the public domain outside business hours;
- h) To minimise potential conflicts and achieve compatibility between different uses;
- i) To ensure that the design of mixed use developments addresses residential amenity;
- j) To create legible safe access and circulation in mixed use developments;
- k) To ensure that mixed use developments address the public domain and the street; and
- I) To ensure an appropriate scale between new development and street width, local context, adjacent buildings and public domain.

- 1) Mixed use developments are to provide flexible floor areas and layouts to both the ground and first floor of buildings to accommodate a range of commercial uses.
- 2) Standard floor to ceiling heights apply for mixed-use developments in accordance with the Building Code of Australia and the Residential Flat Design Code. However, where an applicant is seeking to take advantage of the additional building height incentives prescribed by LEP 2010, the following floor to ceiling heights apply:
 - a) 3.5m on the ground and first floor; and
 - b) 2.7m on the upper floors

These floor to ceiling heights must be applied to the entire floor in order to be granted the height bonus.

To demonstrate that 2.7m floor to ceiling heights can be achieved (allowing for recessed lighting) a minimum floor to floor height of 3.1m is to be provided.

- 3) Where it is proposed to vary the height of building controls to take advantage of the height incentives, applicants are to consult Council early in the design process.
- 4) The commercial and residential activities of the building are to have separate service provision, such as loading docks, lobbies and lift access, defined parking areas, garbage storage and servicing.
- 5) Mixed use developments are to provide commercial frontage (retail/business/office premises) as a part of the development as shown in Figure E12.3 for the ground and first floors. Variation may be considered to this control in order to provide adaptable housing.
- 6) The ground floor of a mixed use development is to provide a minimum of 75% commercial frontage.
- 7) A minimum site width of 24m is required for any mixed use development.

- 8) Residential entries shall be clearly marked and provide direct access to the street. Vehicular access is to be from rear lanes, where practicable and possible. Pedestrian entrances are to address the main streets.
- 9) Commercial and residential uses should have clearly separate entries and vertical circulation.
- 10) Security access controls must be provided to all entrances into private areas, including car parks and internal courtyards.
- 11) Buildings are to provide an active ground floor setback zone, free of columns, balustrades and other visual barriers to the primary streetfront.
- 12) Blank building walls at ground level are to be avoided.



Figure E12.3 Ground and first floor commercial

12.3. Built form controls

A. Background

Building form and character refers to the individual elements of building design that collectively contribute to the character and appearance of the built environment. Penrith LEP 2010 includes provisions for land use, building heights, floor space ratio, heritage provisions and design excellence. The controls in this section of the DCP encourage buildings that provide high quality design, innovation and creativity.

B. Objectives

- a) To establish an appropriate scale, dimension, form and separation of buildings;
- b) To achieve active street frontages with good physical and visual connections between buildings and the street;
- c) To ensure there is consistency in the main street frontages of buildings by having a common alignment to reinforce the streetscape sense of enclosure;
- d) To provide for pedestrian comfort and protection from weather conditions;
- e) To define the public street to provide spaces that are clear in terms of public accessibility and safety, and are easy to maintain;
- f) To ensure building depth and bulk is appropriate to the environmental setting and landform;
- g) To achieve visual interest and a reduction in scale through building design and finishes;
- h) To achieve design excellence;
- i) To achieve a high quality public domain through innovative use of landscape and public domain upgrades
- j) To achieve a high level of amenity throughout the Hospital Precinct and a sustainable urban environment; and
- k) To ensure that buildings are responsive to the overall character of the Hospital Precinct.

12.3.1. Street alignment, building height and setbacks

A. Background

Well framed streets are an important characteristic of a town centre. Buildings within the Hospital Precinct should contribute to a strong definition of the street and public domain by providing an appropriate scale, proportion and sense of enclosure to streets that reflect the hierarchy of the street and the precinct's role as an important centre.

Building alignment and street setbacks establish the front building line. They help to create the proportions of the street reserve and the level of interaction of the building to the street. They can contribute to the public domain by enhancing streetscape character and continuity of street facades.

Street setbacks can also be used to enhance the building address and provide for landscape areas, entries to buildings and deep soil zones. Buildings align along the street with a common setback line to reinforce the urban character and improve pedestrian accessibility, amenity and activity at street level.

Street frontage heights refer to the height of the building at the street alignment including buildings with setbacks. Above the street setback height, upper levels of buildings should be setback further to maintain an appropriate scale for the area.

The built form for the Hospital Precinct should be expressed as mixed use developments comprising of commercial and retail on the lower floors with additional levels of dedicated residential set further back.

B. Objectives

In addition to the objectives for Built Form, the objectives of this section are to:

a) Establish consistent streetscapes through control of the built form visible from the public domain;

- b) Provide street setbacks appropriate to building function and character;
- c) Establish the desired spatial proportions of the street and define the street edge;
- d) Provide for an appropriate transition in building heights from key public spaces;
- e) Locate active uses closer to pedestrian activity areas;
- f) Maximise solar access to the public domain;
- g) Ensure an appropriate level of amenity for building occupants in terms of daylight access, outlook, view sharing, ventilation, wind mitigation, and privacy;
- h) Achieve comfortable public domain environments for pedestrians in terms of scale, daylight access and wind mitigation as well as healthy environments for street trees; and
- i) Provide building separation for visual and acoustic privacy.

- 1) Street building alignments are to be provided as specified in Figure E12.4.
- 2) Minor projections into front building lines and setbacks for sun shading devices, entry awnings and cornices are permissible.
- 3) Building height will generally be restricted to a maximum podium height of 2-4 storeys addressing the main streets, with any additional storeys set back.
- 4) Developments located within the Residential Edge Precinct must step down in height and demonstrate that the development does not adversely impact on the adjoining residential area in terms of visual amenity or overshadowing.



Figure E12.4 Street setbacks

12.3.2. Building Depth and Bulk

A. Background

Controlling the size of upper levels of taller buildings allows for good internal amenity, access to natural light and ventilation, and reduces potential adverse effects that tall and bulky buildings may have on the public domain.

B. Objectives

- a) To provide viable and useable commercial floor space;
- b) To ensure access to light, ventilation and outlook and minimise the dependence on artificial light;
- c) To reduce the bulk of buildings by limiting depth;
- d) To reduce the extent of overshadowing on neighbouring properties; and
- e) To reduce the apparent bulk and scale of buildings by breaking up expanses of building wall with modulation of form.

C. Controls

- 1) Non-residential buildings greater than 12m in height are to have a maximum depth of 25m.
- 2) All points of an office floor should be no more than 10m from a source of daylight (e.g. window, atria or light wells).
- 3) Atria, light wells and courtyards are to be used to improve internal building amenity and achieve cross ventilation and/or stack effect ventilation.
- Large unrelieved expanses of wall or building mass will not be supported and should be broken up by the use of suitable building articulation, fenestration or alternative architectural enhancements.

12.3.3. Boundary setbacks and building separation

A. Background

Setbacks define the spaces between buildings and the balance in a street between built form and landscape between the buildings. The setbacks between the buildings set the rhythm of the street and contribute to the character of the street (ie mixed use versus residential).

Separation in combination with setbacks contributes to amenity by creating privacy, and allowing ventilation, daylight access and view sharing. The degree of separation required for the side setback at the street will relate directly to the design of any apartment or commercial use facing that boundary. For example, if living areas and balconies have their primary orientation towards the side boundary then the separation distance will take precedence over the setback control.

Separation for mixed use development containing residential and commercial uses is to be in accordance with specified distances for each component use.

B. Objectives

In addition to the objectives for Built Form, the objectives of this section are to:

a) Ensure an appropriate level of amenity for building occupants in terms of daylight access, outlook, view sharing, ventilation, wind mitigation and privacy; and

b) Achieve usable and pleasant streets and public domain areas in terms of wind mitigation and daylight access.

C. Controls

1) The minimum side and rear building setbacks for non-residential uses are specified in Table E12.1.

- 2) If the specified setback distances cannot be achieved when an existing building is being refurbished or converted to another use, appropriate visual privacy levels are to be achieved through other means.
- 3) Minimum separation distances for buildings within a site and between adjoining sites for buildings are:

Up to four storeys (approximately 12m):

- 9m between habitable and non-habitable
- 6m between non-habitable

Five to eight storeys (approximately 25m)

- 12m between habitable and non-habitable
- 9m between non-habitable rooms

Table E12.1 Side and rear setback requirements

Building height and use	Minimum Side and Rear Setback
Non-residential uses:	
– up to 12m	0 m
– 12m to 24m	6 m

12.3.4. Site coverage and deep soil zones

A. Background

Limiting site coverage provides separation between buildings. This space may be public (accessible and useable by the general public), communal (shared by all occupants of a development) or private (for the exclusive use of a single dwelling or tenancy). Limiting site coverage improves amenity by providing daylight access, visual privacy and opportunities for recreation and social activities.

Deep soil zones are areas of natural ground retained within a development, uninhibited by artificial structures and with relatively natural soil profiles. Deep soil zones have important environmental benefits, including:

- a) Promoting healthy growth of large trees with large canopies;
- b) Protecting existing mature trees; and
- c) Allowing infiltration of rainwater to the water table and reduction of stormwater runoff.

B. Objectives

In addition to the objectives for Built Form, the objectives of this section are to:

- a) Provide an area on sites that enables soft landscaping and deep soil planting, permitting the retention and/or planting of trees that will grow to a large or medium size;
- b) Limit building bulk on a site and improve the amenity of developments, allowing for good daylight access, ventilation and improved visual privacy; and
- c) Provide passive and active recreational opportunities.

- 1) Open space must be provided equivalent to 25% of the total site area.
- 2) The maximum site cover and minimum deep soil zone for development is specified in Table E12.2:

Table E12.2 Maximum site cover and minimum deep soil zone

Character Area	Maximum Site Cover	Minimum Deep Soil Zone (% of Site Area)
Commercial Mixed Use and Medical Mixed Use	75%	10%
Residential Edge	50%	15%

Note: Council may consider 100% site coverage on land within the Commercial Mixed Use character area along the Great Western Highway only.

- 3) The deep soil zone is to be provided in one continuous block. If multiple deep soil zones are provided, they must have a minimum dimension (in any direction) of 6m.
- 4) Where non-residential developments result in full site coverage and there is no capacity for water infiltration, planting on roof tops or over basement carport structures can be provided as a component of the mixed use development. In such cases, compensatory stormwater management measures must be integrated within the development to minimise stormwater runoff.
- 5) Where deep soil zones are provided, they must be associated with any existing mature trees as well as allowing for the planting of additional trees and landscape.
- 6) No structures, works or excavations that may restrict vegetation growth are permitted in deep soil zones (including, but not limited to, car parking, hard paving, patios, decks and drying areas).

12.3.5 Building exteriors

A. Background

A town's streetscape and public domain is defined by its buildings, streets and public places. The maintenance and improvement of the public domain is dependent on a consistent approach to the design of new development including the articulation and finish of building exteriors.

B. Objectives

The objectives of this section are to ensure that buildings in the Hospital Precinct:

a) Contribute positively to the streetscape and public domain by means of high quality architecture and robust selection of materials and finishes;

- b) Provide richness of detail and architectural interest especially at visually prominent parts of buildings, such as lower levels and roof tops;
- c) Present appropriate design responses to nearby development that complement the streetscape;
- d) Clearly define the adjoining streets, street corners and public spaces and avoid ambiguous external spaces with poor pedestrian amenity and security;
- e) Maintain a pedestrian scale in the articulation and detailing of the lower levels of the building; and
- f) Contribute to a visually interesting skyline.

- 1) Adjoining buildings are to be considered when designing new buildings and extensions to existing buildings in terms of:
 - a) Appropriate alignment and street frontage heights;
 - b) Setbacks above street frontage heights;
 - c) Selection of appropriate materials and finishes;
 - d) Facade proportions including horizontal or vertical emphasis; and
 - e) Provision of enclosed corners at street intersections.
- 2) Balconies and terraces should be provided, particularly where buildings overlook parks and on low rise parts of buildings. Gardens on the top of setback areas of buildings and on roofs are encouraged.
- 3) Reliance on continuous balconies to create the main façade is not supported.
- 4) Building façades are to be articulated so that they address the street and add visual interest.
- 5) The design of the street and laneway facades should respond to the existing lot subdivision pattern in the vertical expression of the building.
- 6) External walls should be constructed of high quality and durable materials and finishes with 'self-cleaning' attributes, such as face brickwork, rendered brickwork, stone, concrete and glass. Use of painted render as the primary material is not encouraged.
- 7) To assist articulation and visual interest, large expanses of any single material are to be avoided.
- 8) Glazing for retail uses is to be maximised, but broken into sections to avoid large expanses of glass.
- 9) Highly reflective finishes and curtain wall glazing are not permitted above ground floor level.
- 10) A materials sample board and schedule are required to be submitted with applications for development over \$1 million or for that part of any development built to the street edge.
- 11) The design of roof plant rooms and lift overruns is to be integrated into the overall architecture of the building, and in residential buildings, may be screened by roof pergolas.

12.3.6 Landscape design

A. Background

Landscape design includes the planning, design, construction and maintenance of all utility, open space and garden areas. Water sensitive urban design principles are encouraged and should be applied as much as possible. Good landscaping is fundamental to the amenity and quality of outside space for residential flats.

Where streets vary in scale and character, trees and plantings should be used to enhance and create a consistent character to each street and place. The design of parks and open space areas should reflect the function of the place, its existing or potential character, and its place in the overall structure and hierarchy of the public domain. The design of these spaces should also contribute to providing a good amount of public amenity within the Hospital Precinct.

B. Objectives

In addition to the objectives for Built Form, the objectives of this section are to:

- a) Ensure that the use of potable water for landscaping irrigation is minimised;
- b) Ensure landscaping is integrated into the design of development;
- c) Add value and quality of life for residents and occupants within a development in terms of privacy, outlook, views and recreational opportunities;
- d) Achieve a strong and distinctive landscape character for the precinct and contribute to the reduction of surface stormwater runoff;
- e) Celebrate the symbolic interpretation with the landscape of regional parklands, the mountains and historic watercourses; and
- f) Create an ongoing City ecology by using appropriate species for the area.

C. Controls

- 1) Recycled water should be used to irrigate landscaped areas.
- 2) Commercial and retail developments are to incorporate planting into accessible outdoor spaces.
- 3) Remnant vegetation must be maintained throughout the site, wherever practicable.
- 4) A long term landscape concept plan must be provided for all landscaped areas, including the deep soil zone, in accordance with the Landscape Design section of this DCP. The plan must outline how landscaped areas are to be maintained for the life of the development.

12.3.7 Planting on structures

A. Background

The following controls apply to planting on roof tops or over car park structures, particularly for communal open space required as a component of mixed use residential development, or in non-residential developments where the landscaping proposed is not on natural ground.

The plants in these areas are grown in total containment with artificial soils, drainage and irrigation and are subject to a range of environmental stresses that affect their health, and

ultimately their survival. Compliance with the controls in this section will help minimise health risks to plants and provide quality landscaped areas.

B. Objectives

In addition to the objectives for Built Form, the objectives of this section are to:

- a) Contribute to the quality and amenity of open space on roof tops and internal courtyards;
- b) Encourage the establishment and healthy growth of greening in urban areas; and
- c) Minimise the use of potable water for irrigating planting on structures.

C. Controls

- 1) Planting should be designed for optimum conditions for plant growth by:
 - a) Providing soil depth, soil volume and soil area appropriate to the size of the plants to be established;
 - b) Providing appropriate soil conditions and irrigation methods; and
 - c) Providing appropriate drainage.
- 2) Planters should be designed to support the appropriate soil depth and plant selection by:
 - a) Ensuring planter proportions accommodate the largest volume of soil possible and soil depths to ensure tree growth; and
 - b) Providing square or rectangular planting areas rather than narrow linear areas.
- 3) Minimum soil depths should be increased in accordance with:
 - a) The mix of plants in a planter, for example, where trees are planted in association with shrubs, groundcovers and grass;
 - b) The level of landscape management, particularly the frequency of irrigation;
 - c) Anchorage requirements of large and medium trees; and
 - d) Soil type and quality.

12.4. Other controls

12.4.1 Public domain

All public domain works within the Hospital Precinct shall be undertaken in accordance with the provisions of Penrith City Council's "Kingswood Public Domain Manual" (2013) and the other relevant parts of this DCP.

12.4.2 Pedestrian amenity

The pedestrian environment provides people with their primary experience of and interface with the public domain. This environment needs to be safe, functional and accessible to all. It should provide a wide variety of opportunities for social and cultural activities.

Pedestrian amenity incorporates all those elements of individual developments that directly affect the quality and character of the public domain. The pedestrian amenity provisions are intended to achieve a high quality of urban design and pedestrian comfort in the public spaces of the Hospital Precinct.

The controls in this section aim to increase the vitality, safety, security and amenity of the public domain by:

- a) Encouraging future through site links at ground level;
- b) Ensuring active street frontages and positive building address to the street;
- c) Ensuring provision of awnings; and
- d) Protecting significant views and vistas along streets.

12.4.2.1 Permeability

A. Background

Through site links provide access connections between the long sides of street blocks for pedestrian and vehicular access at street level. These links provide an important permeability function in the form of lanes, shared zones and pedestrian ways.

B. Objectives

- a) To improve access in the Hospital Precinct by providing through site links as redevelopment occurs;
- b) To retain and enhance existing through site links as redevelopment occurs;
- c) To achieve activated links to increase safety and vitality;
- d) To achieve a high quality pedestrian environment;
- e) To retain or revitalise lanes as useful and interesting pedestrian connections as well as for service access; and
- f) To improve the permeability of large sites when they are redeveloped for more intensive uses.

- 1) Through site links are to be provided as shown in Figure E12.6 with accessible paths of travel that are:
 - a) A minimum width of 4m for its full length and clear of all obstructions including columns, stairs, building overhangs etc;
 - b) Direct and publicly accessible thoroughfares for pedestrians;
 - c) Open-air for its full length and have active frontages or a street address; and
 - d) Activated by retail or commercial for a minimum of 70% of its length.
- 2) Existing dead end lanes are to be extended through to the next street as redevelopment occurs.
- 3) New through site links should be aligned and connected with existing and proposed through block lanes, shared zones and pedestrian ways and opposite other through site links.
- 4) Existing publicly and privately owned links are to be retained.
- 5) Signage is to be located at street entries indicating public access through the site as well as the street to which the link connects.
- 6) Lanes are to be designated pedestrian routes that are:
 - a) Accessible paths of travel, with a minimum width of 6m for the full length, which is clear of all obstructions;

- b) Designed, paved and well lit; and
- c) Appropriately signposted indicating the street(s) to which the lane connects.



Figure E12.6 Existing and desired links

12.4.2.2 Active street frontages and address

A. Background

Active street frontages promote an interesting and safe pedestrian environment. Busy pedestrian areas and non-residential uses, such as shops, studios, offices, cafes, recreation and promenade opportunities, promote the most active street fronts.

Residential buildings contribute positively to the street by providing a clear street address, direct access from the street and direct outlook over the street.

B. Objectives

- a) To promote pedestrian activity and safety in the public domain;
- b) To maximise active street fronts in Hospital Precinct;
- c) To define areas where active streets are required or outdoor dining is encouraged; and
- d) To encourage an address to the street outside of areas where active street frontages are required.

- 1) Active frontage uses are defined as one or a combination of the following, at street level:
 - a) An entrance to retail premises;
 - b) A shop front;
 - c) Glazed entries to commercial and residential lobbies occupying less than 50% of the street frontage, to a maximum of 12m frontage;
 - d) A café or restaurant if accompanied by an entry from the street;
 - e) Active office uses, such as a reception, if visible from the street; and
 - f) A public building, if accompanied by an entry.
- 2) Active street fronts are to be located at the ground level of all buildings located in those areas as shown in Figure E12.7.
- 3) Ground floor active street frontage uses are to be at the same level as the adjoining footpath and must be directly accessible from the street.
- 4) Restaurants, cafes and the like are to consider providing openable shop fronts. A separate approval from Council is required under the *Roads Act* and *Local Government Act* for outdoor street dining.
- 5) Street address is defined as entries, lobbies, and habitable rooms with full height to a minimum of 2.1m clear glazing to the street.
- 6) Residential developments are to provide a clear street address and direct pedestrian access off the primary street front or laneway (if provided), and allow for residents to overlook all surrounding streets.
- 7) Commercial entries are to be separate to residential entries and are to address the primary street frontage.
- 8) Large developments should provide multiple entrances including an entrance on each street frontage leading to separate cores.
- 9) Residential buildings are to provide not less than 65% of the lot width as street address.

Figure E12.7 Active Street Frontages



12.4.2.3 Safety and security

A. Background

The design of buildings and public spaces has an impact on perceptions of safety and security, as well as actual opportunities for crime. A safe and secure environment encourages activity, vitality and viability, enabling a greater level of security.

B. Objectives

- a) To minimise opportunities for crime by incorporating environmental design in the development;
- b) To ensure developments are safe and secure for pedestrians;
- c) To contribute to the safety of the public domain; and
- d) To encourage a sense of ownership over public and communal open spaces.

- 1) For residential lobbies the lift is to be visible upon entry to the foyer.
- 2) The extent of corridors between the entry doors and the lift is to be minimised.
- 3) The minimum width of the corridor is to be at least 3m leading to the lift on the ground floor.
- 4) All residential lobbies are to be provided with a seating area and space for letterboxes.

- Developments are to address the provisions of the Site Planning and Design Principles section of this DCP as it relates to Crime Prevention through Environmental Design (CPTED) principles.
- 6) Building design, particularly for higher density residential buildings, are to allow for passive surveillance of public and communal spaces, accessways, entries and driveways.
- 7) For large scale retail and commercial development with a gross floor area of over 5,000m², a 'safety by design' assessment by a qualified consultant, is to be provided in accordance with the CPTED principles.
- Certain types of development will be referred to Council's Community Safety Officer and, where appropriate, NSW Police in accordance with the CPTED protocol between Penrith City Council and NSW Police.

12.4.2.4 Awnings

A. Background

Awnings increase the useability and amenity of public footpaths by protecting pedestrians from sun and rain. They encourage pedestrian activity along streets and, in conjunction with active edges such as retail frontages, support and enhance the vitality of the local area. Awnings, like building entries, provide a public presence and interface within the public domain and contribute to the identity of a development.

A separate approval to erect an awning over the road reserve including a footpath will be required under the *Roads Act* and the *Local Government Act*.

B. Objectives

- a) To provide shelter from wind and rain for public streets where most pedestrian activity occurs;
- b) To address the streetscape by providing a consistent street frontage in the Hospital Precinct; and
- c) To provide a visually integrated streetscape.

- 1) Continuous street frontage awnings are to be provided for all new developments where active street frontages have been identified in Figure E12.7.
- 2) Awnings should generally:
 - a) Be a minimum 2.8m deep where street trees are not required, otherwise a minimum 2.4m deep;
 - b) Have a minimum soffit height of 3.2m and a maximum of 4m;
 - c) Be stepped for design articulation or to accommodate sloping streets, integral with the building design and not exceed 700mm;
 - d) Be low profile, with slim vertical fascias or eaves (generally not to exceed 300mm height); and
 - e) Be setback from the kerb to allow for clearance of street furniture, trees, etc (minimum 600mm).
- 3) Awning design must match building facades and be complementary to those of adjoining buildings.

- 4) Awnings must wrap around corners for a minimum of 6m.
- 5) Under-awning lighting, recessed into the soffit of the awning or wall mounted onto the building, is to be provided to facilitate night use and to improve public safety.
- 6) One under-awning sign may be attached to the awning and must be 6m away from the sign of the adjoining property.

12.4.2.5 Vehicle footpath crossings

A. Background

Vehicle crossings over footpaths disrupt pedestrian movement and threaten safety. The design of vehicle access to buildings also influences the quality of the public domain. Overly wide and high vehicle access points detract from the streetscape and the active use of street frontages.

The design and location of vehicle access to developments should minimise both conflicts between pedestrians and vehicles on footpaths, particularly along pedestrian priority places, and visual intrusion and disruption of streetscape continuity.

B. Objectives

- a) To make vehicle access to buildings more compatible with pedestrian movements;
- b) To reduce the impact of vehicular access on the public domain; and
- c) To ensure vehicle entry points are integrated into building design and contribute to the building design.

- 1) A maximum of one vehicle access point (including the access for service vehicles and parking for non-residential uses within mixed use development) will be permitted for each development.
- 2) Where practicable, vehicle access is to be from lanes and minor streets rather than primary street fronts or streets with major pedestrian activity.
- 3) Where practicable, adjoining buildings are to share or amalgamate vehicle access points. Internal on-site signal equipment is to be used to allow shared access. Where appropriate, new buildings should provide vehicle access points so that they are capable of shared access at a later date.
- 4) To ensure pedestrian safety, vehicle entry points should not be located adjacent to building entry points.
- 5) Vehicle access widths and grades are to comply with the Australian Standard.
- 6) Vehicle access ramps parallel to the street frontage will not be permitted.
- 7) Vehicle access ramps must be integrated into the building design and are not permitted as separate structures, Ramps must not be exposed along the side boundary.
- 8) Vehicle entry points are to be integrated into building design.
- 9) Doors to vehicle access points are to be roller shutters or tilting doors fitted behind the building facade.
- 10) Vehicle entries are to have high quality finishes to walls and ceilings as well as high standard detailing. No service ducts or pipes are to be visible from the street.
- 11) Porte cocheres disrupt pedestrian movement and do not contribute to active street frontage. They may only be permitted for hotels, medical use buildings and major tourist

venues subject to urban design, streetscape, heritage and pedestrian amenity considerations.

- 12) If justified, porte cocheres are to be internal to the building with one combined vehicle entry and exit point, or one entry and one exit point on two different street fronts of the development.
- 13) In exceptional circumstances for buildings with one street frontage only, an indented porte cochere with separate entry and exit points across the footpath may be permitted, as long as it is constructed entirely at the footpath level, provides an active frontage at its perimeter and provides for safe and clear pedestrian movement along the street.

12.4.3 Car Parking

A. Background

Most controls that relate to car parking are included in the Transport, Access and Parking section of this DCP. The following section provides some additional on-site car parking options for the Hospital Precinct.

B. Objectives

- a) To facilitate an appropriate level of on-site parking provision to cater for a mix of development types;
- b) To minimise the visual impact of on-site parking; and
- c) To provide adequate space for parking and manoeuvring of vehicles.

- 1) Car parking above ground level is to have a minimum floor to ceiling height of 2.8m so it may be adapted to another use in the future.
- 2) Where possible, natural ventilation is to be provided to underground parking areas with ventilation grilles and structures that are:
 - a) Integrated into the overall façade and landscape design of the development;
 - b) Located away from the primary street façade; and
 - c) Oriented away from windows of habitable rooms and private open space areas.
- 3) Proposals for basement parking areas are to be accompanied with a geotechnical report, prepared by an appropriately qualified professional, and any other supporting information.
- 4) Basement car parking should be located directly under building footprints to maximise opportunities for deep soil areas unless the structure can be designed to support mature plants and deep root plants.
- 5) The appearance of car parking is to be improved by locating parking so that it is not visually prominent from the street.
- 6) Car parking structures located above ground and viewed from the public domain are to be architecturally treated or where practical, sleeved with development.
- 7) Car parking layouts are to comply with the relevant Australian Standards.

12.4.4 Site Facilities and Services

A. Objectives

- a) To ensure that the design and location of site facilities (such as clothes drying areas, mail boxes, etc.) are integrated within the development and are unobtrusive;
- b) To ensure that site services and facilities are adequate for the nature and quantum of development; and
- c) To establish appropriate access and location requirements for servicing.

- Letterboxes should be integrated into a wall immediately adjacent to the building entrance(s). Where there are a number of entrances into the building, the letterboxes located at each entrance should service the tenancies that will utilise that building entrance.
- 2) Letterboxes shall be secure and large enough to accommodate articles such as newspapers.
- 3) Telecommunication infrastructure should be built into the development and predominantly below ground, incorporating the following services fundamental in the effective operation of businesses, home businesses and dwellings:
 - a) Multiple telecom services including high speed internet (including broadband), voice and data systems; and
 - b) Cabling from all telephone lines and cable TV.
- 4) Where a master antenna is provided, the antenna must be sited in a location that is least visible from surrounding public spaces/ open areas.
- 5) Air conditioning units, service vents and other associated structures should be:
 - a) Located away from street frontages and lanes;
 - b) Located in a position where the likely impact is minimised; and
 - c) Adequately setback from the perimeter wall or roof edge of buildings.
- 6) Where they are to be located on the roof, they should be integrated into the roofscape design and in a position where such facilities do not become a feature in the skyline at the top of building(s).
- 7) Separate waste storage and collection areas are to be provided for domestic and commercial waste.
- 8) For developments comprising residential uses, a separate storage and collection area for bulky waste (such as cardboard boxes) and old or discarded furniture/appliances shall be provided.
- 9) Vehicular access to the waste collection areas should be from rear lanes, side streets and right of ways.
- 10) The responsibility for the ongoing management of waste facilities must be determined prior to work commencing on the development. Details of the management of waste by future tenants are to form part of the Waste Management Plan for the development. (See Appendix F3 for details on waste management plans).
- 11) Loading/unloading areas are to be:
 - a) Integrated into the design of developments;

- b) Separated from car parking and waste storage and collection areas;
- c) Located away from the circulation path of other vehicles;
- d) Designed for commercial vehicle circulation and access complying with AS2890.2; and
- e) Vehicles are to enter and exit the site in a forward direction.
- 12) Separate loading/unloading areas are to be provided for commercial/retail and residential uses.
- 13) Generally, provision must be made for all emergency vehicles to enter and leave the site in a forward direction, particularly NSW Fire Brigade vehicles where:
 - a) NSW Fire Brigade cannot park their vehicles within the road reserve due to the distance of hydrants from the building or restricted vehicular access to hydrants; or
 - b) Otherwise required by the NSW Fire Brigade's Code of Practice Building Construction NSWFB Vehicle Requirements.
- 14) For developments where NSW Fire Brigade vehicle(s) are required to enter the site, the circulation path and access/egress provision is to comply with the NSW Fire Brigade's Code of Practice Building Construction NSWFB Vehicle Requirements.

12.5 Other Information

Please refer to Parts C and D of this DCP for other relevant controls that may apply to development within the Hospital Precinct.