

Liverpool Development Control Plan 2008
Part 2.10
Development in
Moorebank East

19 February 2014

Part 2.10 must be read in conjunction with Part 1

Refer to Part 6 for development in Business Zones

Liverpool Development Control Plan 2008

Part 2.10 Moorebank East

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1. Preliminary

Applies to

1. Part 2.10 applies to the land, shown in Figure 1.
2. Part 1 applies to the land shown in Figure 1.
3. Part 3.8 also applies for non residential development on the land.
4. Parts 3.1 – 3.7 do not apply to the land.
5. Controls on land within the Business Zone in this locality are in Part 6.



Figure 1 Land to which this plan applies

Background

The site currently consists of a landscape and garden supplies business and sand extraction industry adjoining the Georges River.

The sand extraction industry has reached the end of its economic life. Landfill has been placed over some of the site to a level above the 1% flood on the Georges River. It is proposed to be redeveloped for residential and business uses with possibly private recreation along the foreshore.

The landscape and garden supplies business is proposed to redevelop.

Voluntary Planning Agreement

Two Voluntary Planning Agreements also apply to the site.

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 can 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) Ensuring that development creates a 'people place' by giving priority to people and human relationships through housing mix and safety.
- b) To increase the range of housing opportunities available.

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.
- i) To ensure that future development will not detract from the level of residential amenity and environmental quality enjoyed by residents of adjoining properties
- j) To ensure that future residents and occupants of the site will enjoy a high standard of residential amenity and environmental quality
- k) To ensure that future development responds sympathetically to existing streetscape, riverscape and townscape values
- l) To provide a possible location for a commercial centre and recreational facilities

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 infrastructure is sufficient to meet current and predicted need.

2. Controls for Public Domain

2.1 Street Network

Background

It is envisaged that Moorebank East will be an accessible place with a clearly identifiable hierarchy of streets. There will be a network of footpaths and cycleway that will help connect the precinct to the immediate surrounding areas. The proposed precinct is to comprise a network and hierarchy of streets that link the site with the surrounding urban fabric. A road link from Brickmakers Drive is proposed to link to Davy Robinson Drive, although this is not envisaged to be a short cut from Newbridge Road.

Objectives

- a) To provide for attractive residential and commercial street environments
- b) To ensure safe, efficient and direct access to commercial, residential and recreational areas
- c) To provide for an efficient circulation of bus services and convenient pedestrian access
- d) To minimise the amount of through traffic in residential areas
- e) To ensure safety for pedestrians
- f) To guarantee adequate accessibility for emergency vehicles
- g) To integrate development with the surrounding public transport network.

Controls

- 1. Subdivision of the land shall be in accordance with Figure 2.
- 2. Subdivision of the land shall incorporate a link road between Brickmakers Drive and Davy Robinson Drive as shown on Figure 2. The link road shall be a minimum 20m wide and be able to accommodate a bus route.
- 3. Street sections are to comply with Figures 3 – 4.
- 4. Flood free access via a road bridge from Brickmakers Drive shall be provided prior to any subdivision of Lot 7 DP 1065574.
- 5. The street network is to be clearly legible with signposts showing street names and property numbers.
- 6. Street layouts at key locations are to be designed to ensure pedestrian safety.
- 7. Kerb ramps are required at all intersections where footpaths are provided
- 8. Footpaths must be provided along at least one side of every street.
- 9. A street network plan is to be submitted for all subdivision applications showing street and intersection types and any other proposed street treatments.
- 10. Local streets shall front open space and avoid back fences to open space and other public areas.
- 11. All plans must indicate street types and intersection treatments.
- 12. A direct road connection is to be provided from the Road Bridge through the Residential to the private open space.
- 13. A pedestrian access shall be provided from land in the R3 zone through the B6 zone through to Newbridge Road.

14. Barrier kerbs shall be used:

- 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 with 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.

15. Roll kerbs may be used in other locations to the above.

Street Types

The following streets are provided:

Collector Street (Link Road)

This street provides a connection between Brickmakers Drive and Davy Robinson Drive.

Local Streets

These streets are designed for slow residential traffic. The road reserve is 15m wide.



Figure 2 Street Network

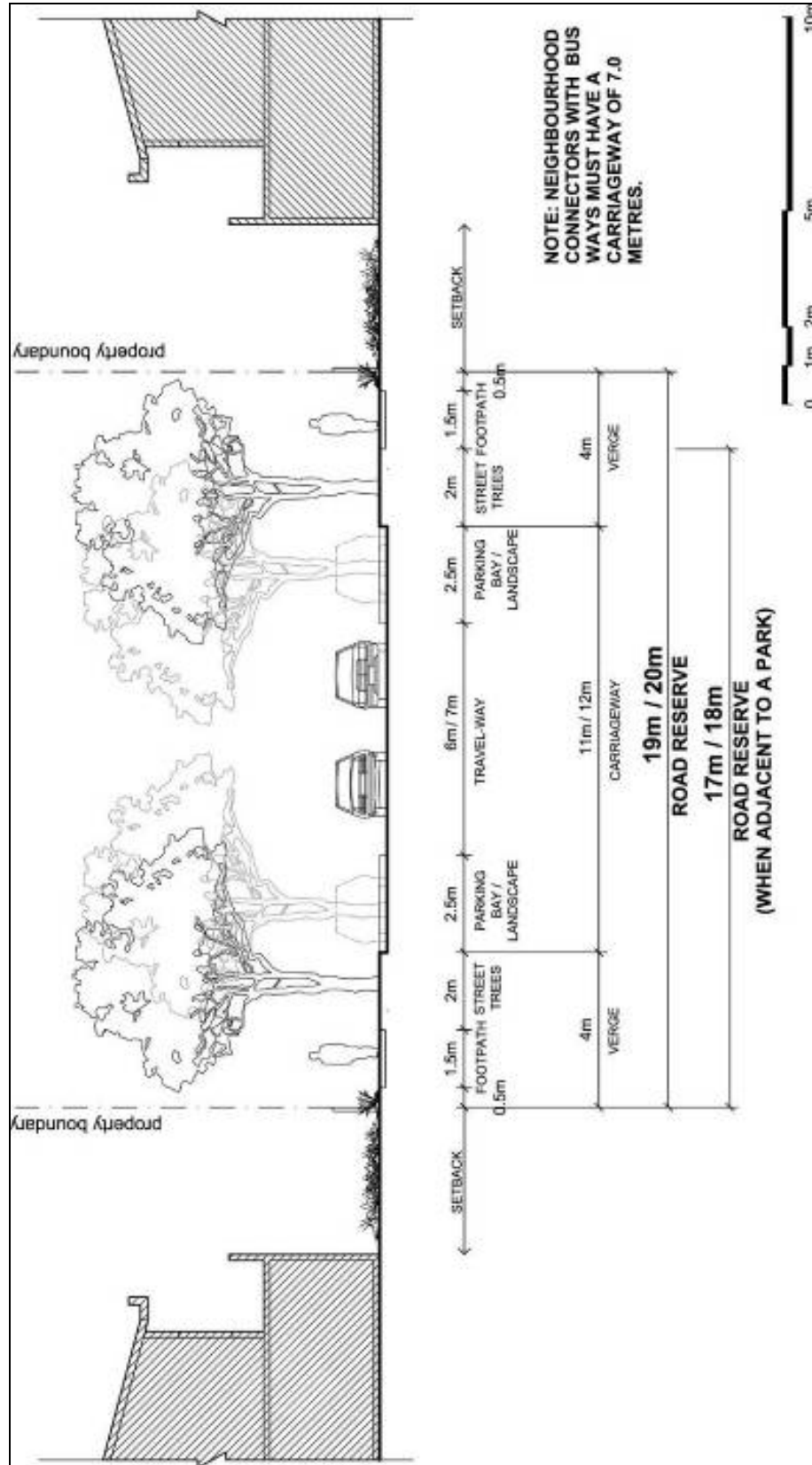


Figure 3 Collector Street

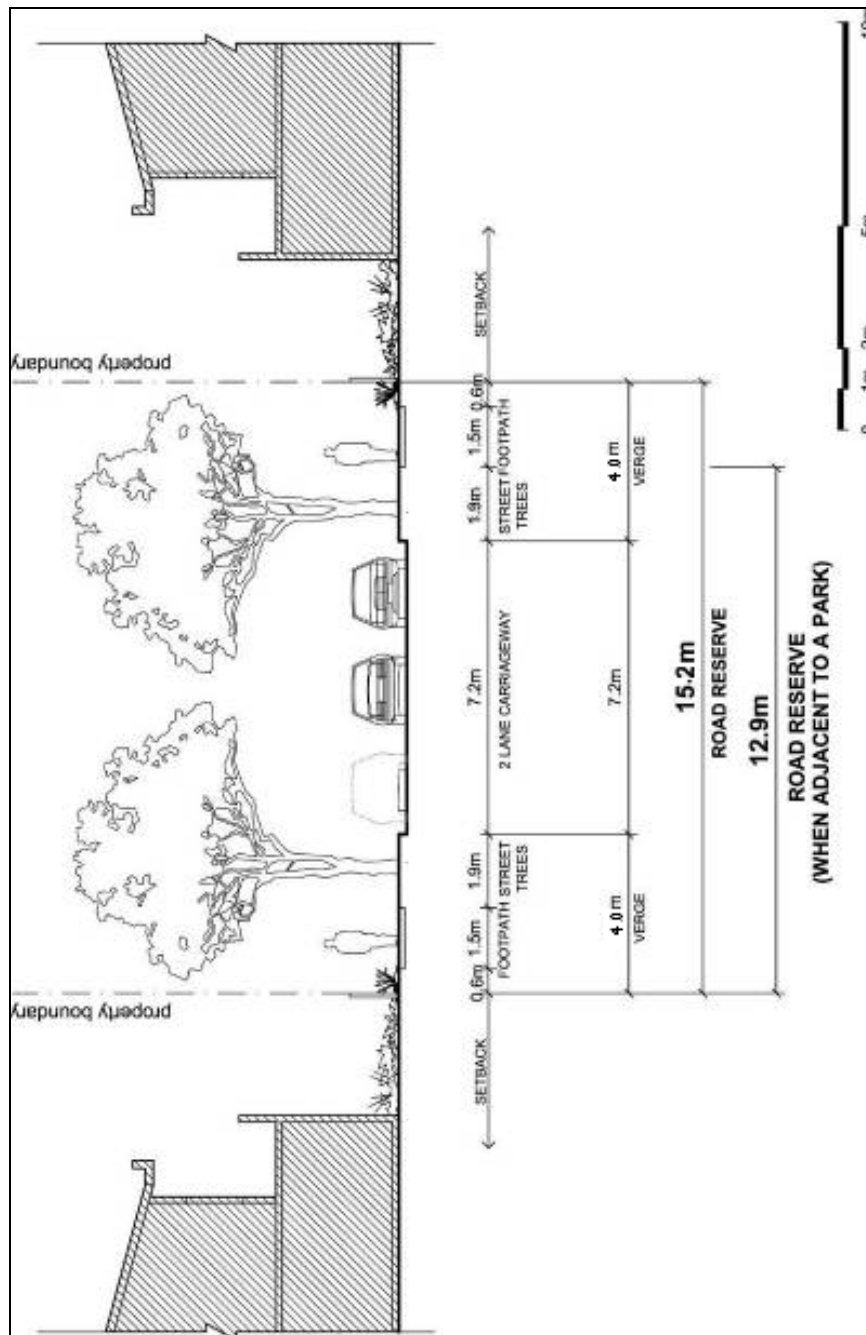


Figure 4 Local Street

2.2 Pedestrian and Cyclist Amenity

Background

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

Vehicle crossings over footpaths need to be managed and minimised to ensure that they do not detract from the quality of the public domain, disrupt pedestrian or cycle movement, or threaten user safety.

Objectives

- a) To encourage walking and cycling as opposed to the use of private vehicles for local trips
- b) To provide a permeable and interconnected network of streets and pathways that gives safe, convenient and legible access both within and beyond the site
- c) To minimise and prevent, where possible, vehicular crossings over a pedestrian or cyclist pathways

Controls

- 1. Vehicle access to developments is to be designed and located to minimise conflicts with pedestrians and cyclists on footpaths, particularly along high volume pedestrian streets.
- 2. Wherever practicable, vehicle access to developments is to be a single crossing, perpendicular to the kerb alignment.
- 3. Where practical, pedestrian and cycle paths in open space areas should be located close to streets on the edge of open spaces to take advantage of street lighting and allow for casual surveillance by residents and drivers. Where this is not practical, paths should be well - lit and visible from the road.
- 4. Pedestrian and cycle paths are to link the key facilities within and outside the area, such as the open space network.
- 5. Shared pedestrian/cycle links, cycle ways public roads and lanes are to be clearly and frequently signposted to indicate their shared status.
- 6. Designated cycle lanes on streets are to be clearly indicated by line – markings on the road surface and/or by signs beside the road.
- 7. Shared pedestrian and cycle paths are to be a minimum of 2.5m wide.
- 8. Designated pedestrian – only paths are to be a minimum of 1.5m wide.
- 9. Pedestrian and Cycle facilities in public spaces are to be safe, well lit, clearly defined, functional and accessible to all. An appropriate level of pedestrian lighting to ensure security and contribute to the legibility of streets.
- 10. Pedestrian and cycle paths, and pedestrian refuge islands are to be designed to be fully accessible by all in terms of access points and gradients, in accordance with AS 1428:1 – 4.

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 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 each residential dwelling 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 5 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. Intensive planting shall be provided along the Link Road between the R3 and B6 zones.

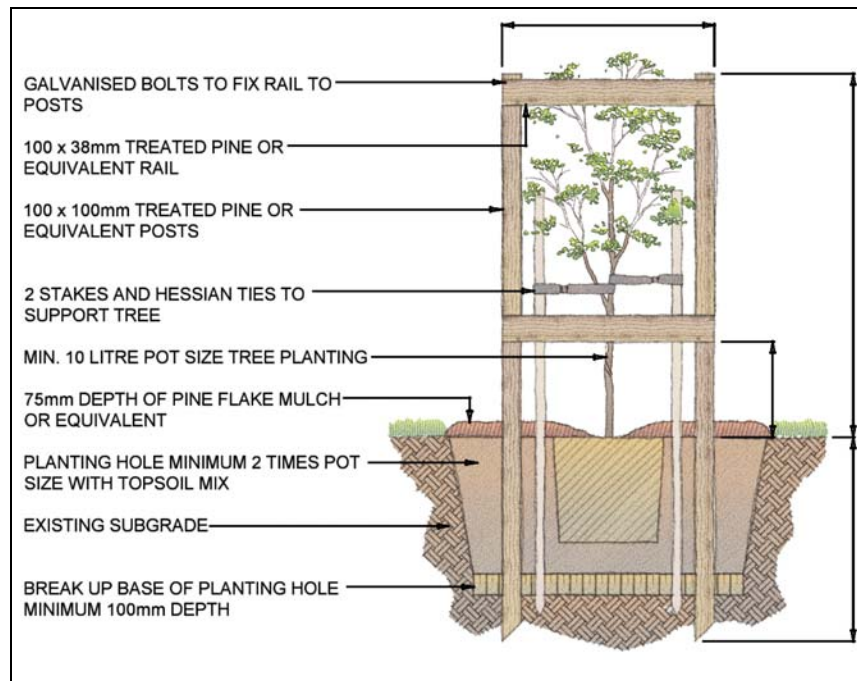


Figure 5 Tree Protection

2.4 Open Space

Background

Public Open Spaces can play an important role in meeting recreational and social needs. Public Open Space at Moorebank East should include continuous foreshore access and pedestrian and cycle connections throughout the precinct.

Public spaces should 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 to be convenient to the needs of the community, especially in higher density areas.

Objectives

- To provide public access to the Georges River Foreshore for residents.
- To ensure adequate provision and distribution of public space to meet the need of the residents.
- To provide for adequate links between major open space, community, recreational, and retail facilities.

Controls

- Direct public access (pedestrian/ bicycle) should be provided from the residential zone east through the private recreation zone, to the Georges River Foreshore reserve.
- A shared pedestrian/cycleway access should also be provided, along the western boundary of the RE2 zone, to the Georges River foreshore reserve.
- Local parks provided within the residential area, should be a focal point for development and activity.

4. Ensure that development which surrounds open space is orientated towards the park to offer casual surveillance.
5. Perimeter streets should be provided to all parks on at least three sides of the park. Where a street frontage is not provided the development must front the park to provide surveillance.
6. Sufficient lighting to be provided within local parks

2.5 Views and View Sharing

Background

The Moorebank East Precinct has several viewpoints, and potential views to the Georges River. It is important to ensure that there are equitable opportunities for lots with potential views.

Objectives

- a) To provide for equitable view sharing.
- b) To provide for a subdivision pattern that maximises view points.
- c) That view points should be located prior to subdivision.

Controls

1. Higher Density lots should be located to best utilise potential view.
2. View corridors out of or into the site should be identified, maintained and improved where possible.
3. Buildings along the southern and eastern edge of the residential zone must be no wider than 35m and separated from other buildings by at least 10m.

2.6 Foreshore Access

Objective

To provide access to land in the RE1 zone along the Georges River foreshore for residents and Council maintenance equipment.

Controls

1. A 10m wide access shall be dedicated free of charge to Council to link a public road with the land in the RE1 zone along the Georges River foreshore at the northern end of Lot 7 DP 1065574 to permit access by the public and Council maintenance vehicles.
2. A right of way access shall be provided free of charge to Council to link a public road with the land in the RE1 zone along the Georges River foreshore at the southern end of Lot 7 DP 1065574 to permit access by Council maintenance vehicles.

2.7 Drainage

Objective

To provide appropriate on-site stormwater system which can be economically maintained.

Controls

1. The site should be generally drained east toward the Georges River, rather than to the drain on the western side of the site.
2. An onsite detention basin is required to avoid any increase in peak stormwater discharge from the drain on the western boundary of the property.
3. Use gross pollutant traps and water quality control ponds to remove suspended sediment, nutrients and bacteria.

2.8 Removal of Fill

Any Development Application on Corner Lot 2 DP 602988 is to include provisions for the removal of 35,000m³ of fill from the area indicated in Figure 6.

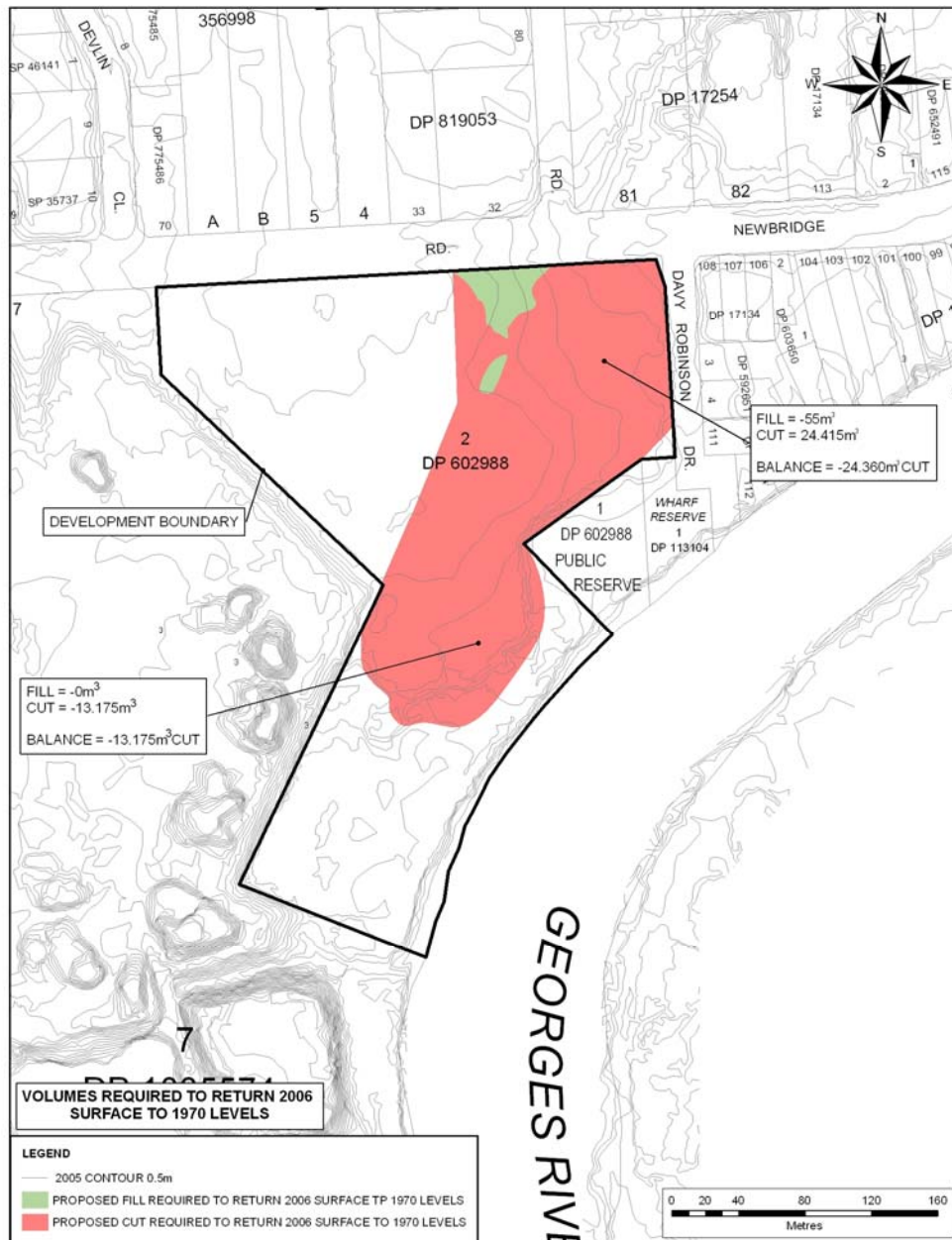


Figure 6 Area of fill to be removed

3. Controls for Private Domain

3.1 Subdivision, Frontage and Allotment Size

Objectives

- a) To provide a range and mix of lot sizes to suit a variety of dwellings types distributed throughout the area.
- b) To locate higher density in places of greatest amenity, such as near parks, other open spaces and along transport nodes.
- c) To ensure that the density of development and siting of dwellings maintain a high standard of privacy.
- d) To ensure lots are oriented to optimise solar access to facilitate micro-climate management, including the application of energy conservation principles.
- e) To ensure all dwellings address the street.
- f) To ensure that lot size and dimensions take into consideration the physical characteristics of the land, in a way, which promotes retention of existing vegetation and reduces the incidence of damaging earthworks and retaining wall construction.
- g) To ensure passive surveillance of public space through the effective and functional layout designs of new developments.
- h) To ensure that the dwelling siting minimises impacts on views from adjacent existing residential development.

Controls

- 1. 25% of lots must be 300sqm or greater
- 2. At least 25% of lots must be less than 300sqm
- 3. Any lot greater than 400sqm should have a frontage of at least 12m.
- 4. All development needs to be in accordance with Council's adopted residential subdivision design principles.

Dwelling Mix

Objectives

- a) To ensure development provides a mix of apartment types and sizes to accommodate a range of household types and needs
- b) To provide for a variety of residential unit mix, sizes and layouts within each residential development

Controls

- 1. A maximum of 216 Dwellings are permitted on the site.
- 2. Subdivision, lot sizes and orientation are to address the principles in Figures 7 and 8.

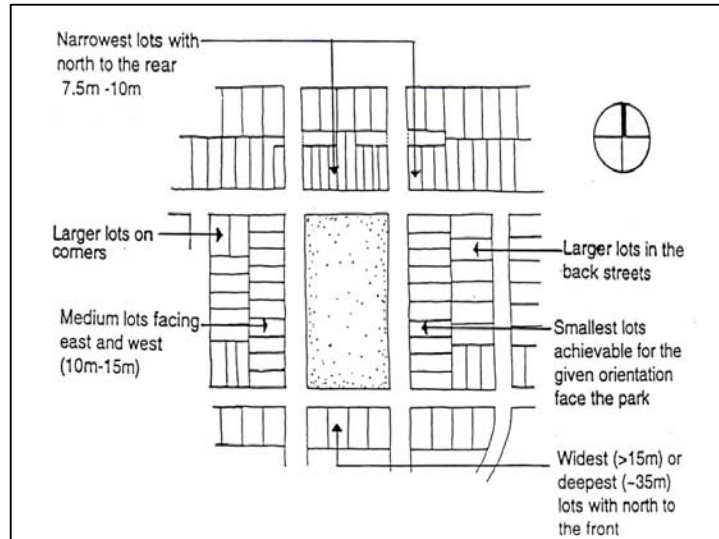


Figure 7 Highest density generally located in accessible places with highest amenity

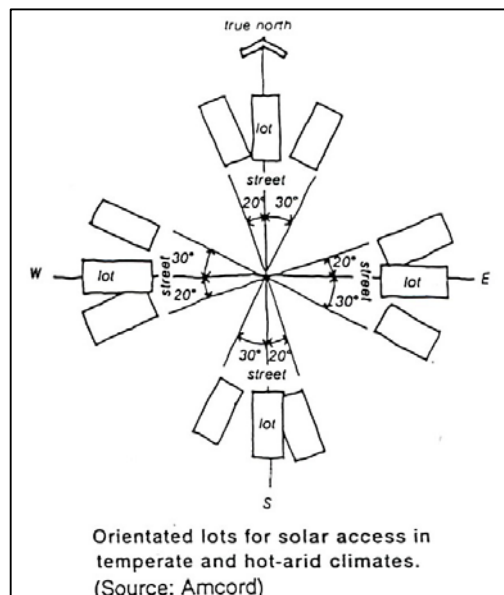


Figure 8 Lot Orientation

1. Lot sizes and dimensions are to take into account the slope of the land to minimise earthworks/retaining wall construction and the retention of existing trees.
2. Minimum allotment width is 6m.
3. Any application for subdivision creating allotments of 6m width must be accompanied by an application for a dwelling house on each of those allotments.
4. On east-west lots, houses and private open space are to be sited generally in accordance with Figure 9.

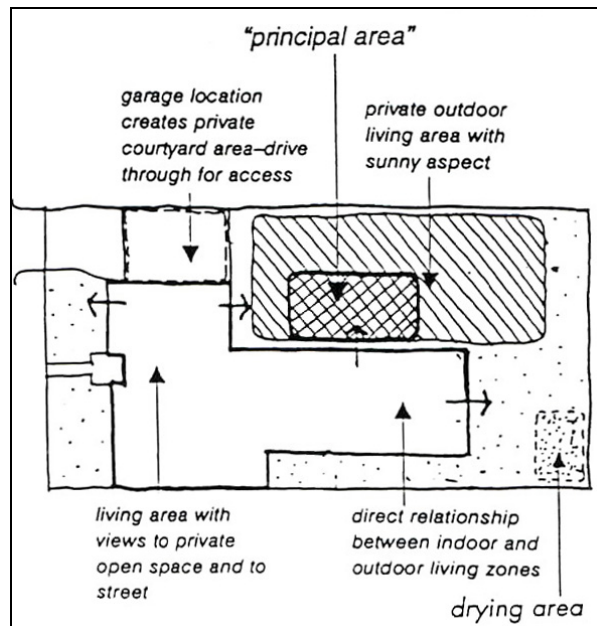


Figure 9 Private open space considerations on an east-west lot

3.2 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 10).
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.
4. Stormwater from the site must be able to be drained satisfactorily. Where the site falls away from the street, it may be necessary to obtain an easement over adjoining property to drain water satisfactorily to a Council stormwater system. Where stormwater drains directly to the street, there may also be a need to incorporate on-site detention of stormwater where street drainage is inadequate. Refer to Water cycle management in Part 1.

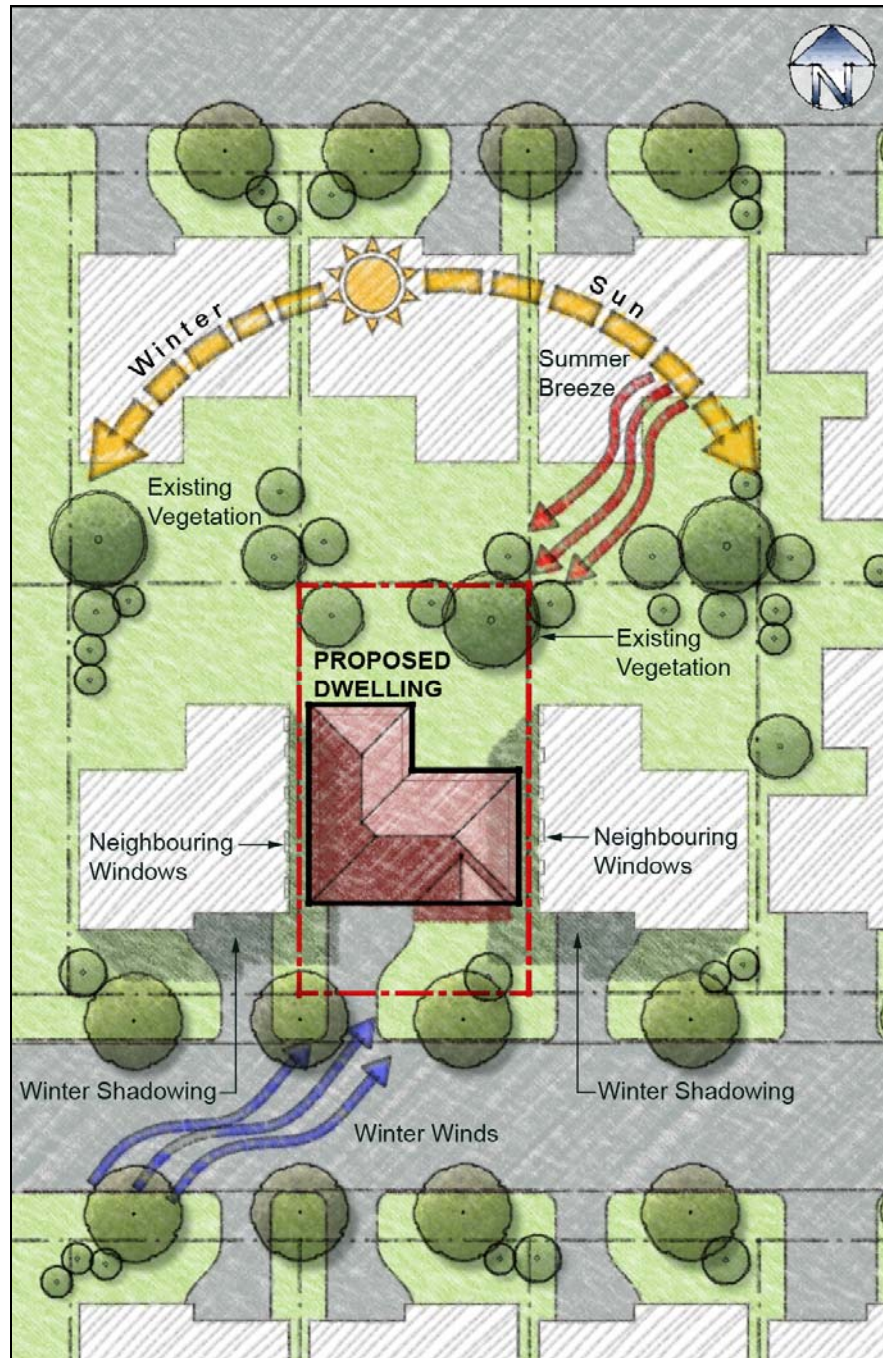


Figure 10 Site Analysis

3.3 Setbacks

Front and Secondary Setbacks

Objectives

- a) To ensure appropriate front setbacks.
- b) To contribute to the creation of attractive and memorable streetscapes that has a consistent character.
- c) To reduce the potential visual effects of garages on dwelling facades and streetscapes.
- d) To provide adequate space for landscaping or open space.

Controls

- 1. Dwelling houses shall be setback in accordance with Table 1.

Table 1 Setbacks

Height	Front Setback	Secondary Setback
Ground floor	4.5m	2.5m
First floor	5.5m	2.5m

- 2. 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)
- 3. Verandahs, balconies, eaves and other sun control devices may encroach on the minimum front and secondary setback by up to 1m.
- 4. The secondary setback is the longest length boundary.
- 5. Garages that address the secondary frontage must have a minimum setback of 5.5m.
- 6. 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

Objectives

- a) To maximise private amenity within the building.
- b) To minimise the impacts of development on neighbouring properties in regard to views, privacy and overshadowing.
- c) To ensure that buildings are sited so as to provide for solar access and both visual and acoustic privacy.

Controls

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	0.9m	5.0m
Second storey component of dwelling houses	1.2m	8.0m
Living room doors (including family rooms and rumpus rooms)	4.0m	5.0m

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.

Zero lot lines

1. Walls are generally to be 180mm 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 wall boundary.
3. No windows are permitted in a zero lot line wall.
4. A maintenance easement of at least 700 mm shall be provided on the adjoining boundary.

3.4 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.
- f) Note: All proposed developments require a landscape plan to be submitted with the development application.

Controls

1. A minimum of 20% 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 5 x 6m shall be provided in rear setback 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 3 x 5m 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 50 m² of Private Open Space.
2. Areas less than 2.5m in width does not qualify as Private Open Space.
3. Private open space areas are not permitted within the primary street setbacks.
4. The Private Open Space shall include the principal private open space, which is directly accessible from the main living area of a dwelling with a minimum dimension of 4 x 6 m
5. The Principal Private Open Space must receive 3 hours of sunlight to at least 50% of the area between 9:00am and 5:00pm on 21 June.

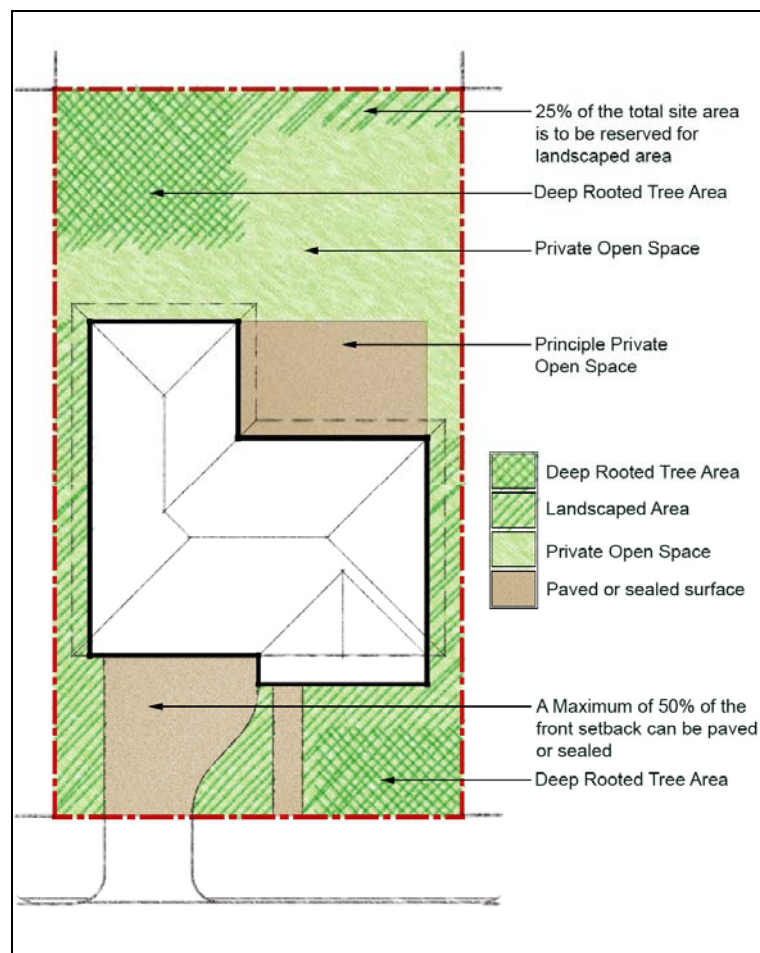


Figure 11 Landscaped Area

3.5 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 must not exceed 600mm.
- 2. All retaining wall structures shall be masonry construction 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 1 m. All fill must be contained within the dwelling footprint.
- 4. Contaminated fill, either imported or found on site is not permitted.

Note: 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.

- 5. 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:
 - A plan showing existing contours (at 0.5m intervals) of the subject site and all adjoining sites.
 - A plan showing future contours (after proposed cut and fill) of the subject site and all adjoining sites.
 - 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.

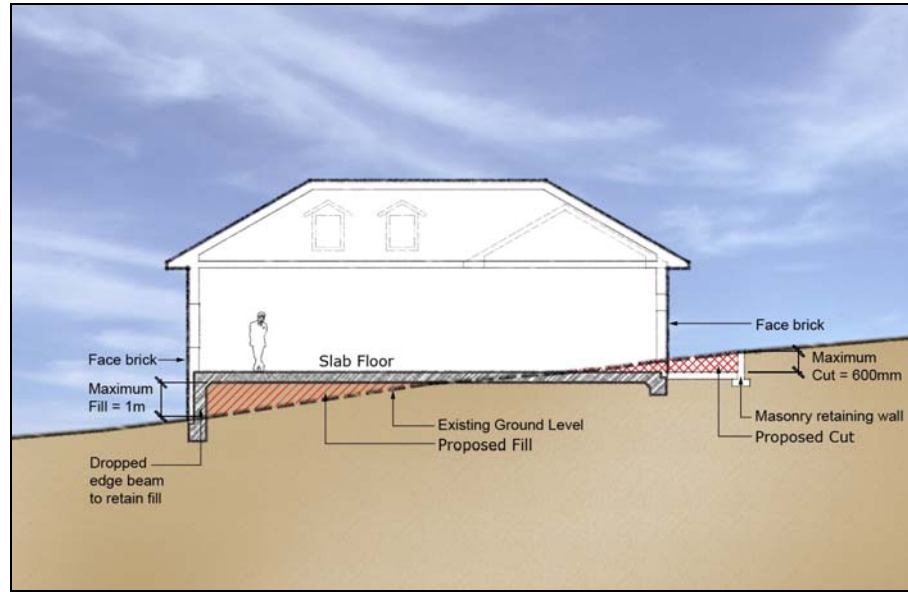


Figure 12 Cut and Fill requirements for a dwelling

Building Design and Appearance

Objectives

- To encourage designs that will enhance the character of the neighbourhood.
- To promote variation of building facade and design.
- The building enhances the streetscape through the use of suitable built form design and landscaping.
- To ensure buildings address all street frontages.
- To discourage garages and in particular garage doors, from visually dominating the streetscape.
- To ensure that the building design, detailing, colour and finish shall add visual interest to the street and shall compliment the street.
- To ensure habitable rooms address the street.
- To encourage balconies over garages in two storey dwellings.

Controls

Dwellings

- All dwellings are to be orientated to the street (See Figure 13).
- The front pedestrian entrance must be visible from the street.
- The front Building facades shall be articulated, this articulation may include front porches, entries, wall indents, changes in finishes, balconies and/or verandahs.
- For two storey developments, the side walls shall be articulated if the wall has a continuous length of over 10m.
- Eave overhang must provide for sun shading and protect windows and doors. Eaves should have a minimum overhang of 400 mm and be provided to a minimum of 70% of the dwelling.
- Dwellings that face two street frontages or a street and public space must address both frontages by the use of verandahs, balconies, windows or similar modulating elements.

7. Balconies facing the street on two storey dwellings are encouraged (See Figure 13).

Two storey dwellings

To break up the bulk of two storey dwellings balconies built above garages are encouraged

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 may be built in front of the garage *only if* the carport is:
 - No larger than 5.5 x 6m.
 - Built of a similar colour and materials of the house.
 - Setback 2m from the front property boundary.
 - Compatible with the local streetscape.
6. The conversion of garages to living space may only be permitted if:
 - At least one car parking space is provided behind the front setback.
 - The additional living area does not result in the building exceeding the maximum permitted floor space ratio.



Figure 13 Example of Building Appearance (Indicative Only – Not to Scale)

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 provide passive surveillance from rooms addressing the street or any adjoining open space.
- c) To locate amenity rooms (such as laundries, bathrooms, toilets) to the side and rear of the development.

- d) To encourage the internal design of the dwelling to take advantage of cross ventilation.
- e) 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.
- 3. Access to private open space must be from at least one living room.
- 4. The internal layout of the dwelling must 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 8m³.
- 7. Locate active use rooms or habitable rooms with windows overlooking communal/public areas (e.g. playgrounds, gardens).
- 8. The main living area must receive at least 3 hours of sunlight between 9.00am and 5.00pm on 21 June.

3.6 Landscaping and Fencing

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 to be deciduous.
- 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 8 m should be planted a minimum distance of 3 m from the building or utility services.
- 5. A landscape plan must be lodged with all Das, and is to provide the following details
 - The location of any existing trees on the property, specifying those to be retained and those to be removed.
 - The location of any trees on adjoining properties that are likely to be damaged as a result of excavations of other site works.

- The position of each shrub and tree species proposed to be planted. Each plant is to

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. The front fence must be 30% transparent.
- 4. Front fences shall be constructed in masonry, timber, metal picket fencing and/or vegetation and must be compatible with the proposed design of the dwelling.
- 5. The maximum height of the front fence is 1.2m.

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 13).
- 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 12). The secondary setback is the longest length boundary.
- 3. Side fencing 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.
- 2. Boundary fences shall be lapped and capped timber or metal sheeting.

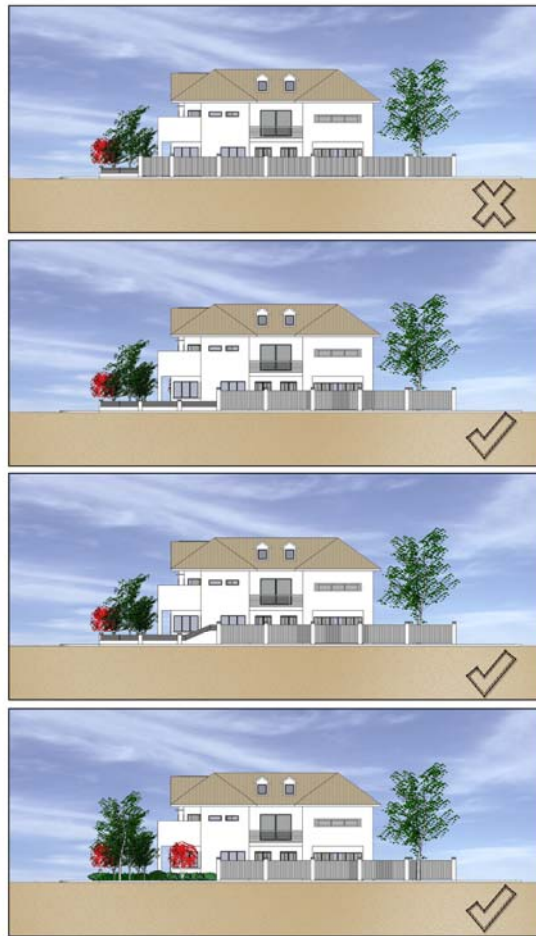


Figure 13 Fence types

3.7 Car Parking and Access

Car Parking

Background

The provision of on-site parking is required for all residential allotments. On-site parking is to be provided in a way that does not compromise the appearance of dwellings from the street.

Objectives

- a) To provide sufficient and convenient parking for residents and visitors.
- b) To ensure that parked vehicles do not create traffic or pedestrian hazards, and do not degrade landscaped areas such as grass verges.
- c) To reduce the visual impact of garages, carports and parking areas on the streetscape and improve dwelling presentation.

Controls

1. Two car parking spaces shall be provided for each dwelling.
2. At least one car parking must be provided behind the front setback.
3. A car parking space is to have a minimum dimension of 2.5 x 5.5m.
4. A single garage is to be a minimum of 3m wide internally and unobstructed.

5. All parking spaces for adaptable housing units shall comply with AS 2890:1 for disabled car parking.

Internal Driveways

Background

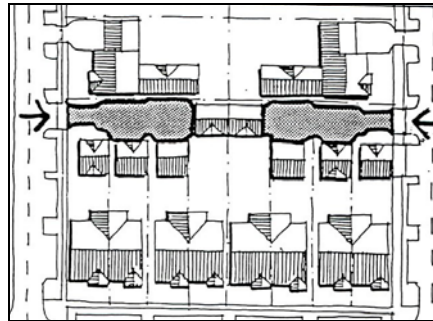
Where private driveways are used they are designed to minimise their impact on the streetscape and on the environment.

Objectives

- a) To provide safe and convenient access to garages, carports and parking areas.
- b) To create a pleasant, low maintenance place.
- c) To ensure clearly defined public and private spaces, such that driveways are for the sole use of residents.
- d) To ensure casual surveillance of private driveways from dwellings and from the street
- e) To minimise conflict between pedestrians and vehicles at the junction of driveways and footpaths.

Controls

1. The driveway crossing the verge between the property boundary and the kerb is to have a maximum width of 5.5m.
2. Driveways are to have soft landscaped areas on either side, suitable for infiltration.
3. Private driveways are to have the smallest configuration possible to serve the required parking facilities and vehicle turning movements.
4. Private driveways are to be constructed as one of three general types, depending on block geometry and garages to be accessed. (See Figure 13).
5. Higher density development fronting to collector streets is to have rear access through laneways, car courts and the like. Developers are to identify opportunities for rear lanes parallel to collector streets.
6. Corner lots on collector streets are to have access from the street perpendicular to the collector street.
7. At the street entry, the driveway is to be landscaped to have low visual impact and be clearly distinguishable as private access only.
8. Landscaping at driveways should not block lines of sight for pedestrians, cyclists and vehicles.



TYPE 1 – CLOSE
- **Preferable**

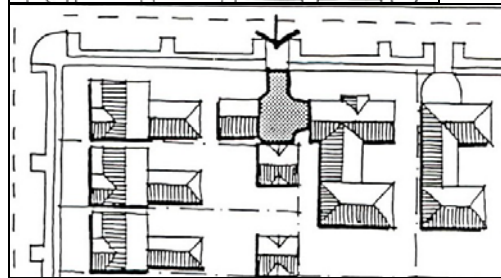
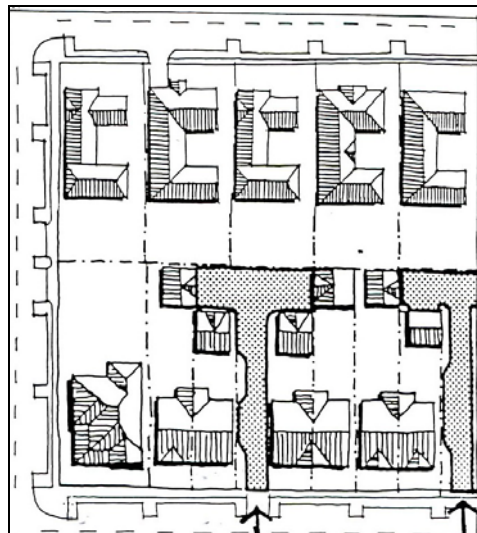


Figure 14 Private Driveways



TYPE 2 – T-SHAPED
- Driveway should be from frontage road of the narrow lot dwellings
- Use where block geometry or available road frontage precludes “close”.

Figure 15 Private Driveway Options

3.8 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:

- One living room, rumpus room or the like.
- 50% of the private open space.

Privacy

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 16).
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 16).
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.

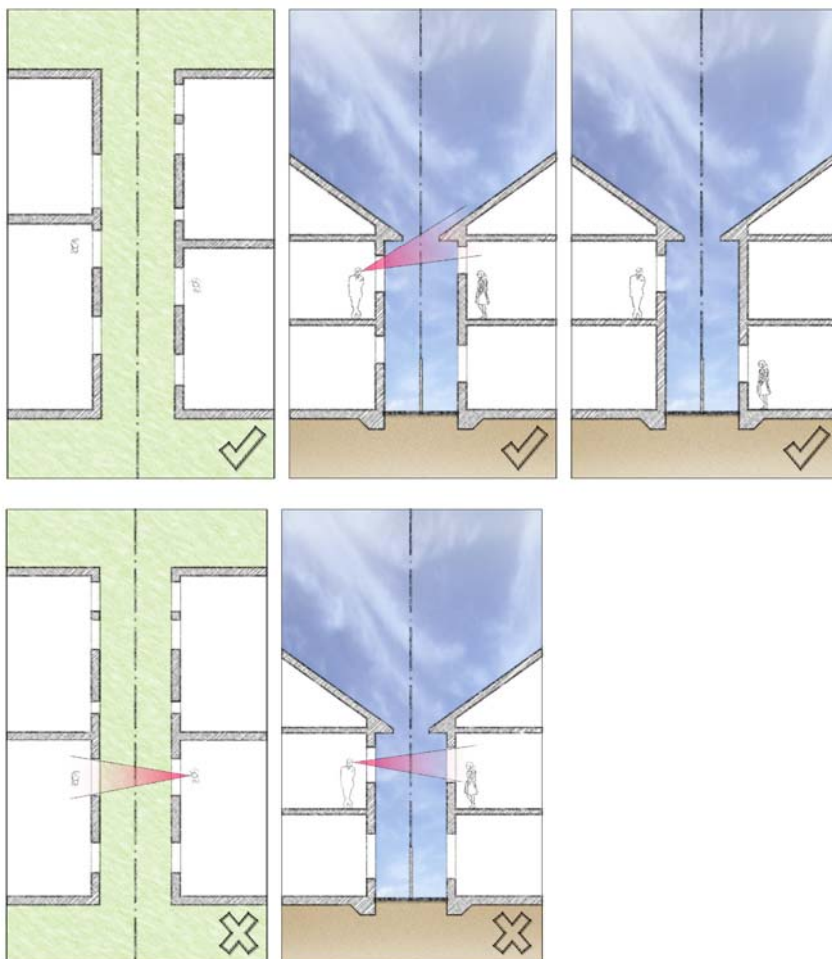


Figure 16 Privacy and Amenity

Acoustic Privacy

Objective

To ensure appropriate noise and vibration attenuation measures are incorporated into residential development.

Controls

1. Noise attenuation measures should be incorporated into building design to ensure acoustic privacy between on-site and adjoining buildings.
2. Developments in areas adversely impacted upon by traffic related noises must incorporate the appropriate noise and vibration mitigation measures into the design in terms of the site layout, building materials and design, orientation of the buildings and location of sleeping and recreation areas.
3. Where party walls are provided they must be carried to the underside of the roof and be constructed in accordance with Part F5 of the *Building Code of Australia*.
4. The proposed buildings must comply with the Environment Protection Authority criteria and the current relevant Australian Standards for noise and vibration and quality assurance.

3.9 Site Services

Objectives

- a) To ensure that the required services are provided.
- b) To ensure that the services provided are easily protected or maintained.

Controls

Letterboxes

1. Letterboxes shall to be provided for each dwelling on site, easily accessible from the street, able to be securely locked and provided in accordance with Australia Post's requirements.
2. Freestanding letterbox structures should be designed and constructed of materials that relate to the main building.
3. Residential numbering should be attached to the letterbox so that it is clearly visible from the street frontage. Numbers should be 75mm in height, reflective and in contrast to the backing material.

Waste management

1. Waste disposal facilities shall be provided for development involving residential flat buildings or shop top housing. These shall be located adjacent to the driveway entrance to the site or at the rear if a rear lane is provided.
2. Any structure involving waste disposal facilities shall be located as follows:
 - Setback m from the front boundary to the street.
 - Landscaped between the structure and the front boundary and adjoining areas to minimise the impact on the streetscape.
 - Not be located adjacent to an adjoining residential property.
 - Details of the design of waste disposal facilities are shown in Part 1.

Frontage works and damage to Council infrastructure

1. Where a footpath, road shoulder or new or enlarged access driveway is required to be provided this shall be provided at no cost to Council.
2. Council must be notified of any works that may threaten Council assets. Council must give approval for any works involving Council infrastructure.
3. Where there are no existing street trees in front of the site and contributions have not been collected for street tree planting it may be a condition of consent that street trees be provided in the footpath area immediately in front of the site.

Electricity Sub Station

In some cases it may be necessary to provide an electricity sub station at the front of the development adjacent to the street frontage. This will involve dedication of the area as a public road to allow access by the electricity provider. The front boundary treatment used elsewhere on the street frontage

3.10 Secondary Dwellings (Granny Flats)

Objective

To provide housing choice within a standard residential lot for the use of a separate dwelling within the existing title.

Controls

1. A Secondary dwelling can be a maximum of one storey high, unless the granny flat is above the garage facing a rear laneway, where the Secondary dwelling must be one storey high above the garage.
2. A Secondary dwelling should be attached to the main dwelling, as provided by Part 2 of the DCP. However, Council may consider applications for detached granny flats on a merit base.
3. A Secondary dwelling should compliment the main dwelling design by using the same style of construction and a similar colour.

Note: Secondary dwellings are included in the overall floor space ratio of a property, and only one Secondary dwelling is permitted per lot.



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