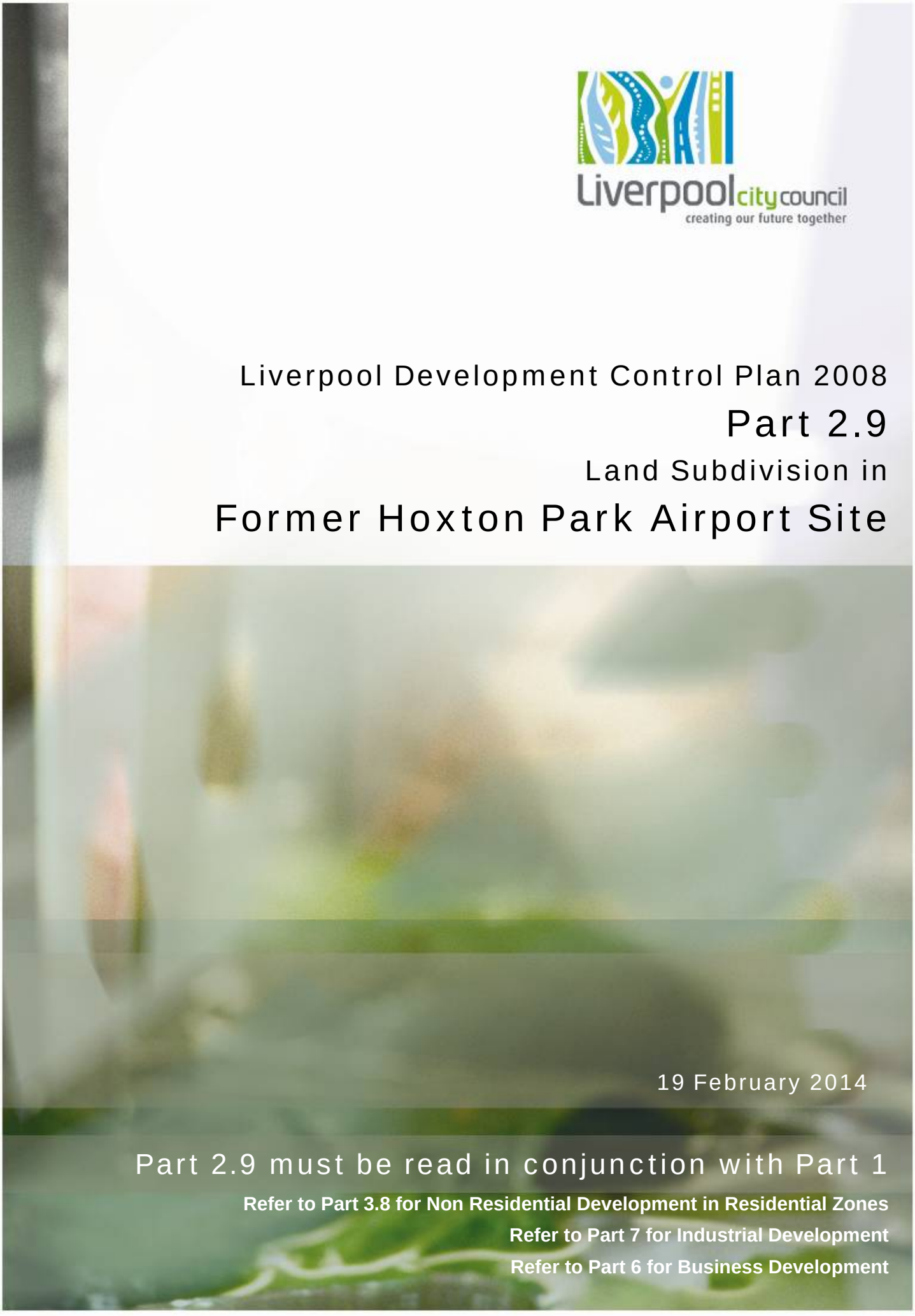


Liverpool city council
creating our future together

Liverpool Development Control Plan 2008

Part 2.9

Land Subdivision in

Former Hoxton Park Airport Site

19 February 2014

Part 2.9 must be read in conjunction with Part 1

Refer to Part 3.8 for Non Residential Development in Residential Zones

Refer to Part 7 for Industrial Development

Refer to Part 6 for Business Development

Liverpool Development Control Plan 2008
Part 2.9 Former Hoxton Park Airport Site

Table of Contents

Table of Figures

List of Tables

1. Preliminary

Applies to

1. This Part applies to land shown in Figure 1.
2. The controls in this part relate to:
   i. Subdivision and development of residential land;
   ii. Development of the public domain within the industrial zoned land; and
   iii. Development of the business zoned land.

Note: Notification of a Dwelling House is not required if the Development Application complies with all the provision of Part 2.9.

3. Part 1 also applies to the land.
4. Minimum lot sizes and widths are to comply with the requirements within Part 1 of the DCP.
5. Part 3.8 also applies for non residential development on residential land.
6. Parts 3.1 - 3.7 do not apply to the land.
7. Controls on development in the Industrial Zones (except for the public domain) in this locality are in Part 7.
8. Additional controls on development in the Business Zone in this locality are in Part 6.

Figure 1 Land to which this Part applies

Background

The Former Hoxton Park Airport site was rezoned under the Liverpool LEP 2008. It is envisaged that development of the site will link to Middleton Grange, Cecil Hills and to Cowpasture Road. The only access at the beginning of the development of the site is from the southern end of the site off Cowpasture Road. This access point is flood liable and cannot easily be made flood free.

In order to make the site available for development an alternative access point to Cowpasture Road will be required. Subsequently it is expected that access will also be made to Cecil Hills and to Middleton Grange.

Voluntary Planning Agreement

The provision of the access and the provision of public facilities on site are to be by way of a Voluntary Planning Agreement. The timing and scope of the provision of public facilities is specified in the Voluntary Planning Agreement.

Objectives

Accessibility

To ensure a clear relationship between accessibility and land use by:

a) Promoting a movement system that gives appropriate priority to: walking, cycling, public transport, and private vehicles.

b) Guaranteeing a movement system that relates accessibility demand to location of development type.

c) Ensuring that servicing is able to be carried out appropriately.

d) Ensuring movement priorities, traffic speeds and street and road designs are appropriate to the location and give priority to pedestrians and children.

e) Guaranteeing adequate accessibility for emergency vehicles.

f) Building upon existing movement patterns and infrastructure by utilising the existing street layout.

g) Providing safe access during flooding events.

Social Benefits

To establish affordable and accessible facilities and resources that allow people to maintain wellbeing, live and recreate by:

a) Making appropriate provision for social and community needs.

b) Providing for a full range of housing types, form and tenure.

c) Establishing a hierarchy of recreation facilities and parks/reserves.

d) Ensuring that development creates a 'people place' by giving priority to people and human relationships through housing mix and safety.

e) Accommodating life-long educational and learning needs.

Environmental Benefits

To ensure a clean, safe and healthy environment that builds on existing resources and produces quality built and natural assets by:

a) Establishing appropriate drainage and floodplain management that, contributes positively to the area.

b) Developing solutions to manage environmental issues on-site.

c) Ensuring that waste disposal is effective and efficient and that recycling is utilised at every opportunity.

d) Ensuring a high standard of water and air pollution management and water quality.

e) Maintaining and enhancing the quality of the natural environment.

f) Connecting and enhancing vegetation corridors and providing links between the Western Sydney regional parkland and the Hinchinbrook Creek Corridor.

g) Promoting the conservation of flora and fauna, including the retention of Cumberland Plain Woodland.

h) Promoting the development of place and a quality built environment with people and human relationships as a central consideration.

Economic Benefits

To establish economic capital that is accessible and meets the needs of the community by:

a) Ensuring appropriate accessibility to employment.

b) Ensuring the area's needs are identified in a local context through provision of local facilities and services.

c) Ensuring infrastructure is sufficient to meet current and predicted need.

d) Providing appropriate locations for local institutions.

2. Controls for Public Domain in the Residential Area

2.1 Street Network

The development of the site will involve industrial development in the larger southern portion of the site. There will be residential development in the northern portion of the site. It is envisaged that there will be further residential development to the north of the site which will link to the residential area in Cecil Hills.

It is envisaged that there will be an east west link road which will separate the residential and industrial precincts. This road link will provide access to Middleton Grange in the west and flood free access to Cowpasture Road in the east.

It is also envisaged that there would be a link capable of carrying public transport linking north to Cecil Hills. There would also be a direct link south through the industrial area to Cowpasture Road, which would provide for industrial traffic as well as public transport.

In addition to these links there will be a local street network.

Link roads

Objectives

a) To provide an attractive residential street environment.

b) To provide for the safe and efficient circulation of traffic.

c) To provide for the safe and efficient movement of pedestrians with particular regard to the provision of clear and safe access routes for people who have a disability.

d) To provide for efficient movement of local bus services and direct pedestrian access for all members of the community including those with disabilities.

e) To provide safe access during flooding events.

f) Provide safe, legible and efficient access both within the site and through the creation of new connections to the existing road network.

g) Encourage pedestrian and cycle use through a clear footpath and cycleway network, providing the potential to link to key destinations in the surrounding district such as the Western Sydney Regional Parklands, Hinchinbrook Creek corridor, schools and local community and retail facilities.

Controls

1. The major road links shall be provided in accordance with Figure 2.
2. The timing of the provision of road links will need to be consistent with the Voluntary Planning Agreement.
3. Works to facilitate the installation of signals and the construction of slip/turning lanes at the two proposed traffic intersections with Cowpasture Road is to be carries out by the developer.

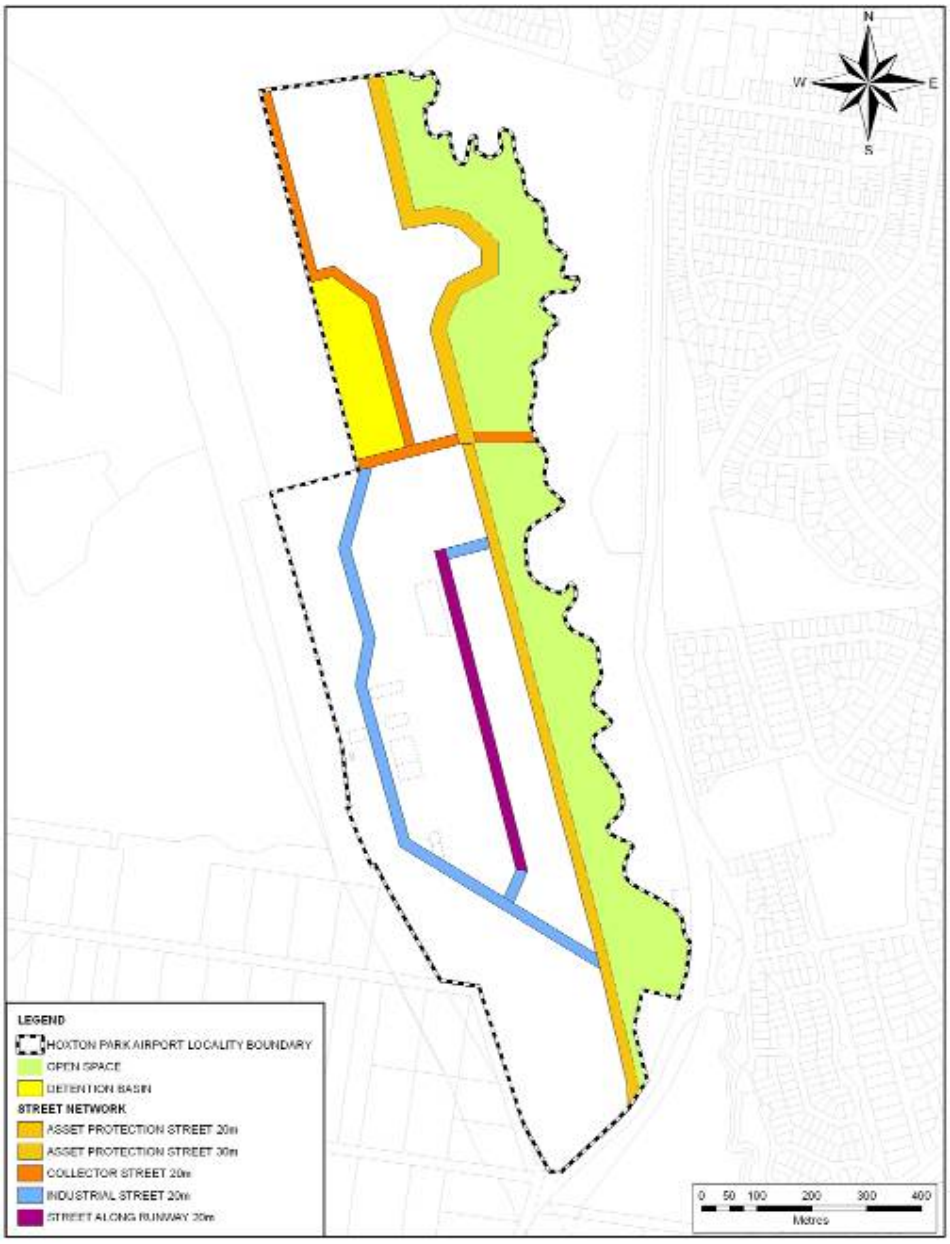


Figure 2 Street Network

Local Street Network

Objectives

a) To encourage a low-speed traffic environment.

b) To develop a comprehensive street network that links the site to the surrounding residential, commercial and employment areas.

c) To provide a comprehensive pedestrian and cycle network linking residential areas with parks, recreation areas and village centre.

d) To create a high quality safe environment for walking and cycling.

Controls

1. Subdivision plans are required to comply with the fixed roads identified in Figure 2.
2. Provide a grid-like street network pattern to facilitate walking and cycling and enable direct local vehicle trips within the neighbourhood. Cul-de-sacs will not be supported other than where alternative street patterns are not achievable.
3. Design safe pedestrian crossing points.
4. All intersections are to be designed in accordance with the RTA Austroads standards.
5. Street sections are to comply with Figures 3 - 5.
6. Streets planned to accommodate bus routes are to have a minimum carriageway width of 7m.
7. Local streets shall front open space and avoid back fences to open space and other public areas.
8. All streets are to be legibly signposted with streets names and property numbers.
9. Footpaths are to be provided on both sides of all streets.
10. All Development Applications for subdivision are to detail the proposed kerb type.
11. Barrier kerbs are to be used:
    - On all streets within the town centre.
    - On any street frontage to open space.
    - At all intersections (between the potential driveway location on one frontage to the potential driveway location on the alternative street frontage). Driveways are not to be located within 6m of the tangent point of any intersection.
    - Barrier kerb shall be installed for the entire length of bus zones and for 10m on the approach of the bus stop.
12. Roll kerbs may be used in other locations to the above.

Street Types

The following types of streets are to be provided.

East West Link Road

An east west link road is to be provided from the M7 Motorway underpass to Cowpasture Road. This road is to incorporate a bridge crossing of Hinchinbrook Creek. The bridge is to be designed and constructed in a way which minimises impacts upon flora and fauna within the Hinchinbrook Creek Riparian Corridor. The proponent is to provide a signalised intersection and any works for the provision of an intersection at the junction of the east west link road and Cowpasture Road. This may include turning lanes, median separator, kerbs etc.

East West Link Road in Village Centre

These pedestrian-orientated streets have 6m wide footpaths to allow for outdoor eating areas. These streets have active retail frontages with opportunities for commercial and residential uses on other levels. The Town Centre Secondary Streets follow a north oriented grid pattern. The southern side of east-west streets on the grid have a wider footpath allowing for solar access in winter. Deciduous trees are proposed for the east-west streets to maintain solar access in winter. Outdoor eating areas must not impact on the provision of adequate pedestrian circulation especially adjacent to bus stops. Refer to Figure 4.

Collector Street

This street provides a connection north from the East West Link Road through the residential area to Cecil Hills. It will be the public transport route. Refer to Figure 3.

Local Streets

These streets are designed for slow residential traffic. The road reserve is 15.2m wide. Refer to Figure 4.

Asset Protection Road

This road is situated between the proposed urban areas and adjoining conservation areas that may be prone to bush fires. Pedestrian and cycle paths will encourage recreational use in what will be a scenic environment. Appropriate night lighting is important on this road to allow for incidental surveillance along the bushland fringe. Asset protection roads will have a road reserve of 15m of which is taken by the carriageway and road verges. The remaining 5m is proposed to be and dedicated cycleway, grassland and scattered trees and may serve a passive recreation purpose. Refer to Figure 5.

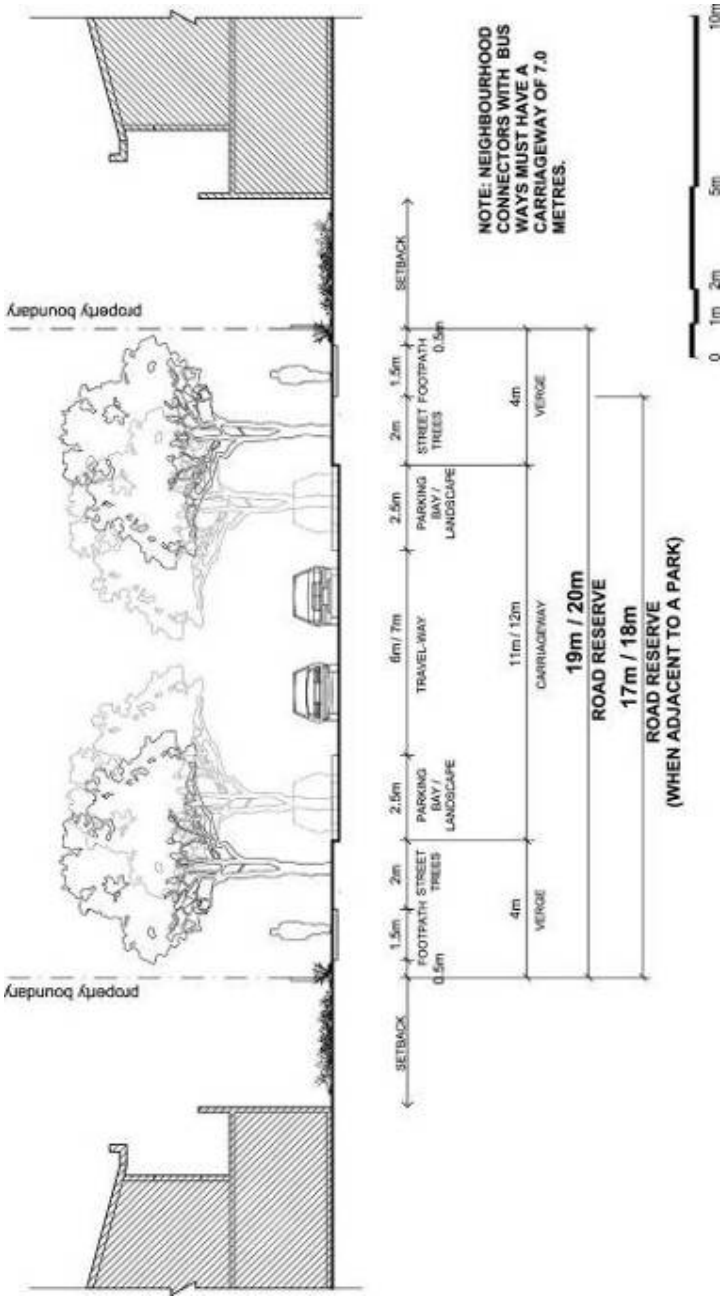


Figure 3 Collector Street

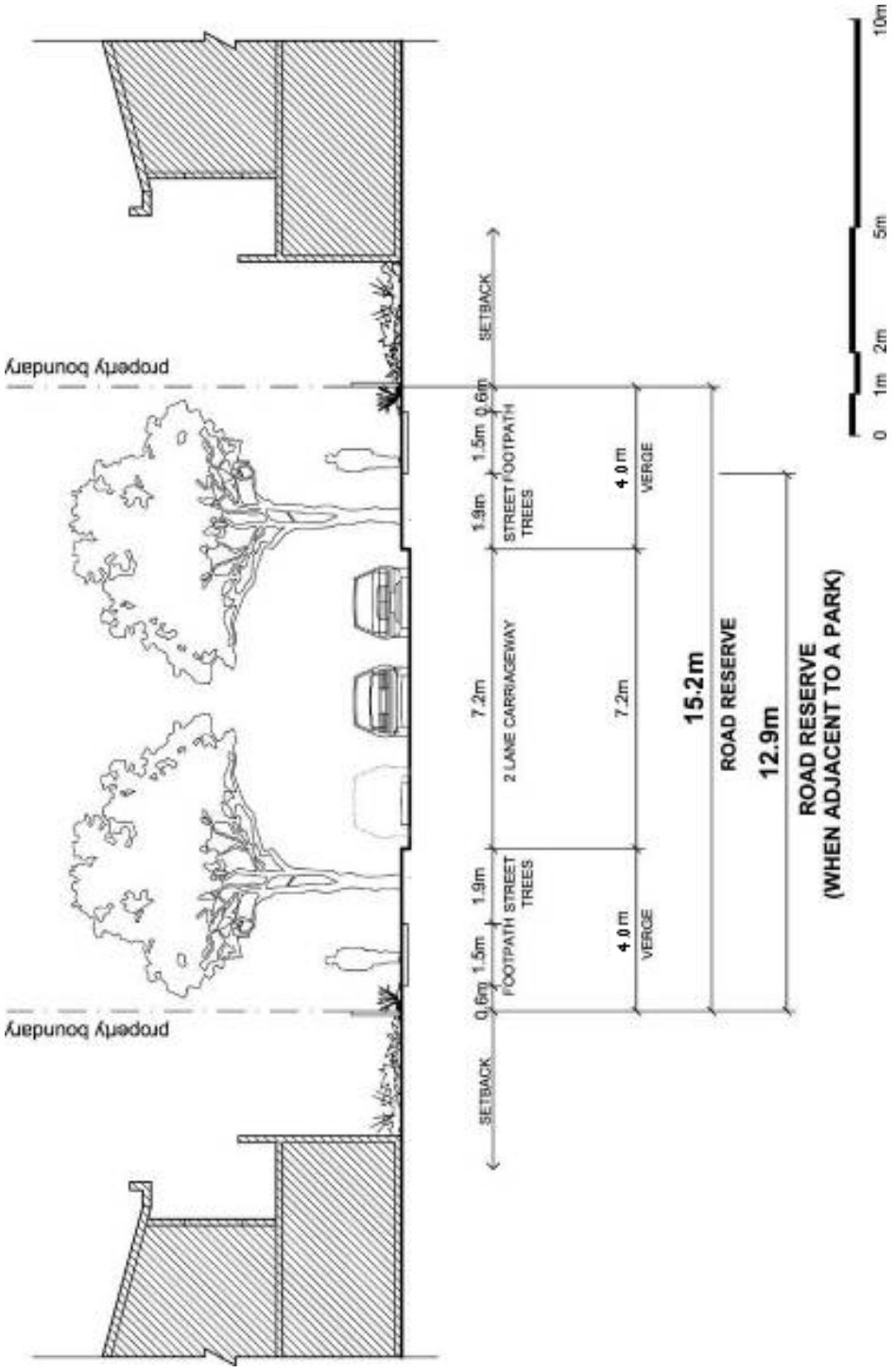


Figure 4 Local Street

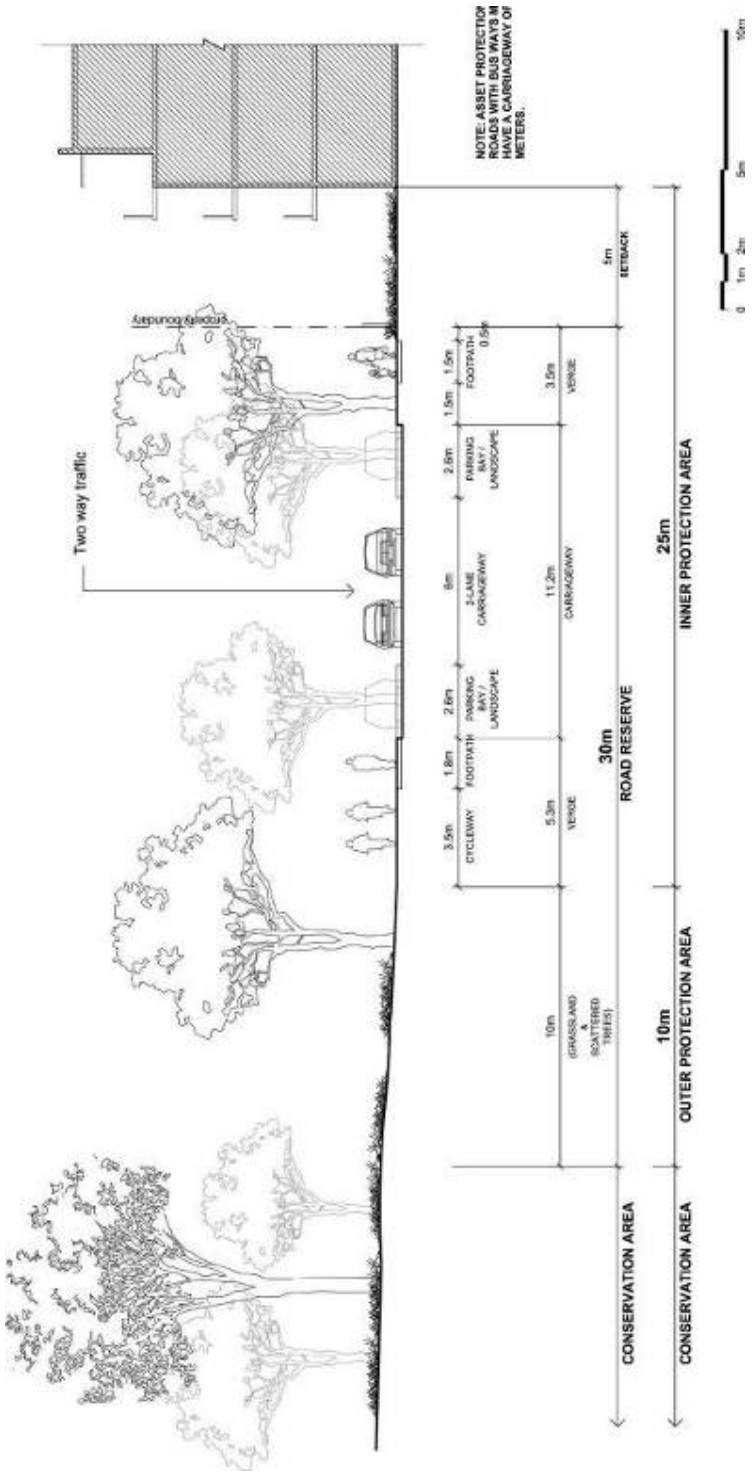


Figure 5 Asset Protection Road

2.2 Pedestrian and Cyclist Paths

Background

Pedestrian and cycle facilities in public spaces provide linkages to social and cultural activities and educational facilities, and should be characterised by excellence of design appropriate to the area.

Objectives

a) To encourage walking and cycling for local trips.

b) To provide a permeable and interconnected network of streets and pathways that gives safe, convenient and legible access to areas of attraction both within and beyond the suburb.

Controls

1. Pedestrian and cycle paths shall be provided in conjunction with the subdivision of land, creation of streets and development of open space in accordance with Figure 6.
2. Shared pedestrian/cycle links, cycle ways, public streets and lanes shall be clearly and frequently signposted to indicate their shared status.
3. Designated cycle lanes on streets shall be clearly indicated by line-markings on the road surface and/or by signs beside the road.
4. Shared pedestrian and cycle paths shall be a minimum 2.5m wide.
5. Pedestrian footpaths along school frontages shall be a minimum of 2.5m wide.
6. Pedestrian footpaths through the neighbourhood centre shall be full verge width and paved with a Council approved paver.
7. Designated pedestrian-only paths shall be a minimum of 1.5m wide and located in accordance with Figures 3 - 4.

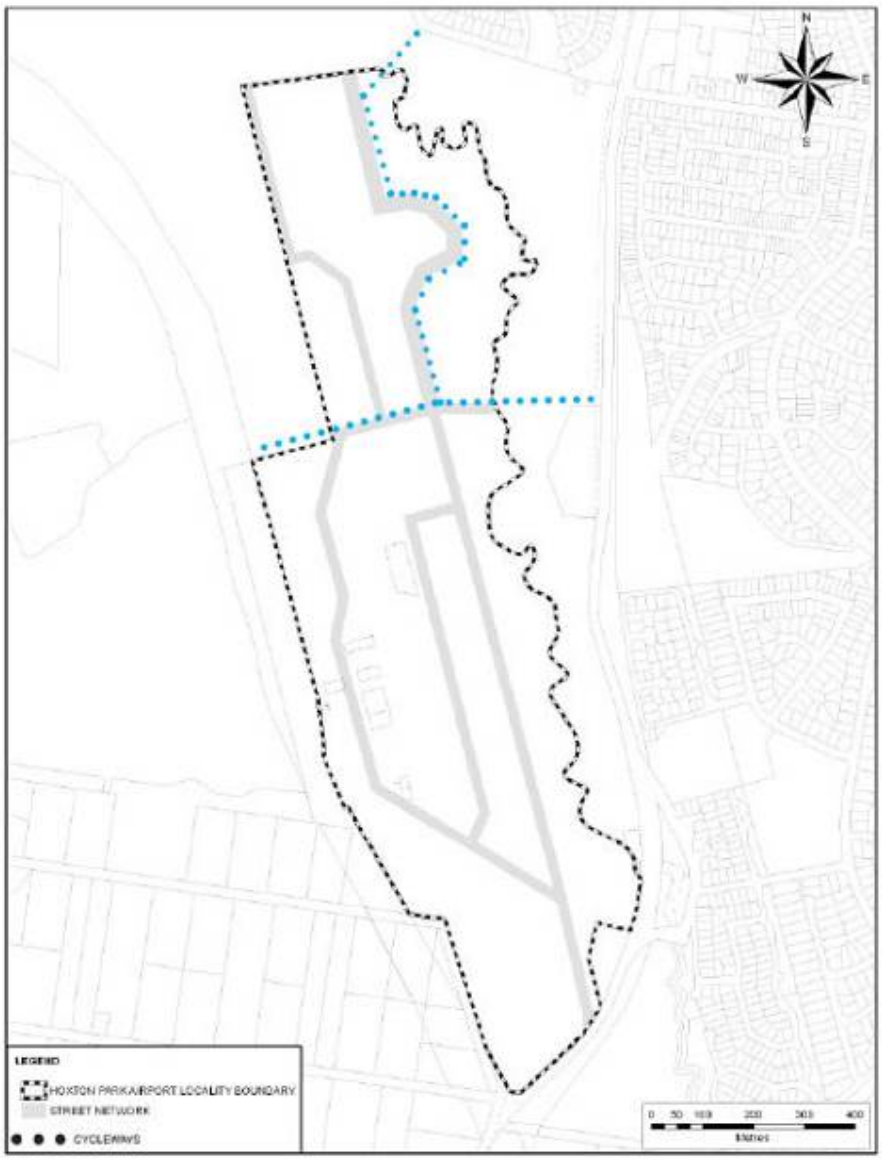


Figure 6 Cycleway routes in Hoxton Park Aerodrome

2.3 Streetscape and Street Trees

Background

Street furniture should maximise pedestrian comfort, convenience and amenity, create visual harmony and be used to define spaces, streets, paths and gateways. Opportunities for public art in significant public domain locations should be explored as part of the development process.

Objectives

a) To create a sense of identity for the area.

b) To enhance public spaces so that they are vibrant, safe and welcoming.

c) To facilitate cultural identity through art and design in public places.

d) To create quality streetscapes that is visually attractive and integrates with surrounding street layout.

Controls

1. Street furniture is to be incorporated into the design of all public spaces and should be consistent in design and style.
2. Street furniture is to be located so as not to impede mobility, generally in accordance with *AS 1428:1 - 4*.
3. The location and detailing of all proposed street furniture is to be indicated on the Landscape Plan, to be submitted with the DA.
4. Elements from the *Hoxton Park Airport Interpretation Plan and Strategy* should be provided for the benefit of enhanced public domain, to reflect the sites previous land use and the significance of the 'defence' theme and to communicate the importance of significant events, places and people associated with Hoxton Park Airport.

Street Tree Planting

1. Street trees shall be required to be planted in conjunction with the creation of a new street or the extension of an existing street.
2. One street tree shall be planted for each allotment created.
3. The street trees shall be planted prior to the release of the subdivision certificate.
4. The trees shall be provided with protection to ensure their survival during the construction of buildings in the street. Refer to Figure 7 for details.
5. Trees and shrubs on individual streets must be of a uniform species. On streets adjacent to bushland, species indigenous to the area must be planted.
6. The trees planted along the main access avenue are to be; *Lophostemon confertus* or an equivalent tree.
7. Where appropriate, incorporate interpretative streetscape elements reflecting the former land use history on the site having regard to the Heritage Interpretation Plan and Strategy Report.

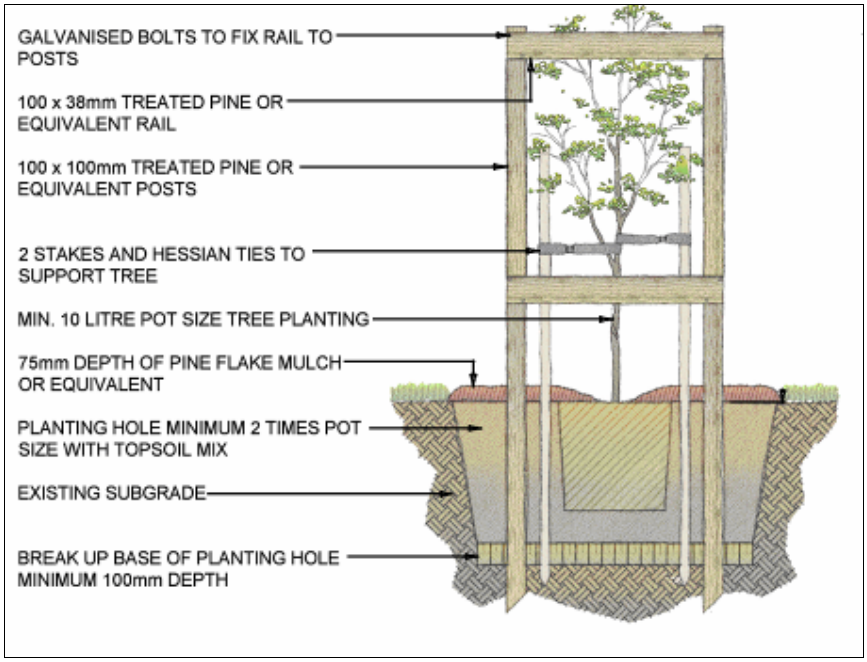


Figure 7 Tree Protection

2.4 Interpretation Strategy

Objective

To provide physical infrastructure which interprets the historical significance of Hoxton Park Airport within elements of the new development and open space parcels.

Controls

1. Provide interpretation signage within the developable land. This can be in the form of free standing signage, plaques, or signage within the industrial and retail buildings.
2. Interpretive signage should not be intrusive and be scratch and graffiti proof to ensure minimal ongoing maintenance.
3. The runway is one of the last remaining original features of Hoxton Park Airport. Its location is to be reflected via the proposed road pattern and highlighted by the street name, landscape treatments and signage.
4. Public open spaces, former aeroplane hideouts and taxiways shall be embellished with features such as sculptures, signage/plaques, play equipment and shade structures following an aeronautical and defence theme.

2.5 Open space

Background

Public spaces can be designed to promote vibrant social interaction, civic pride and a sense of public ownership and belonging. Landscaped areas and open space within the public domain play a major role in setting the character of the locality. These areas should make the neighbourhood pleasant and welcoming and be convenient to the needs of the community.

Objectives

a) To ensure adequate provision and distribution of public open space to meet the needs of the residents

b) To retain and integrate existing landscape elements, such as vegetation and topographic features, in the design of new development

c) To provide links between the open space areas and community and retail facilities

d) To create a variety of linked public spaces that fulfils functional requirements as well as creates attractive and memorable places.

e) To endorse public ownership of open spaces and environmental protection zones within the site to promote local and regional recreational and ecological values.

f) To integrate landscape design with water cycle management across the development area to promote water sensitive urban design principles as part of the development.

g) To extend, link and reinforce the natural features of the area, particularly the natural watercourses and habitat.

h) To encourage the use of native species and low maintenance landscape treatments.

i) To ensure good quality open space to meet the recreational needs of residents.

Controls

1. All landscape plans are to be prepared by a qualified Landscape Architect or suitably qualified person, and are to follow the requirements under Part 1.
2. All landscaped areas must incorporate shade planting
3. Any neighbourhood recreation spaces created within the open space are to be readily accessible from the residential area and create a precinct focus.
4. Embellishment of open space shall reflect the former land use history on the site having regard to the *Heritage Interpretation Plan and Strategy Report*
5. The provision of Open Space shall be in accordance with the Voluntary Planning Agreement.
6. Neighbourhood and playground parks are to create a precinct focus.
7. Public open spaces are to be designed and landscaped so as to minimise the need for maintenance. This is to be achieved through the use of appropriate native species (refer to Appendix 2 in Part 1). The Landscape Plan submitted with the DA must demonstrate how the proposed landscaping will minimise maintenance.
8. Public open space should be bounded by public streets with buildings oriented towards the open space.
9. Significant existing trees, tree stands and vegetation are to be retained, relocated or replaced by the same species.
10. Pedestrian and cycle paths must be provided as part of parks and recreation areas.
11. Street name and information signs are to be designed to reinforce the distinct identity of the locality and to facilitate accessibility and mobility.
12. The design of fences must be consistent throughout the public domain, parks and open space.
13. Existing trees, tree stands and vegetation, in good health, are to be retained where possible.
14. A Landscape Plan must be lodged with all DAs.

2.6 Stormwater Management

Creeks

Objectives

a) To conserve, protect and enhance the creek corridors and biological connectivity through the provision of continuous vegetated creek protection zones along either side of Hinchinbrook Creek.

b) Maximise opportunites for stream/creek restoration and enhancement.

c) Enable exsiting water courses to contribute to and be enhanced by a coordinated approach to development within the area.

d) Ensure the rehabilitation of the creek corridors is integrated into floodplain management planning.

Controls

1. The Hinchinbrook Creek corridor interfaces are to be constructed in accordance with Section A-A and Section of C-C of Figure 8.
2. Asset protection zones (APZs) are to be generally located outside the creek corridor.
3. Should public footpaths and cycleways have to be incorporated within the creek zone, they are to be located at the outer edge of the creek land corridor.
4. Any flood impact or hydraulic assessment should consider not only the initial vegetation density but also the final growth, with due allowance for debris build-up before and during flooding.

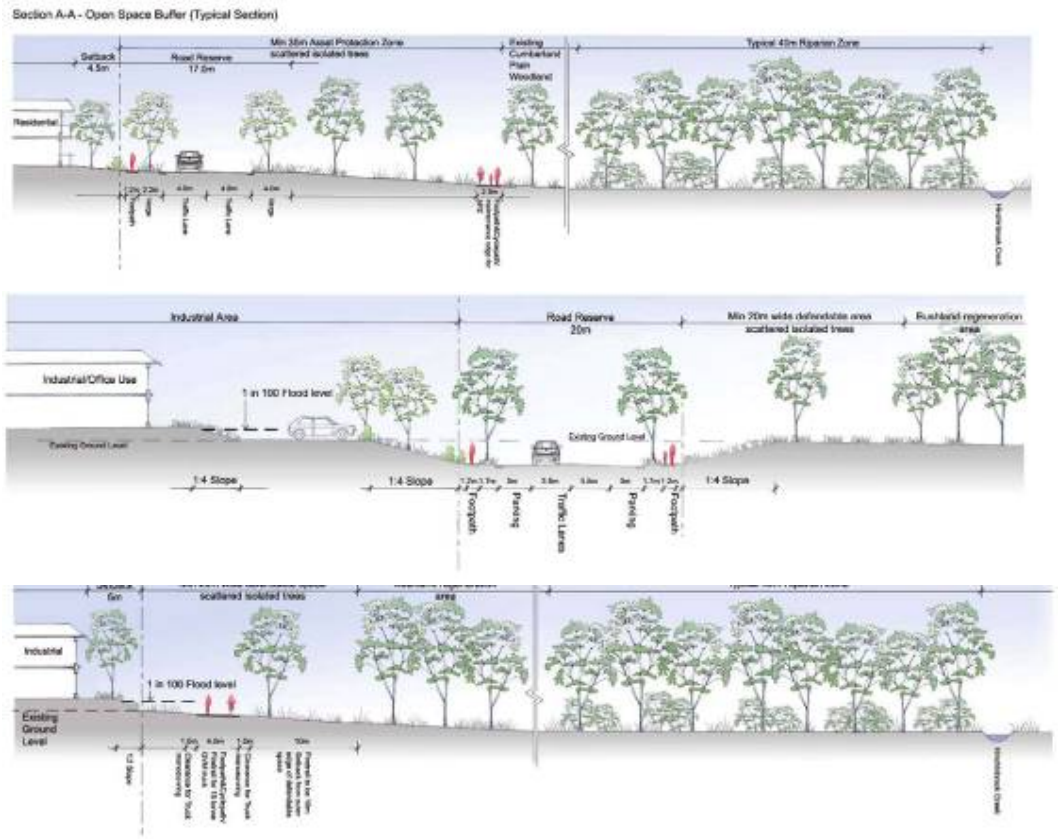


Figure 8 Cross Section of Creek Lands

Waterway Crossings

Objectives

a) To minimise the impact of development on the creek environs.

b) To ensure that any crossing does not restrict natural passages of aquatic life

Controls

1. A detailed assessment by a suitably qualified person is required for any proposed crossing of Hinchinbrook Creek.
2. The design of the proposed creek crossing is to be in accordance with Department of Primary Industries (Fisheries) policies and guidelines for road crossings and bridges including "Fish Passage Requirements for Water Crossings".
3. Rehabilitation of affected creek areas and creek should be implemented post construction; and,
4. Stormwater erosion and sedimentation controls for construction and operation should be designed as part of any proposed development to minimise impacts on Hinchinbrook Creek.

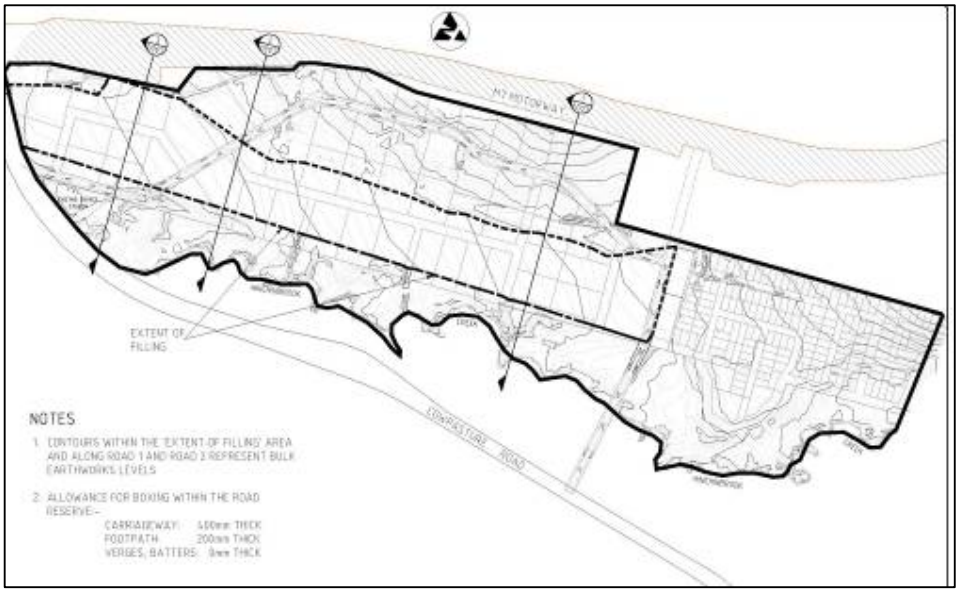


Figure 9 Areas of Site Fill

2.7 Bushfire Protection

Objectives

a) To protect life and property from bushfire attack by incororating adequate mitigation measures.

b) The incorporate bushfire protection measures consistent with the *Planning for Bushfire Protection 2006 Policy* (as amended).

Controls

1. Incorporate an Asset Protection Zone (APZ) to the east of the residential, business and industrial precincts.
2. Allow for a temporary APZ width for the northern and western perimeter of the residential areas as well as bushfire construction standards to apply only if the

adjoining land is not developed prior to the creation of the perimeter lots on the northern and western edge of the residential precinct.

3. Provision of a 20m wide defendable space building setback form the eastern boundary of the residential, industrial and commercial zones.
4. A hydrant water supply shall be installed to the subdivision in accordance with the relevant Australian Standard.
5. Provide for a perimeter road with two way access which delineates the extent of the intended development.
6. Dwelling setbacks may need to be increased for lots on perimeter roads in order to incorporate the required APZ's.
7. APZ's are to be contained within the private land holding and not within land owned by, or to be dedicated to Council.

3. Controls for Public Domain in the Industrial Area

3.1 Street Network

The development of the site will involve industrial development in the larger southern portion of the site.

It is envisaged that there will be an east west link road which will separate the residential and industrial precincts. This road link will provide access to Middleton Grange in the west and flood free access to Cowpasture Road in the east.

It is also envisaged that there would be a link capable of carrying public transport linking north to Cecil Hills. There would also be a direct link south through the industrial area to Cowpasture Road, which would provide for industrial traffic as well as public transport.

In addition to these links there will be a local street network. Detailed conceptual street sections are provided in Section 2.1.

Link roads

Objectives

a) To provide safe access during flooding events.

b) Provide safe, legible and efficient access both within the site and through the creation of new connections to the existing road network.

c) To promote a movement system that, where appropriate, gives priority to walking, cycling and public transport.

d) Encourage pedestrian and cycle use through a clear footpath and cycleway network, providing the potential to link to key destinations in the surrounding district such as the Western Sydney Regional Parklands, Hinchinbrook Creek corridor, schools and local community and retail facilities.

Controls

1. The major road links shall be provided in accordance with Figure 2.
2. The timing of the provision of road links will need to be consistent with the Voluntary Planning Agreement.

Street Types

Objectives

a) To ensure that entry roads and internal access arrangements are suitable for the anticipated nature and volume of traffic and provide a safe movement system.

b) To provide safe easy access throughout the precinct for walking and cycling.

c) To create attractive streetscapes by integrating landscaping and pathways along the road verge.

Controls

1. A minimum 13m wide road carriageway for all streets.
2. All intersections to be designed in accordance with the RTA *Austroads Road Design Guide*.
3. Pedestrian footpaths with a minimum width of 1.2m to be provided on both sides of the road.

4. Street verges are to incorporate suitable levels of landscaping.
5. Street carriageways are to be endorsed by Council prior to the release of development applications for subdivision.

3.2 Streetscape and Street Trees

Background

Street furniture should maximise pedestrian comfort, convenience and amenity, create visual harmony and be used to define spaces, streets, paths and gateways. Opportunities for public art in significant public domain locations should be explored as part of the development process.

Objectives

a) To create a sense of identity for the area.

b) To enhance public spaces so that they are vibrant, safe and welcoming.

c) To facilitate cultural identity through art and design in public places.

d) To create quality streetscapes that is visually attractive and integrates with surrounding street layout.

Controls

1. Street furniture is to be incorporated into the design of all public spaces and should be consistent in design and style.
2. Street furniture is to be located so as not to impede mobility, generally in accordance with *AS 1428:1 - 4*.
3. The location and detailing of all proposed street furniture is to be indicated on the Landscape Plan, to be submitted with the DA.

Street Tree Planting

1. Street trees shall be required to be planted in conjunction with the creation of a new street or the extension of an existing street.
2. One street tree shall be planted for every 20m of street frontage.
3. The street trees shall be planted prior to the release of the subdivision certificate.
4. The trees shall be provided with protection to ensure their survival during the construction of buildings in the street. Refer to Figure 10 for details.
5. Trees and shrubs on individual streets must be of a uniform species. On streets adjacent to bushland, species indigenous to the area must be planted.
6. The trees planted along the main access avenue are to be; *Lophostemon confertus* or an equivalent tree.
7. Where appropriate, incorporate interpretative streetscape elements reflecting the former land use history on the site having regard to the *Heritage Interpretation Plan and Strategy Report*.

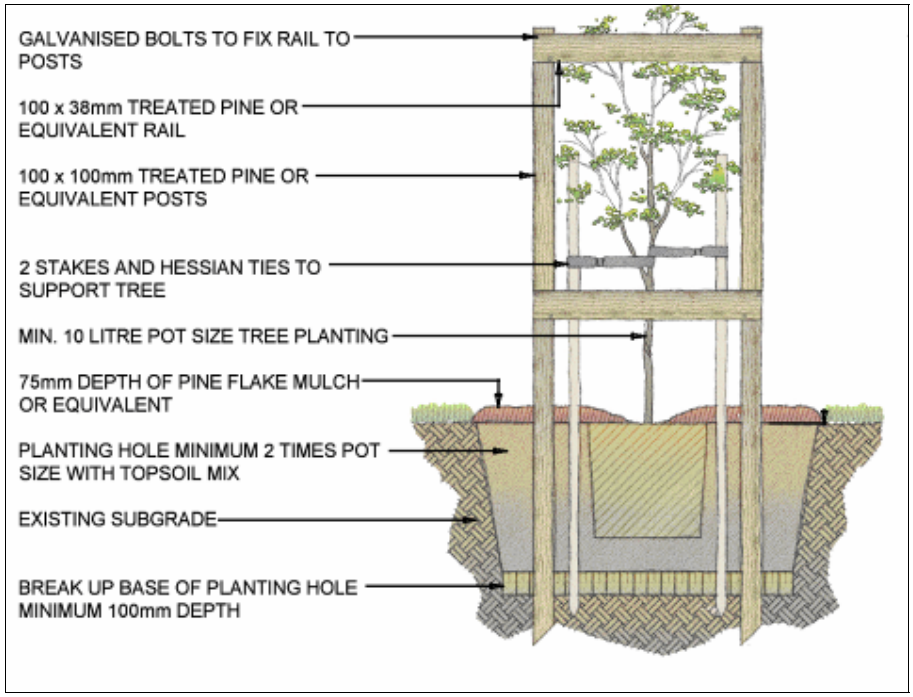


Figure 10 Tree Protection

4. Controls for the Neighbourhood Centre

4.1 General

Objectives

a) To allow for a variety of retail and commercial uses to serve the needs of the people who live, work and visit the local area.

b) To ensure a high quality built appearance that maintains a human scale and prevents adverse amenty impacts on adjoining land uses.

c) To maintain a vibrant and safe public domain with active street frontages and good pedestrian linkages.

Controls

1. Development is to comply with the Minimum lot size, Height, and Floor Space Ratio's as set out in the *Liverpool LEP 2008*.
2. Protruding elements such as porches, verandas or canopy type structures shall be used to reinforce the entry to buildings.

4.2 Parking and Access

Controls

1. Off site car parking layout and design is to be provided in accordance to Part 1.
2. The number of access points from a site should be limited and located where they will cause the least interface between vehicular and pedestrian movement on public roads.
3. Adequate space should be provided on site for loading and unloading activities of service vehicles.
4. Appropriate bicycle racks along with trip facilities for staff including lockers and showers, are to be provided to encourage cycling to the local centre.

4.3 Public Domain Treatment

Controls

1. A minimum 2.5m wide landscaped strip is required around the street frontages to enhance the streetscape.
2. Provide a 2.5 x 5m long landscape bay with suitable shade tree planting for every 8 on-site car parking spaces to enhance public domain amenity.
3. Appropriate provision to enable safe pedestrian access is to be incorporated into the design.

4.4 Design of the Neighbourhood Centre

The Neighbourhood Centre is an important part of the development of the former Hoxton Park Airport Site and ensuring a vibrant, permeable and easily accessible town centre is of high importance.

Objectives

a) To provide for a vibrant and successful town centre

b) To have a centre with high permeability

c) To provide for a central meeting place and outdoor shopping spaces.

d) To ensure that adequate and appropriate street furniture is provided.

e) To provide for car parking in appropriate and convenient locations.

Controls

1. The Neighbourhood Centre must provide for shops and entrances to all street faces.
2. The Neighbourhood Centre must not provide more than 30% of the total front to street faces as blank walls.
3. Smaller retail and commercial uses should be provided closer to the street front, and the central meeting point.
4. Parking for bicycles and motorcycles should be provided.
5. Connection to the regional cycleway network is desirable.
6. Car parking should be provided as shown in Figure 11 below, along street frontages to maximise convenience for users of the centre.

   Note: This style of car parking will count towards the total required for the Neighbourhood Centre.

Figure 11 Desired Car Parking in Neighbourhood Centre

7. A central meeting point should be integrated into the neighbourhood centre, with smaller scale retail and commercial leading off from this, as shown in Figure 12. This space should also be used for external retailing uses such as outdoor dining. Larger retail or commercial uses such as supermarkets should be located behind the meeting point.
8. The larger and smaller retail or commercial uses should be integrated into one building.
9. This central meeting point should have an outlook towards Hinchinbrook Creek, or any other significant vegetative or point of interest as well as a frontage street.

Figure 12 Central meeting point in the Neighbourhood Centre

10. Street furniture, including trees within the town centre should be designed to ensure compatibility with the buildings.
11. Trees within the central meeting point should maximise shade cover of this space.

5. Controls for the Private Domain

5.1 Site Planning

Objectives

a) To ensure that the dwelling house is sensitive to site attributes, such as streetscape character, natural landform, drainage, existing vegetation, land capability, slope, solar access and if relevant, heritage items.

b) To ensure privacy for residents and neighbours.

Controls

1. The dwelling layout must be designed around the site attributes such as slope, existing vegetation, land capability and/or solar access (See Figure 13).
2. There must be a direct link from at least one living area to the principal private open space.
3. The siting of windows of habitable rooms on the first floor shall minimise overlooking to the principal private open space of neighbouring properties.

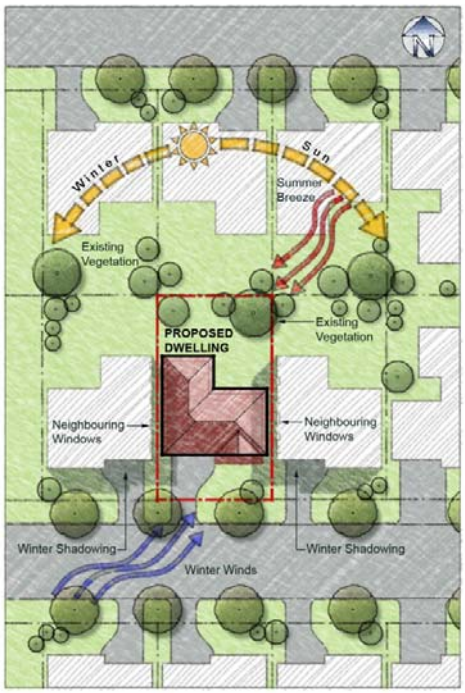


Figure 13: Example of a Site Analysis Plan

5.2 Setbacks

Objectives

a) To set dwellings back from the street and adjacent properties to provide reasonable space for landscaping, private open space and solar access;

b) To set dwellings back from each other to provide visual and acoustic privacy;

c) To create a streetscape that provides a desirable and safe environment;

d) To establish a streetscape of a scale and sense of enclosure appropriate to the locality;

e) To provide an appropriate area capable of allowing the growth of trees and shrubs.

f) To discourage vehicular parking across street verges and footpaths

Controls

Front and Secondary Setbacks

1. Dwelling houses, Semi-detached dwellings, Attached dwellings and Multi-Dwelling Housing shall be setback in accordance with Table 1.

Table 1: Front and Secondary Setbacks

Height	Front Setback	Secondary Setback Lots under 450m^2	Secondary Setback Lots 450m^2 and over
Ground floor	4.5m*	2.0m**	2.5m
Second storey	4.5m*	2.0m**	2.5m

* The dwelling setback may be reduced to 3m for lots fronting land zoned RE1 Public Recreation.
** The dwelling setback may be reduced to 1m for a maximum length of 4m.

2. For dwellings fronting RE1 Public Recreation the front setback may be reduced to 3m. A front verandah, porch or patio may be built to within 1.8m of the front setback. The garage setback is to be maintained at a minimum of 5.5m.

3. Verandahs, balconies, eaves and other sun control devices may encroach a maximum of 2.5m forward of the front setback. On the secondary setback, encroachments must not be constructed within 1m from the property boundary.

4. Garages must be set back a minimum of 1m behind the main face of the dwelling. The main face is the first wall of a habitable room.

5. The secondary street frontage setback is the longest length boundary and does not include laneway frontage.

6. Garages that address the secondary frontage must be setback 1m or 5.5m and greater. Garages are not permitted to be setback between 1m - 5.5m.

7. Corner sites shall provide a frontage to both streets and should articulate their corner location with an architectural feature such as a wrap around verandah, bay window, corner entry or roof feature.

Side and Rear Setbacks

1. Buildings shall be setback from the side and rear boundaries in accordance with Table 2.

Table 2: Side and Rear Setbacks

Item	Side Setback	Rear Setback
Single storey dwelling houses	0.9 m	4.0 m*
Second storey component of dwelling houses	1.2 m	6.0 m
Living room doors (including family rooms and rumpus rooms)	4.0 m	4.0 m

* Note: Building encroachments may only occur if it is seen as beneficial for open space, solar access and the internal layout of the dwelling. The dwellings living areas should open out to open space.

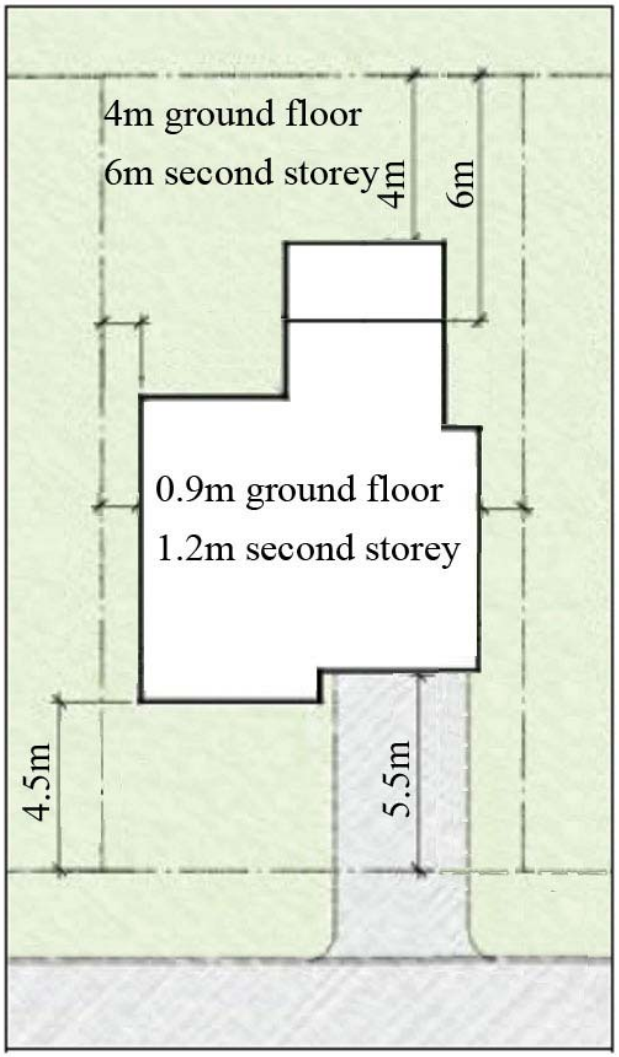


Figure 14: Example of Ground Floor & Second Storey Minimum Setbacks

Zero lot lines

1. Walls are generally to be 150mm clear of the side boundary to allow for gutter and eaves overhang.
2. The length of a zero lot line wall is limited to 50% of the adjacent side boundary length. The maximum length of a second storey zero lot line wall is 12 metres.
3. No windows are permitted in a zero lot line wall.
4. A maintenance easement of at least 900mm shall be provided on the adjoining boundary. Refer to figure 15.

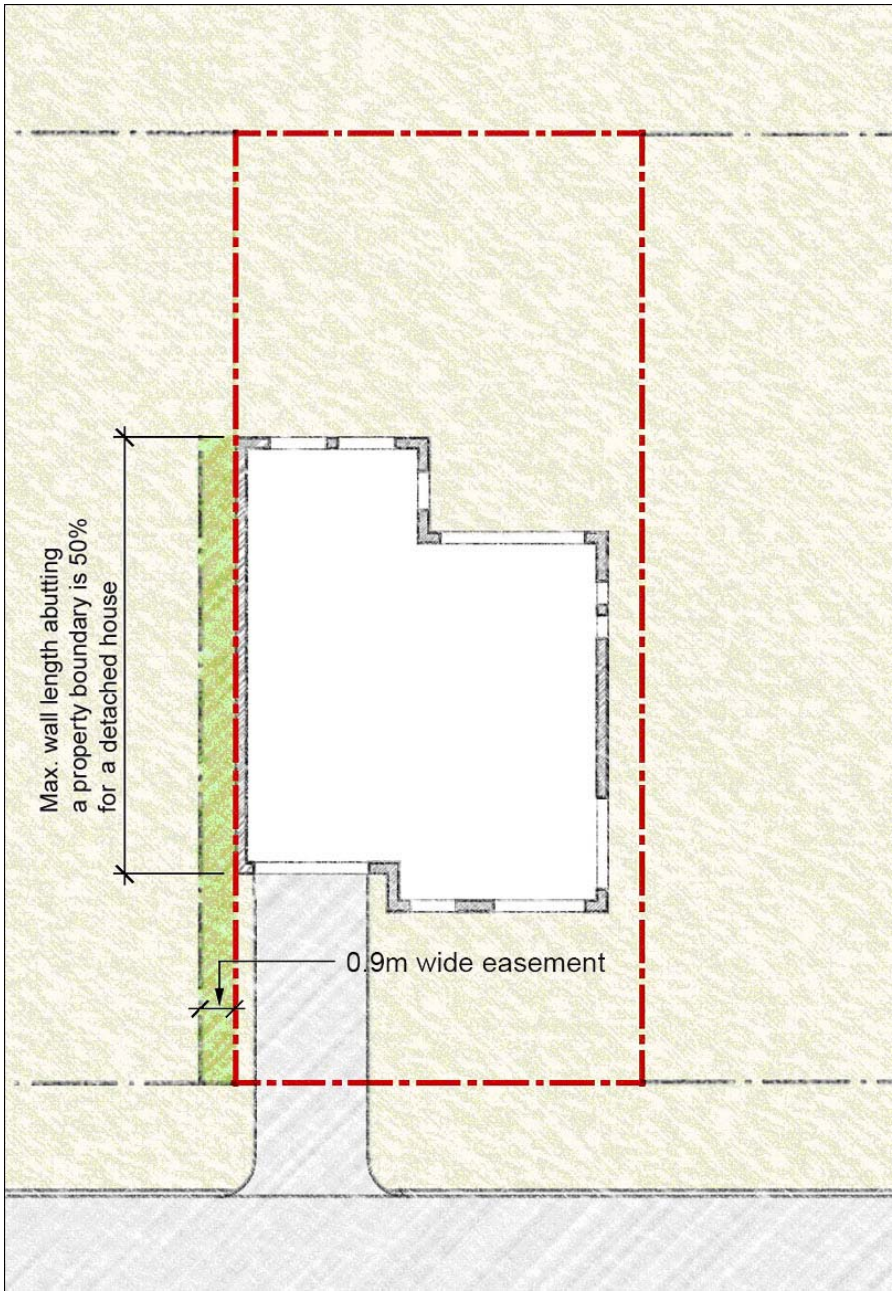


Figure 15: Zero Lot Lines

5.3 Dwelling Typology

Objectives

a) To provide for certainty as to the location of dwelling types.

b) To provide for the orderly development of South Cecil Hills.

c) To provide for areas of higher density near areas of high amenity such as parks and creeks.

Controls

In order to establish dwelling density and certain character through built form, the below list identifies building types proposed within the residential zoning.

Multi Dwelling Housing and Attached Dwellings

Opportunities are provided for row housing in small groups, duplexes, triplexes or Terraces. They are located in areas of higher amenity and may contain home businesses. These need rear lanes for parking and servicing.

Dwelling house

These locations are suitable for free standing traditional one and two storey houses often in prime or feature locations (corner site, wider streets). The larger lots provide the opportunity for large traditional family homes. These are often free standing but can have a zero lot line on one boundary.

5.4 Landscaped Area and Private Open Space

Landscaped area is defined in *Liverpool LEP 2008.*

Private open space is an area within the site (usually at the rear) that is set aside for outdoor activities. Clotheslines, BBQ areas, pergola (unroofed structure), patio, garden sheds and pools can be included in the private open space.

Principal Private open space is an area that is directly accessible from at least one living room and is included in the private open space calculations (the principal private open space area may be paved or sealed).

Landscaped Area

Objectives

a) To provide an area to allow vegetation to mature.

b) To reduce the impact to neighbouring properties and natural waterways from stormwater runoff.

c) To reduce the amount of impervious areas.

d) To enhance the existing streetscape and soften the visual appearance of the dwelling.

e) To maximise the amount of landscaped area within the front setback of the dwelling.

Controls

1. A minimum of 25% of the site area shall consist of Landscaped Area, this may include lawn, deep rooted trees, garden beds and mulched areas.
2. A minimum unincumbered area of 4m x 6m shall be provided to accommodate deep rooted trees.
3. A minimum of 50% of the front setback area shall be Landscaped Area.
4. A minimum unincumbered area of 3m x 3m shall be provided in front setback to accommodate deep rooted trees.

Private Open Space

Objectives

a) To ensure that a minimum amount of Private Open Space is provided for outdoor activities.

b) To ensure that Private Open Space is clearly defined for private use.

c) To ensure that Private Open Space is private, landscaped, screened from overlooking and receives an adequate amount of solar access.

Controls

1. Each dwelling must provide a minimum of 50sqm of Private Open Space.
2. Areas less than 2.5m in width do not qualify as Private Open Space.
3. Private Open Space areas are not permitted within the primary street setbacks.
4. Private Open Space must have an area for clothes drying with at least 2 hours of full sun between 9.00am and 5.00pm at 21 June.
5. The Private Open Space shall include the Principal Private Open Space of 25sqm, which is directly accessible from the main living area and has a minimum dimension of 4m.
6. The Principal Private Open Space must receive 2 hours of sunlight to at least 50% of the area between 9:00am and 5:00pm on 21 June.

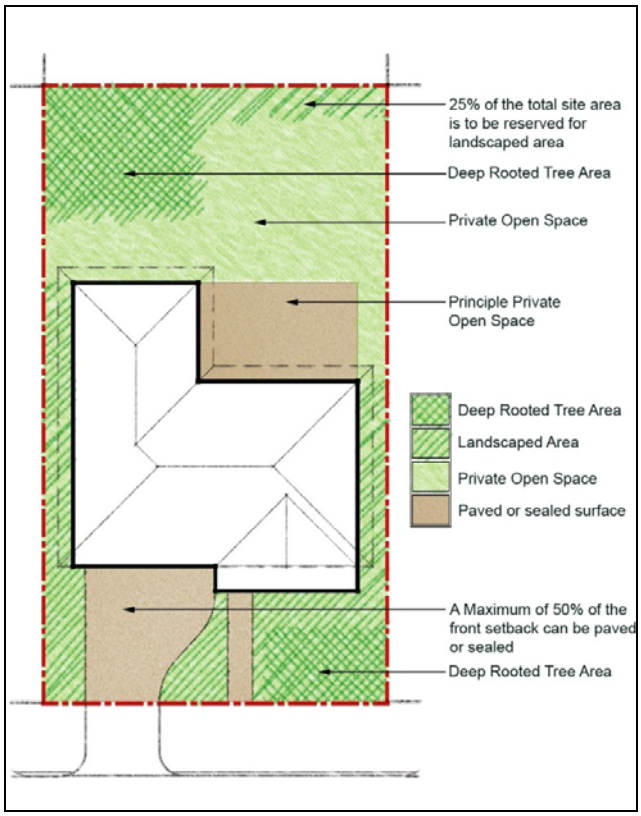


Figure 16: An Example of Landscaped Area & Private Open Space

5.5 Cut and Fill, Building Design, Streetscape and Layout

Cut and Fill of Land

Objectives

a) To reduce the incidence of change in natural ground levels.

b) To encourage the architectural designs of dwellings which suit the contours of the land.

c) To provide controls for cut and fill of land designed to minimise the incidence of soil erosion and subsequent sedimentation of waterways.

d) To ensure that development on adjoining properties is not threatened or prejudiced by proposed cut and fill practices.

e) To discourage and eliminate, where possible, the construction of retaining walls on allotment boundaries.

f) To minimise overshadowing of neighbouring dwellings, their private open space or any solar panelling.

Controls

1. The maximum cut on a site should not exceed 1m.
2. All retaining wall structures shall be masonry construction where visible from the street and designed by a suitably qualified person, or constructed as specified by the manufacturer of the product. The retaining wall shall be constructed wholly inside (within) the boundary of the site.
3. All slab constructions for dwellings that are above natural ground level are to be constructed using dropped edge beams to retain fill. The maximum fill within the confines of the slab must not exceed 1m. All fill must be contained within the dwelling footprint. Refer to Figure 17.
4. Contaminated fill is not permitted.
5. In the event of approval being granted to the erection of retaining wall(s) to contain proposed cut, Council will require the completion of such retaining wall(s) **PRIOR TO** the release of the occupation certificate.
6. Where an applicant considers that an allotment has characteristics which warrant exemption from this policy, an application for exemption may be made by the submission of a development application to Council for consideration. In addition to normal requirements the submission should include:
   i. A plan showing existing contours (at 0.5m intervals) of the subject site and all adjoining sites.
   ii. A plan showing future contours (after proposed cut and fill) of the subject site and all adjoining sites.
   iii. Full details of any proposed retaining wall(s).

   Note: In the event of approval being granted to the erection of retaining wall(s) to contain proposed cut and fill, Council will require the completion of such retaining wall(s) PRIOR TO the commencement of any building works.

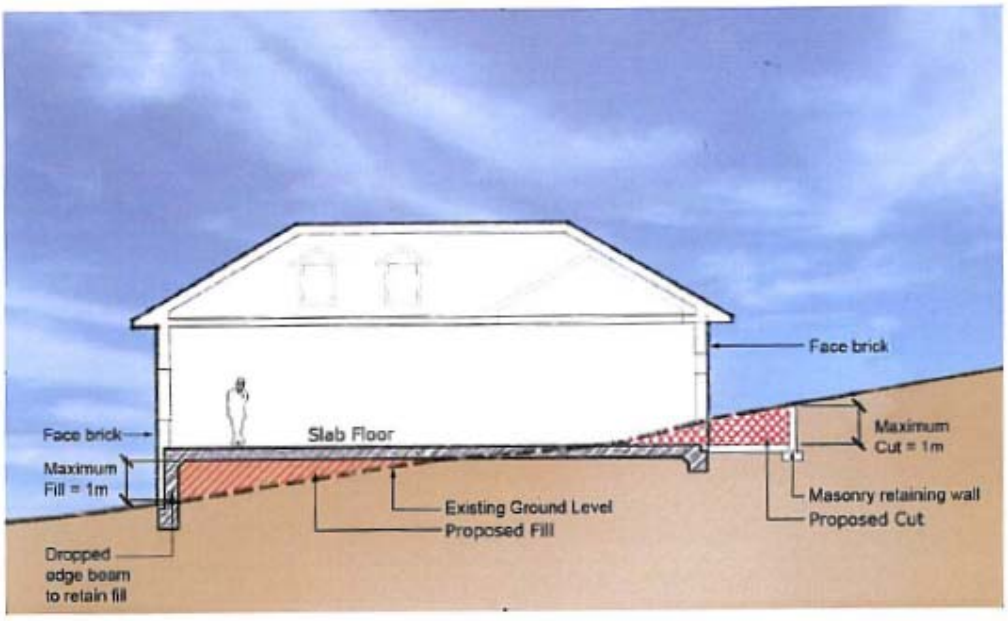


Figure 17: Cut & Fill Requirements

Building Envelopes

Background

The orientation and site cover of a building has significant implications for residential amenity. Building envelopes determine the orientation and footprint of a dwelling, as well as the total volume of the dwelling.

Objectives

a) To facilitate the efficient use of the site area.

b) To maximise private amenity within the building.

c) To minimise the impacts of development on neighbouring properties in regard to views, privacy and overshadowing.

d) To ensure that buildings are sited so as to provide for solar access and both visual and acoustic privacy.

e) To provide an acceptable scale of development.

Controls

1. The building footprint for single detached dwellings is not to occupy more than 55% of the site and the total impervious area is not to exceed 75% of the total site area.

2. The building footprint for denser development (i.e. attached/zero lot housing, terrace, townhouse or villa development) is not to occupy more than 60% of the site and the total impervious area is not to exceed 75% of the total site area.

Building Design and Appearance

Objectives

a) To encourage designs that will enhance the character of the neighbourhood.

b) To promote variation of building facade and design.

c) To ensure that the building enhances the streetscape through the use of suitable built form design and landscaping.

d) To ensure buildings address all street frontages.

e) To discourage garages and in particular garage doors, from visually dominating the streetscape.

f) To ensure that the building design, detailing, colour and finish shall add visual interest to the street and shall compliment the street.

g) To ensure habitable rooms address the street.

h) To encourage balconies over garages on two storey dwellings.

Controls

1. All dwelling houses are to be orientated to the street.
2. The front pedestrian entrance must be visible from the street.
3. The front building facades shall be articulated, this articulation may include front porches, entries, wall indents, changes in finishes, balconies and/or verandahs.
4. Eave overhang must provide for sun shading and protect windows and doors. Eaves should have a minimum overhang of 400mm and be provided to a minimum of 70% of the dwelling.
5. Dwelling houses that face two street frontages or a street and public space shall address both frontages by the use of verandahs, balconies, windows or similar modulating elements.
6. "Mirror – imaging" of facades on Semi-detached dwellings and Attached dwellings are not permitted.

Two storey dwellings

1. To break up the bulk of two storey dwellings balconies built above garages are encouraged (See Figure 18)
2. The maximum total length of the side walls of the first floor component of a dwelling shall be a maximum of 33m as measured from any point within 3m of that side wall (for example 14m + 19m = 33m) (See Figure 19).

Figure 18: An Example of Building Appearance (Indicative Only – Not to Scale)

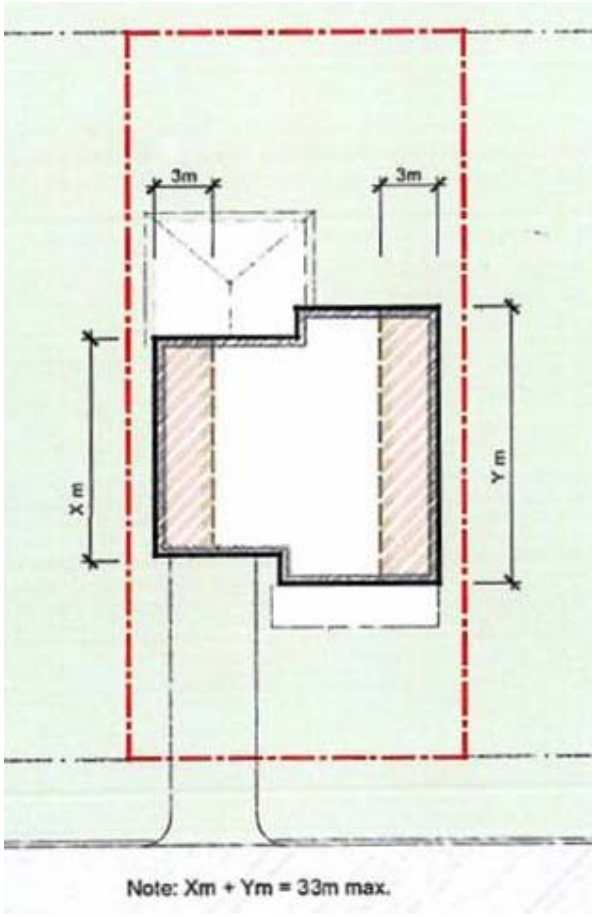


Figure 19: Maximum Total First Floor Wall Length of a Two Storey Dwelling

Garages and Carports

1. The maximum width of garage doors or carports must be no greater than 50% of the building frontage width.
2. Garages and carports must be designed to be the minor element of the façade
3. Garage roofs shall be incorporated into the roof design of the house. Separate roofs for garages are discouraged, unless actually separated from the dwelling.
4. Garages and carports are to be compatible with the building design in terms of height, roof form, detail, materials and colours.
5. Carports shall not be built in front of the building line and shall be:
   i. No larger than 5.5 x 6m.
   ii. Built of a similar colour and materials of the house.
   iii. Compatible with the local streetscape.
6. The conversion of garages to living space may only be permitted if:
   i. At least one car parking space is provided behind the front setback.
   ii. The additional living area does not result in the building exceeding the maximum permitted floor space ratio.

Internal Design of Dwellings

Objectives

a) The internal design must contribute to personal safety and to the protection of property by permitting casual surveillance of public spaces from private windows and entries.

b) To encourage the internal design of the dwelling to take advantage of cross ventilation.

c) To locate amenity rooms (such as laundries, bathrooms, toilets) to the side and rear of the development.

d) To ensure that each dwelling shall provide a sufficient amount of storage for elements such as garden and sports equipment.

Controls

1. All dwellings shall have habitable rooms located to the front of the dwelling for security and surveillance to the street.
2. Living rooms should take advantage of northern aspects where possible.
3. Access to private open space must be from at least one living room.
4. The internal layout of the dwelling is encouraged to incorporate cross ventilation.
5. Bathrooms, ensuites, laundries and walk in wardrobes should be located to the side or rear of the dwelling.
6. Each dwelling must provide a minimum storage area of $8m^3$.
7. Locate active use rooms or habitable rooms with windows overlooking communal/public areas (e.g. playgrounds, gardens).
8. Dwelling entries must be oriented to the street.

5.6 Landscaping and Fencing

Landscaping

Objectives

a) To retain existing mature trees within the site in a way which ensures their ongoing health and vitality.

b) To provide privacy, summer shade and allow winter sun.

c) To enhance the existing streetscape and visual appearance of dwellings.

d) To encourage landscaping that is appropriate to the natural, cultural and heritage characteristics of its locality.

e) To ensure the visual impact of development is minimised and integrated into the streetscape.

Controls

1. A minimum of one tree is to be provided within the front setback area of every residential dwelling. This may include existing trees that are to be retained within the front setback area. Newly planted trees are to have a minimum pot size of five litres.
2. Trees planted on the northern side of private open space and habitable rooms are encouraged to be of a deciduous species.
3. Planting of vegetation at the front of higher density development must consider the need for passive surveillance. Excessively dense vegetation that creates a visual barrier must be avoided.

4. Any tree with a mature height over 8m should be planted a minimum distance of 3m from the building or utility services.
5. A landscape plan must be lodged with all new dwellings and is to provide the following details:
   i. The location of any existing trees on the property, specifying those to be retained and those to be removed.
   ii. The location of any trees on adjoining properties that is likely to be damaged as a result of excavations of other site works.
   iii. The position of each shrub and tree species proposed to be planted. Each plant is to be identified by a code referring to a plant schedule on the plan.

Fencing

Objectives

b) To provide a clear transition between public and private areas.

c) To provide a visual element within the streetscape.

d) To ensure fencing enhances the streetscape.

Controls

1. Wall finishes must have low reflectivity.
2. Where noise insulation is required, consider the installation of double-glazing or other noise attenuation measures at the front of the building rather than construction of a high solid form fence.

Primary Frontage

1. The maximum height of a front fence is 1.2m.
2. Fences should not prevent surveillance by the dwelling's occupants of the street or communal areas.
3. Front fences shall be constructed in masonry, timber and/or vegetation and must be compatible with the proposed design of the dwelling.

Secondary Frontage

1. Side fences and walls must be a maximum of 1.8m in height, and constructed of masonry, timber and/or landscaped (see Figure 20).
2. For side walls or fences along the secondary frontage, a maximum height of 1.2m is required for the first 9m measured from the front boundary, the remaining fence / wall may then be raised to a maximum of 1.8m (see Figure 20). The secondary setback is the longest length boundary.
3. Side fencing facing a public street or open space must not be constructed of sheet metal.

Boundary Fences

1. The maximum height of side boundary fencing within the setback to the street is 1.2m.

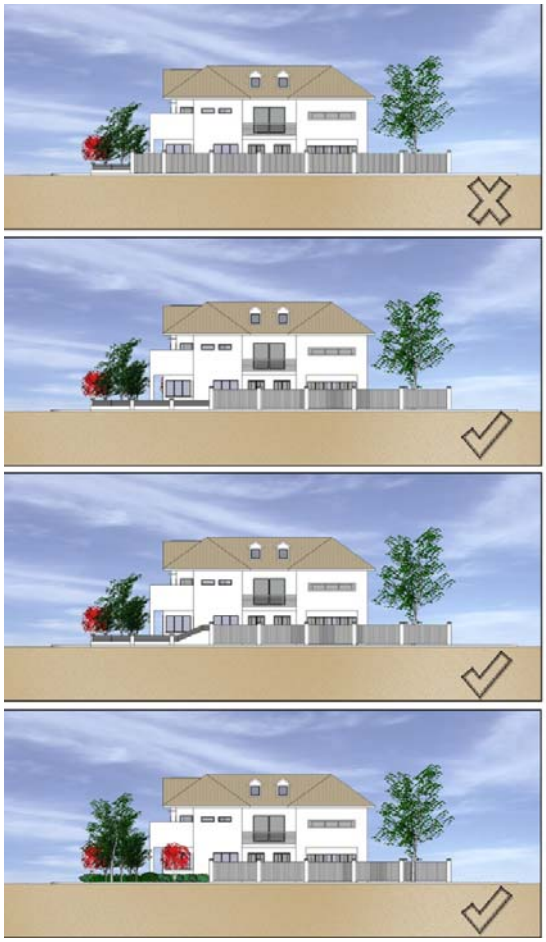


Figure 20: Fence Treatments on Secondary Frontage

5.7 Car Parking and Access

Objectives

a) To provide car parking facilities on site that are convenient, safe and have sufficient space for vehicular manoeuvrability, whilst being visually unobtrusive.

b) To minimise the need for on-street car parking from new dwellings.

Controls

1. Two car parking spaces shall be provided for each dwelling, except for lots under 300sqm which must provide a minimum of 1 car parking space.
2. At least one car parking space must be provided behind the front setback.
3. A car parking space is to have a minimum dimension of 2.5m x 5.5m.
4. A single garage is to be a minimum of 3m wide internally and provide unobstructed access.
5. All parking spaces for adaptable housing units shall comply with *AS 2890:1* for disabled car parking.

Private Driveways

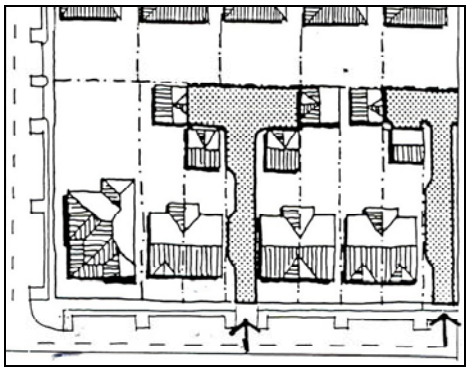
Objectives

a) To provide safe and convenient access to garages, carports and parking areas.

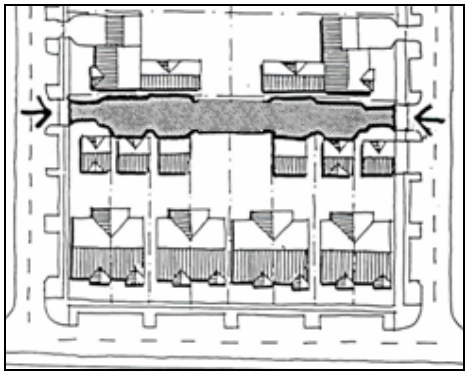
b) To clearly define public and private spaces, such that driveways are for the sole use of residents.

Controls

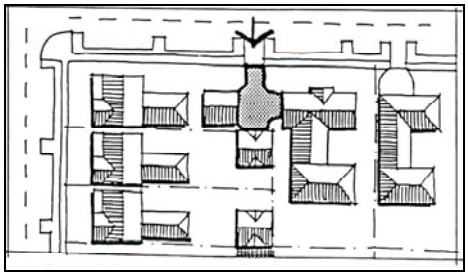
1. Private driveways shall have the smallest configuration possible to serve the required parking facilities and vehicle turning movements.
2. A lot on which an off-street car parking space is provided must have a driveway to a public road.
3. A driveway on a lot must be constructed in accordance with Australian Standard AS 2890.1 - 1993, Parking facilities - Off-street car parking.
4. Development on corner lots on collector streets shall have access from the street perpendicular to the collector street.



T-Shaped
- Driveway should be from the frontage road of the narrow lot dwellings
- Use where block geometry or available road frontage precludes 'close'



Where driveways are to serve several lots they should connect through to public roads.



Common Apron
- Maximum 3 dwellings

Figure 21: Private Driveways

5.8 Amenity and Environmental Impact

Overshadowing

Objective

To minimise overshadowing of neighbouring dwellings and their private open space.

Controls

Adjoining properties must receive a minimum of three hours of sunlight between 9am and 5pm on 21 June to at least:

i. One living room, rumpus room or the like.

ii. 50% of the private open space.

Objective

To site and design buildings in a manner which protects the visual privacy of adjoining dwellings and their private open space.

Controls

1. Habitable room windows facing side boundaries are to be offset by at least 1m from any habitable room windows in an adjoining dwelling (See Figure 22).
2. Habitable room windows on the first floor that face the side boundary are to avoid unreasonable overlooking by having a minimum sill height of 1.5m, except where they face a street or public open space (See Figure 22).

3. Building siting, window location, balconies and fencing must consider the importance of the privacy of on site and adjoining buildings and private open spaces.
4. Landscaping should be used where possible to increase visual privacy between dwellings and adjoining properties.

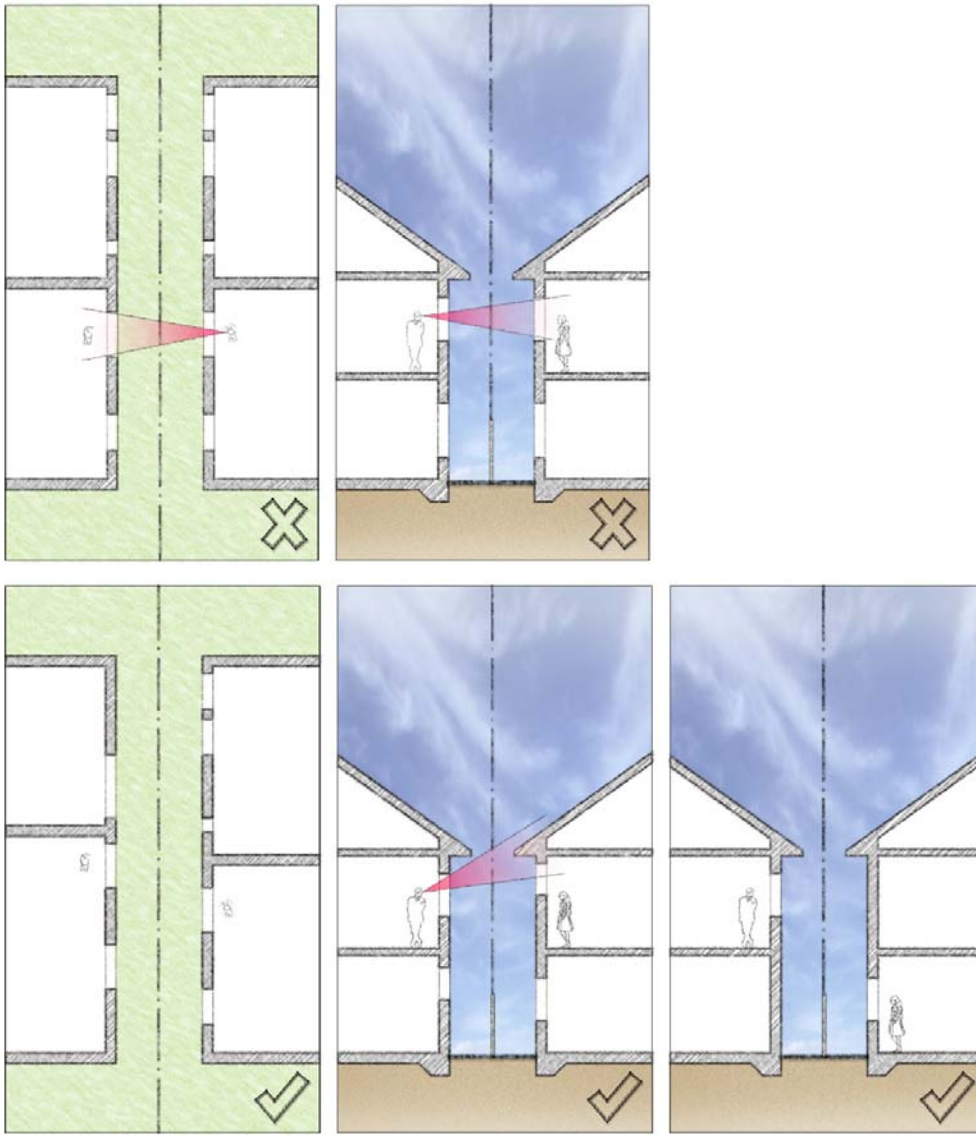


Figure 22: Privacy and Amenity

Council Administration Centre Level 2, 33 Moore Street, Liverpool NSW 2170

Postal Address Locked Bag 7064, Liverpool BC NSW 1871

Customer Contact Centre 1300 36 2170

Fax 02 9821 9333

NRS (National Relay Service) 133 677

Email lcc@liverpool.nsw.gov.au

Website www.liverpool.nsw.gov.au