Kintyre Heights Estate Development Control Plan

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Adopted by Council on _____2023

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Part 1 Introduction

1.1 Name and application of this Plan

This Development Control Plan is known as the Kintyre Heights Estate Development Control Plan (the Plan).

This Plan has been prepared by Council in accordance with Section 3.43 of the Environmental Planning and Assessment Act 1979 (the Act) and the Environmental Planning and Assessment Regulation 2021 (the Regulation).

1.2 Application of this Plan

This DCP applies to the land known as 'Kintyre Heights' being land identified (outlined red) as Lot 172 DP 753233 and as shown in Figure 1 below:

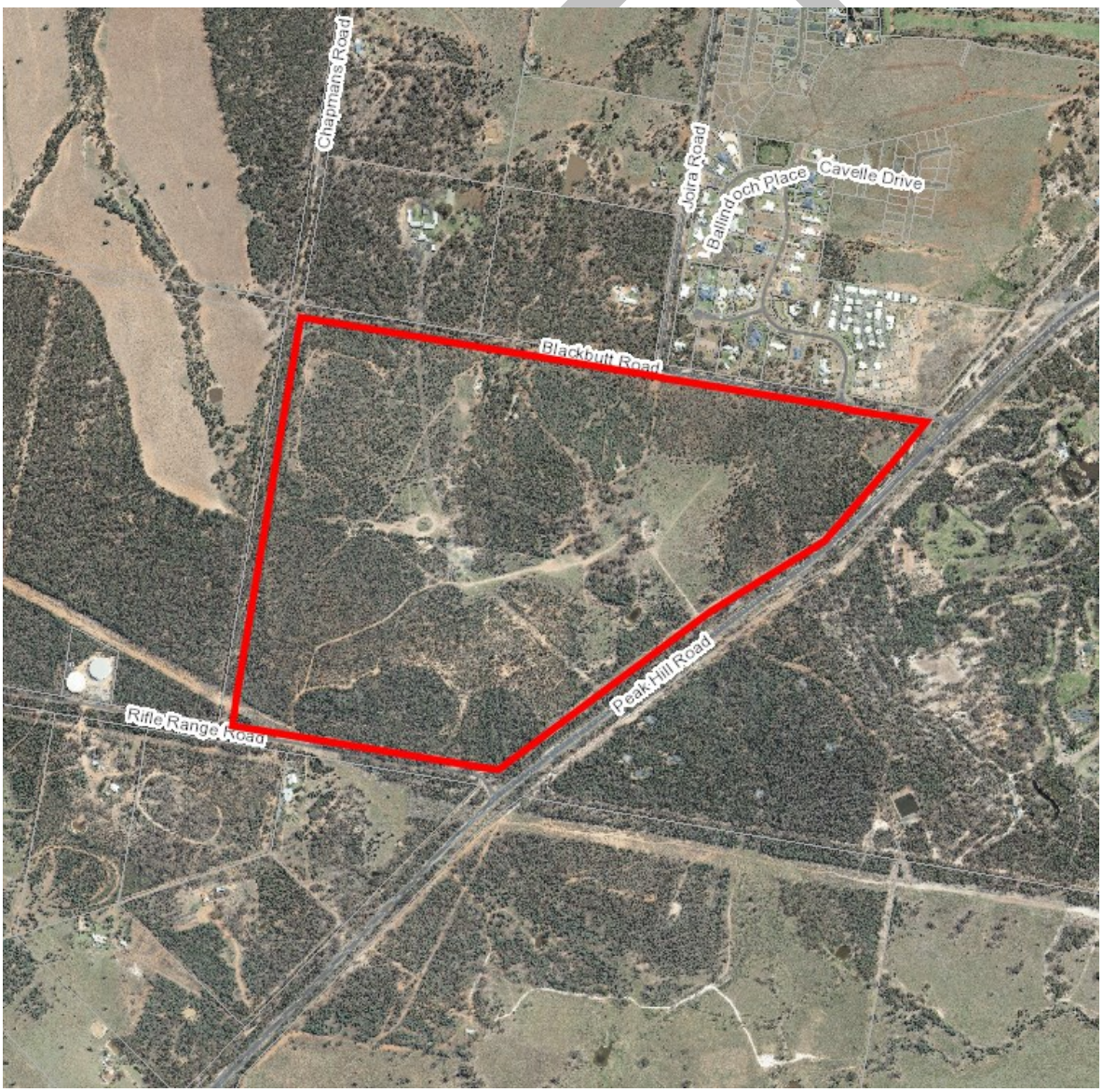

Figure 1. Area to which this Plan applies

1.3 Purpose of this Plan

The purpose of this Plan is to provide detailed planning and design guidelines for land within the South-West Urban Release Area, in line with Part 6 of the Dubbo Regional Local Environmental Plan 2022. Specifically the plan will:

- Provide guidance to developers/applicants/builders in the design of development proposals for land to which this Plan applies.
- Communicate the planning, design and environmental objectives and controls against which the Consent Authority will assess development applications in the Kintyre Heights Estate.
- Provide guidance on the orderly, efficient and environmentally sensitive development of the Kintyre Heights Estate.
- Promote quality urban design outcomes within the context of environmental, social and economic sustainability.

1.4 Commencement of the Plan

The Plan was adopted by Council and commenced on _____. The Plan should be read in conjunction with the Dubbo Local Environmental Plan 2022 (LEP) and the Dubbo Development Control Plan 2013 (DCP).

1.5 Relationship to other Plans and documents

Under the Act, Council is required to take into consideration the relevant provisions of this Plan in determining an application for development on land to which this Plan applies.

In the event of any inconsistency between an Environmental Planning Instrument (EPI) and this Plan, the provisions of the EPI will prevail.

Council in the assessment of a development application will consider all matters specified in Section 4.15 of the Act. Compliance with any EPI or this Plan does not infer development consent will be granted.

1.6 Torrens Title Subdivision

The owner of the land, Highview Country Estates Pty Ltd intends to develop the subject land for the purposes of residential development.

The land is zoned R5 Large Lot Residential under the provisions of the Dubbo Regional LEP 2022. The Minimum Lot Size of the land can be categorised into three (3) sizes: 2000m^2, 4000m^2, and 10Ha. The land has existing vegetation with two (2) distinct ridgelines through the property dividing the land into a number of catchments.

The intent of the site is to be subdivided into allotments ranges from 2000m^2 to 6900m^2 and be developed as a Torrens Title Subdivision where all infrastructure services within the site (roads, stormwater drainage, sewer and water reticulation) will be maintained and managed in accordance with Council's engineering standards.

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The subdivision will be required to comply with Council's requirements for public infrastructure.

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Part 2 Residential Development and Subdivision

2.1 Residential Subdivision Controls

This section is designed to encourage current 'best practice' solutions for subdivision design. The achievement of pleasant, safe and functional subdivision is the main objective for subdivision design.

This section lists subdivision design elements under the following headings:

Element 1	Streetscape character and building design
Element 2	Lot layout
Element 3	Public open space and landscaping
Element 4	Infrastructure
Element 5	Street design and road hierarchy
Element 6	Pedestrian and cycle links
Element 7	Stormwater management
Element 8	Water quality management

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Element 1. Streetscape Character and Building Design

Introduction

Successful neighbourhoods have a sense of community, are designed to promote social interaction, are pleasant to live in and have a high level of safety for residents and visitors. Good neighbourhood design considers how residents will interact within the neighbourhood and considers the street and pedestrian networks in addition to housing.

Objectives

- To efficiently utilise land and maintain the bushland character and ecological attributes of the estate.
- To emphasise the natural attributes of the site and reinforce neighbourhood identity through the incorporation of visible features such as bushland canopies, retention of existing established trees and vegetation corridors.
- To provide neighbourhoods that offer opportunities for social interaction.
- To ensure motor vehicles do not dominate the neighbourhood.
- To establish a clear residential structure that facilitates a 'sense of neighbourhood' and encourages walking and cycling within the Estate and connections into adjoining Estates.

Performance criteria The streetscape character and building design objectives may be achieved where:	**Acceptable solutions** The acceptable solutions illustrate one way of meeting the associated performance criteria:
P1 Residential neighbourhoods are focused on elements of the public domain such as a bushland reserves and wetlands that are typically within walking distance.	A1.1 Watercourses, natural vegetation and heritage items are retained and emphasised in the design.
P2 The layout provides for community focal points and public open space that promotes social interaction and caters for a range of uses by the community.	A2.1 Pedestrian connectivity is maximised within and between each residential neighbourhood with a particular focus on pedestrian routes connecting to public open space, bus stops, educational establishments and community/recreation facilities.
P3 The layouts of street blocks establish a clear urban structure and are of a size and length that promotes and encourages walking and cycling.	There is no applicable Acceptable Solution to this Performance Criteria.

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P4	Neighbourhood design provides for passive surveillance of residences and public areas to enhance personal safety and minimise the potential for crime.	A4.1	The subdivision layout minimises narrow pedestrian pathways between or behind development (for example, at cul-de-sac heads) and sound barriers and fencing which remove or reduce passive surveillance of higher order roads.
		A4.2	Neighbourhood design enhances legibility and way-finding through an easily-understood street layout and provides vistas towards natural features and buildings.
		A4.3	Neighbourhoods are designed with high levels of physical connectivity for pedestrians, cyclists and vehicles, both within and to adjacent neighbourhoods.
P5	Lot dimensions respond to the topography and the road layout to ensure the bushland character is maintained and enhanced.	A5.1	A minimum lot frontage of 25 metres measured at the front building line/street facing building line, as shown in Figure 4, should be provided to all lots.
P6	Street networks provide good external connections for local vehicle, pedestrian and cycle movements.	A6.1	The overall subdivision development shall achieve a minimum Internal Connectivity Index (ICI) score of 1.30. Note: The importance of a well-connected subdivision which can be achieved through a good ICI is further explained in the following section.

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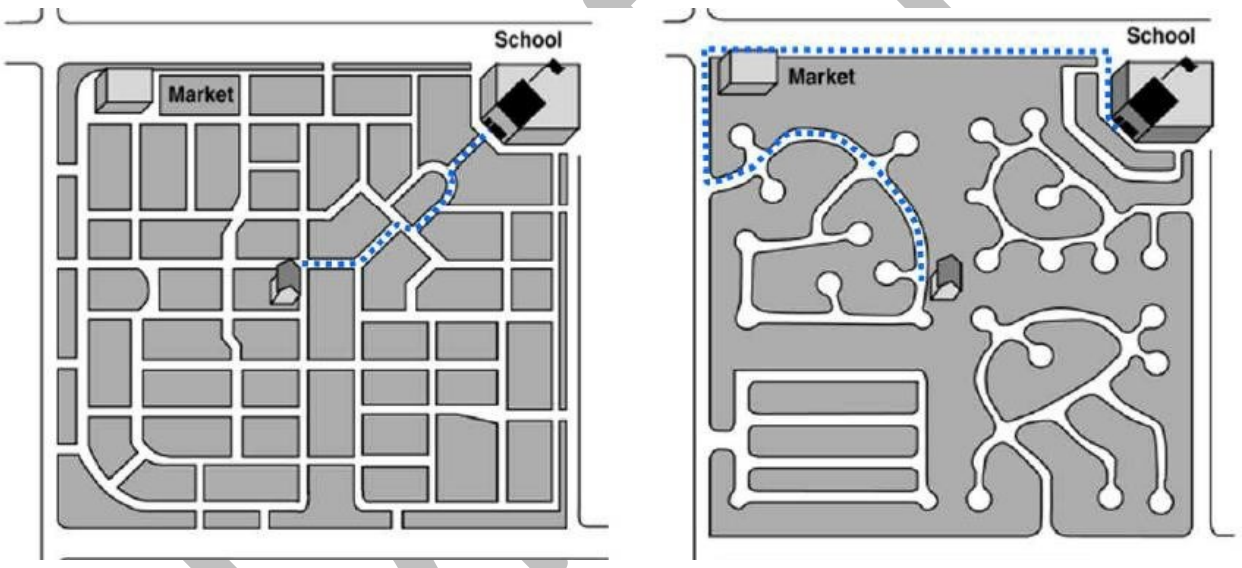
Internal Connectivity Index

The Internal Connectivity Index (ICI) is calculated by the number of street links divided by the number of street nodes (Ewing, 1996). A link is defined as a segment of road between two intersections or from an intersection to a cul-de-sac, including road segments leading from the adjoining highway network or adjacent development.

A node is defined as an intersection and the end of a cul-de sac. They do not include the end of a stub-out at the property line. The higher the connectivity index, the more connected the roadway network. Residential subdivisions that are dominated by cul-de-sacs provide discontinuous street networks, reduce the number of footpaths, provide few alternate travel routes and tend to force all trips onto a limited number of arterial roads.

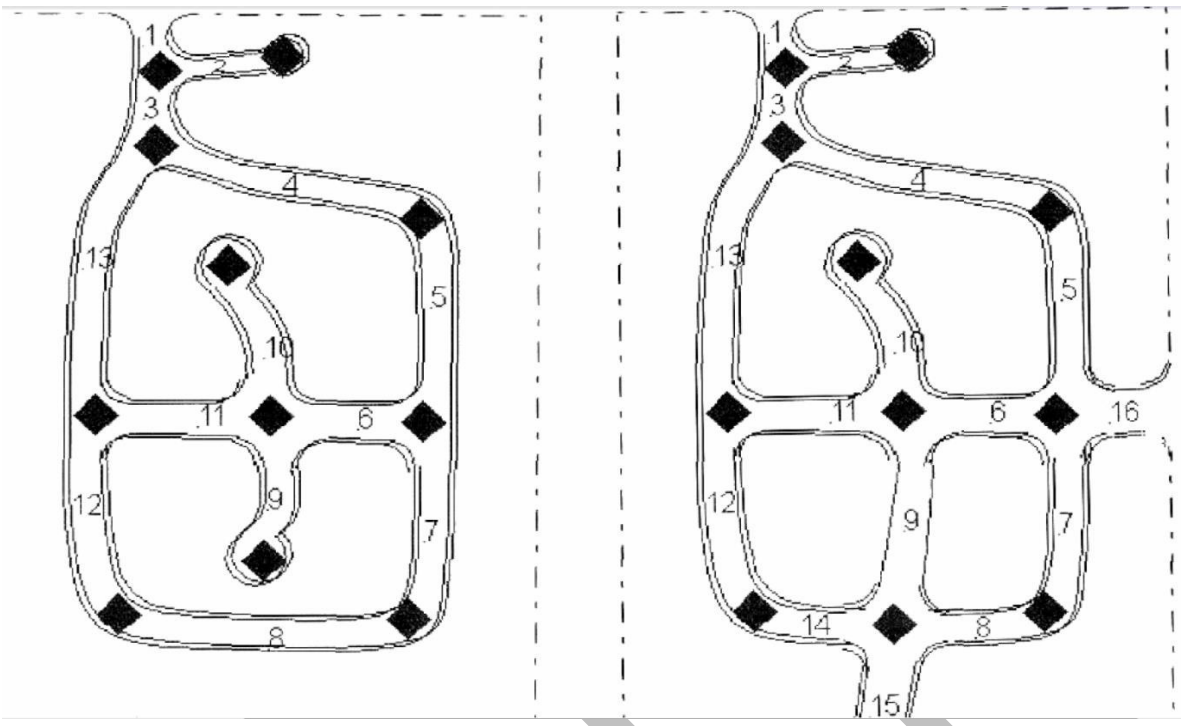
Figure 2 shows two examples of a subdivision. The example on the left shows a well-connected subdivision layout that minimises the distance to travel from a dwelling house to a focal point. The example on the right shows the same trip through a poorly connected subdivision.



A well-connected subdivision layout

A poorly-connected subdivision layout

Figure 2. Subdivision connectivity examples



Example 1. 13 links/11 nodes = 1.18 ratio Example 2. 16 links/11 nodes = 1.45 ratio

Figure 3. Calculation of the Internal Connectivity Index (ICI)

25 metre frontage width

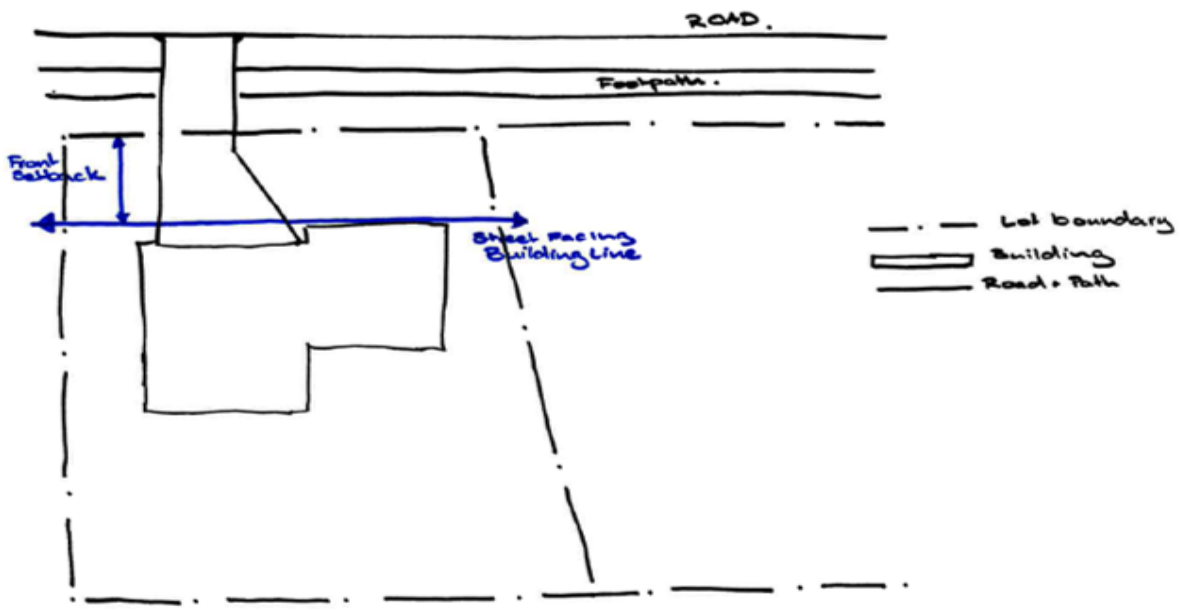


Figure 4. Example of minimum lot frontage of 25 metres measured at the front building line/street

Element 2. Lot Layout

Introduction

Provision of an efficient and effective lot layout can allow for the creation of neighbourhoods that encourage connectivity and achieve quality urban design outcomes.

The arrangement of future dwellings will have an important influence on the quality of the neighbourhood that develops and should be considered as part of the lot design.

Objectives

- To provide lot sizes to suit a variety of household types and requirements whilst considering the bushland setting of the area.
- To create attractive residential streets by carefully planning the location of garages and driveways within street frontages and improving the presentation of dwelling houses.

Performance criteria The lot layout objectives may be achieved where:	**Acceptable solutions** The acceptable solutions illustrate one way of meeting the associated performance criteria:
P1 Lots are designed to optimise outlook to the bushland bounding the subdivision.	A1.1 There is no applicable Acceptable Solution to this Performance Criteria.
P2 The design of lots provides vehicular access to the rear or side of lots where front access is restricted or not possible, particularly narrow lots where front garaging is not permitted.	A2.1 There is no applicable Acceptable Solution to this Performance Criteria.
P3 A range of lot types (area, frontage, depth and access) is provided to ensure a mix of housing designs and styles.	A3.1 Within the Estate, the subdivision design shall provide varied lot frontages to promote a differentiation in design and housing product. A3.2 Where residential development adjoins the bushland reserve areas, the subdivision is to create lots to enable a living area within the dwelling to overlook the bushland reserve area.

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Performance criteria The lot layout objectives may be achieved where:	**Acceptable solutions** The acceptable solutions illustrate one way of meeting the associated performance criteria:
P4 Battle-axe lots shall only be provided in limited circumstances where the topography and development orientation results in regular subdivision not being able to be achieved.	A4.1 There is no applicable Acceptable Solution to this Performance Criteria.
P5 The visual impact to the streetscape of battle-axe entry ways and driveways should be ameliorated, where possible.	A5.1 There is no applicable Acceptable Solution to this Performance Criteria.
P6 To ensure corner lots are of sufficient dimensions and size to enable residential controls to be met.	A6.1 Corner lots are to be designed to allow residential accommodation to positively address both street frontages.

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Element 3. Landscaping

Objectives

- To provide landscaping that contributes to the identity and environmental health of the community.
- To ensure streetscape components do not detrimentally affect solar access to individual dwellings.

Performance criteria The public open space and landscaping objectives may be achieved where:	**Acceptable solutions** The acceptable solutions illustrate one way of meeting the associated performance criteria:
P1 Landscaping is designed and located to not negatively impact on built infrastructure.	A1.1 Landscaping is provided in accordance with the requirements of a Landscaping Schedule that has been approved by Council's Community, Culture and Places Division.
P2 Landscaping is provided in an environmentally sustainable manner which limits the time and costs associated with maintenance.	A2.1 Existing native trees are retained wherever possible. A2.2 Species selected are suitable for the local climate. A2.3 Species selected require a minimal amount of watering. A2.4 Landscaping does not impact ground-water levels by encouraging over-watering resulting in groundwater level increases or the pollution of waters.
P3 Street trees are selected to provide summer shading while not impeding solar access to dwellings in winter.	A3.1 Street trees are provided in accordance with the requirements of Council's Community, Culture and Places Division generally and any applicable tree planting standards. A3.2 Deciduous trees are selected where shadows would adversely impact solar access.

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Performance criteria The public open space and landscaping objectives may be achieved where:	**Acceptable solutions** The acceptable solutions illustrate one way of meeting the associated performance criteria:
	A3.3 Taller tree species are planted on the northern side of east-west aligned streets, shorter species are planted on the southern side. A3.4 Endemic species or species with a proven tolerance to the local climate and conditions that preserve solar access of adjoining properties are provided. A3.5 Plantings with low maintenance and low water consumption are provided. A3.6 Evergreen species for windbreaks and planting along the south or west side of the area are protected against wind.

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Element 4. Infrastructure

Objectives

- To ensure the Estate is serviced with essential services in a cost-effective and timely manner.
- To ensure the Estate is adequately serviced with water and sewerage infrastructure.
- To ensure acoustic infrastructure adequately mitigates adverse noise impacts on residential development.

Performance criteria The infrastructure objectives may be achieved where:	Acceptable solutions The acceptable solutions illustrate one way of meeting the associated performance criteria:
P1 Design and provision of utility services including sewerage, water, electricity, gas, street lighting and communication services are cost-effective over their lifecycle and incorporate provisions to minimise adverse environmental impact in the short and long-term.	A1.1 The design and provision of utility services conforms to the requirements of relevant service authorities. A1.2 Water and sewerage services are to be provided to each allotment at the full cost of the developer. A1.3 Telecommunications and National Broadband Network Infrastructure is provided to each lot in accordance with the requirements of the appropriate authority. A1.4 Energy efficient and appropriately located street lighting is provided in accordance with AS/NZS 1158.1.1. All cable reticulation is to be installed underground. A1.5 Subdivision of the land is to be undertaken as a Torrens Title Subdivision. A1.6 Electricity supply is to be provided in accordance with the requirements of the relevant electricity supply authority. All cable reticulation is to be installed underground.
P2 Compatible public utility services are located in common trenching in order to minimise the land required and the costs for underground services.	A2.1 Services are located next to each other in accordance with Council's Policy for trenching allocation in footways (Standard Drawing 5268).

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P3 Water supply and sewerage networks are available and are accessible.	A3.1 Water and sewerage services are designed and constructed in accordance with Council's adopted AUS-SPEC#1 Development Specification Series – Design and Construction and Technical Schedules – Construction of Water Reticulation and Gravity Sewerage Reticulation and Water Services Association of Australia. A3.2 Any development application for subdivision of the land shall include an analysis of Council's downstream sewerage infrastructure, including information addressing the capacity of the downstream network. A3.3 A Drinking Water Quality Management Plan is required to be prepared, which addresses the 12 elements of the Australian Drinking Water Guidelines 2011 and requirements of NSW Health. A3.4 The water supply system for the subdivision shall be designed and provided as an in-line pressure booster pumping station to service all of the proposed Kintyre Heights subdivision, designed in accordance with s.6.2 – IN-LINE PRESSURE BOOSTER PUMPING STATIONS of the WSAA Water Supply Code of Australia – Part 1: Planning and Design – Version 3.2. Whilst the entirety of s.6.2 needs to be reviewed and adhered to. The water supply system is to be designed in accordance with the following requirements: Section 6.2.2.9 – SITE SELECTION, the booster pump station is to be placed on land dedicated to Council. Section 6.2.8.5 – EMERGENCY POWER, an emergency primary supply generator is to be provided in the event mains power is interrupted. The generator shall be sufficiently sized to sustain at least 8 hours of full load operation. Section 6.2.9.4 – FIRE FLOW OPERATION, the booster pump station shall be designed to operate under fire flow conditions and allow for the usage of spring hydrant valves within the proposed subdivision. Appendix D – BOOSTER CONFIGURATION provides examples of booster pump station designs.

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Element 5. Street Design and Road Hierarchy

Objectives

- To ensure streets fulfil their designated function within the street network.
- To facilitate public service utilities.
- Encourage street designs that accommodate drainage systems.
- Create safe and attractive street environments.

Performance criteria The street design and road hierarchy objectives may be achieved where:	Acceptable solutions The acceptable solutions illustrate one way of meeting the associated performance criteria:
P1 The street reserve width is sufficient to cater for all street functions, including: Safe and efficient movement of all users. Provision for parked vehicles. Provision for landscaping.	A1.1 The road hierarchy complies with the relevant Residential Release Strategy. A1.2 The road hierarchy is designed and constructed in accordance with Aus-Spec (Dubbo Regional Council version). A1.3 The road layout provides appropriate connectivity as approved by Council, between adjoining residential estates for both vehicular and pedestrian movement.
P2 The verge width is sufficient to provide for special site conditions and future requirements.	A2.1 The verge width is increased where necessary to allow space for: Larger scale landscaping. Indented parking. Future carriageway widening. Retaining walls. Cycle paths. Overland flow paths.
P3 Street design caters for all pedestrian users including the elderly, disabled and children by designing streets to limit the speed motorists can travel.	There is no applicable Acceptable Solution to this Performance Criteria.

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Performance criteria The street design and road hierarchy objectives may be achieved where:	**Acceptable solutions** The acceptable solutions illustrate one way of meeting the associated performance criteria:
P4 Driveway egress movements do not create a safety hazard.	A4.1 Motorists can enter or reverse from a residential lot in a single movement.
P5 Bus routes have a carriageway width that: - Allows for the movement of buses unimpeded by parked cars. - Safely accommodates cyclists. - Avoids cars overtaking parked buses.	A5.1 The geometry of streets identified as bus routes provides suitable turning, stopping sight distance, grade and parking for buses.
P6 Geometric design for intersections, roundabouts and slow points is consistent with the vehicle speed intended for each street.	A6.1 Sufficient area is provided at the head of cul-de-sacs for waste disposal vehicles to make a three point turn.
P7 Car parking is provided in accordance with projected needs determined by: - The number and size of probable future dwellings. - The car parking requirements of likely future residents. - Availability of public transports. - Likely future onsite parking provisions. - Location of non-residential uses such as schools/shops. - The occasional need for overflow parking.	There is no applicable Acceptable Solution to this Performance Criteria.
P8 Car parking is designed and located to: - Conveniently and safely serve users, including pedestrians, cyclists and motorists. - Enable efficient use of car spaces and access ways including adequate manoeuvrability between the street and lots. - Fit in with adopted street network and hierarchy objectives and any related traffic movement plans. - Be cost effective. - Achieve relevant streetscape objectives.	There is no applicable Acceptable Solution to this Performance Criteria.

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Element 6. Pedestrian and Cycle Links

Objective

- To encourage walking and cycling by providing safe and convenient movement networks to points of attraction and beyond the development.

Performance criteria The pedestrian and cycle links objectives may be achieved where:	Acceptable solutions The acceptable solutions illustrate one way of meeting the associated performance criteria:
Planning P1 The residential street and path network provides a network of pedestrian and cyclist routes, with connections to adjoining streets, open spaces and activity centres.	A1.1 Where a Traffic Calming Plan or an approved Pedestrian and Cyclist Plan exist, pedestrian and cyclist paths are provided in accordance with that Plan. A1.2 Pedestrian and cycle paths are provided in accordance with the Dubbo Strategic Open Space Master Plan. A1.3 A network of footpaths and cycle routes is provided that accounts for: The need to encourage walking and cycling. Likely users (e.g. school children, parents with prams, aged people, commuters and cyclists). Opportunities to link open space networks and community facilities including public transport, local activity centres, schools and neighbouring shopping centres. Topography and cyclist and pedestrian safety.
P2 The alignment of paths allows safe and convenient use by pedestrians and cyclists and is varied to preserve trees and other significant features. A focus on vistas and landmarks adds visual interest where they exist.	There is no applicable Acceptable Solution to this Performance Criteria.

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Performance criteria The pedestrian and cycle links objectives may be achieved where:	**Acceptable solutions** The acceptable solutions illustrate one way of meeting the associated performance criteria:
P3 Provision is made for the location of seats in appropriate places.	A3.1 Seats to be provided in accordance with the requirements of Council's Community, Culture and Places Division, within the bushland reserve area.
P4 There is adequate provision for passing with paths widened at potential conflict points or junctions on high-use facilities to allow for passing of pedestrians/cyclists.	A4.1 Paths are widened at potential conflict points or junctions in areas of high use such as schools, corner stores etc.
P5 Pedestrian and cyclist paths are constructed to provide a stable surface for projected users and is easily maintained.	There is no applicable Acceptable Solution to this Performance Criteria.

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Element 7. Stormwater Management

Objectives

- To provide major and minor drainage systems which:
  - Adequately protect people and the natural and built environments to an acceptable level of risk and in a cost effective manner in terms of initial costs and maintenance.
  - Contribute positively to environmental enhancement of catchment areas.
- To manage any water leaving the site (during construction and operation) with stormwater treatment measures.

Performance criteria The stormwater management objectives may be achieved where:	**Acceptable solutions** The acceptable solutions illustrate one way of meeting the associated performance criteria:
P1 Post development peak flows (up to 100 year ARI storm events) are limited to 'pre-development' levels.	A1.1 The system design allows for the safe passage of vehicles at reduced speeds on streets which have been affected by run-off from a 20% AEP event.
P2 The stormwater drainage system has the capacity to safely convey stormwater flows resulting from the relevant designed storm event under normal operating conditions, taking partial minor system blockage into account.	A2.1 The design and construction of the stormwater drainage system is in accordance with the requirements of Australian Rainfall and Runoff 1987 and Aus-Spec (Council version) Development Specification Series – Design and Development Specification Series – Construction. A2.2 Infrastructure plans for subdivisions shall show all minor and major stormwater systems clearly defined and identified. Minor systems for residential areas are designed to cater for the 1-in-100 year storm event. These systems are to be evident as 'self-draining' without impacting on flooding of residential houses etc.

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Performance criteria The stormwater management objectives may be achieved where:	**Acceptable solutions** The acceptable solutions illustrate one way of meeting the associated performance criteria:
P3 Natural streams and vegetation are retained wherever practicable and safe, to maximise community benefit.	A3.1 Natural streams and vegetation are incorporated into the stormwater drainage system for the subdivision and open space requirements.
P4 The stormwater system/drainage network is designed to ensure that there are no flow paths which would increase risk to public safety and property.	There is no applicable Acceptable Solution to this Performance Criteria.
P5 The system design allows for the safe passage of vehicles at reduced speeds on streets which have been affected by run-off from the relevant designed storm event.	A5.1 The system allows for the safe passage of vehicles at reduced speeds on streets which have been affected by run-off from a 20% AEP event.
Site drainage P6 Subdivision design and layout provides for adequate site drainage.	A6.1 Site stormwater drainage systems are provided in accordance with Council's requirements. A6.2 The design and construction of the inter-allotment drainage system are in accordance with the requirements of Australian Rainfall and Runoff (1987) and Aus-Spec (Dubbo Regional Council version) Development. Specification Series – Design and Development Specification Series – Construction.

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Performance criteria The stormwater management objectives may be achieved where:	Acceptable solutions The acceptable solutions illustrate one way of meeting the associated performance criteria:
Flooding P7.1 Where residences (new or existing) are proposed in flood-affected areas, these shall be protected from flood waters. P7.2 Flood-ways are developed in a manner which ensures that there is a low risk of property damage.	A7.1 The finished floor level of residential accommodation is located at or above the 'flood planning level' to provide protection to life and property in accordance with the accepted level of risk.

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Element 8. Water Quality Management

Objective

- To provide water quality management systems which:
  - Ensure that disturbance to natural stream systems is minimised.
  - Stormwater discharge to surface and underground receiving waters, during construction and in developing catchments, does not degrade the quality of water in the receiving areas.

Performance criteria The water quality management objectives may be achieved where:	**Acceptable solutions** The acceptable solutions illustrate one way of meeting the associated performance criteria:
P1 Adequate provision is made for measures during construction to ensure that the land form is stabilised and erosion is controlled.	A1.1 An Erosion and Sediment Control Plan is prepared by suitably qualified professionals using the 'Blue Book – Managing Urban Stormwater: Soils and Construction' and provided to Council.
P2 The system design optimises the interception, retention and removal of water-borne pollutants through the use of appropriate criteria prior to their discharge to receiving waters.	A2.1 The Erosion and Sediment Control Plan is to comply with the document 'Managing Urban Stormwater: Soils and Construction', produced by NSW Department of Housing.
P3 The system design minimises the environmental impact of urban run-off on surfaces receiving water quality and on other aspects of the natural environment, such as creek configuration and existing vegetation, by employing techniques which are appropriate and effective in reducing run-off and pollution travel.	A3.1 Water pollution control ponds or wetlands are developed (where appropriate) for final treatment before discharge to the wider environment and should be sited to minimise impacts on the natural environment. A3.2 Sensors are used to control watering systems.

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2.2 Residential Design

This section is designed to encourage 'best practice' solutions and clearly explain requirements for the development of Residential Accommodation.

The objectives of this section are:

- To facilitate a mix of dwelling sizes complementing the character of the area and that provide accommodation for all sectors of the community.
- To facilitate low density residential accommodation with an economic use of infrastructure.

This section lists design elements under the following headings:

Element 1	Streetscape character
Element 2	Building setbacks
Element 3	Solar access
Element 4	Private open space and landscaping
Element 5	Vehicular access and car parking
Element 6	Visual and acoustic privacy

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Element 1. Streetscape Character

Objectives

- To design residential housing development to complement the new streetscape and emerging neighbourhood character.
- To design residential housing in keeping with the desired future streetscape and neighbourhood character.
- To provide a mix of dwelling sizes complementing the character of the area and that accommodate for many sectors of the community.

Performance criteria The streetscape character objectives may be achieved where:	**Acceptable solutions** The acceptable solutions illustrate one way of meeting the associated performance criteria:
Built form P1 The frontage of buildings and their entries are readily apparent from the street.	A1.1 Buildings adjacent to the public street, address the street by having a front door facing the street. A1.2 The minimum frontage for dual occupancy developments is 25 metres.
P2 The development is to be designed to respect and reinforce the positive characteristics of the neighbourhood, including: • Built form. • Bulk and scale. • Vegetation. • Topography.	A2.1 Design elements to consider include: • Massing and proportions. • Roof form and pitch. • Facade articulation and detailing. • Window and door proportions. • Features such as verandahs, eaves and parapets. • Building materials, patterns, textures and colours. • Decorative elements. • Vehicular footpath crossing (location and width). • Fence styles. • Building setbacks.
P3 Walls visible from the street are adequately detailed for visual interest.	A3.1 This may be achieved by recesses, windows, projections or variations of colour, texture or materials.

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Performance criteria The streetscape character objectives may be achieved where:	Acceptable solutions The acceptable solutions illustrate one way of meeting the associated performance criteria:
P4 Garages and parking structures (carports) are sited and detailed to ensure they do not dominate the street frontage, integrate with features of the dwelling and do not dominate views of the dwelling from the street.	A4.1 Garages or parking structures are located in line with or behind the alignment of the front façade/ entrance of the dwelling.
P5 Fencing is consistent with the bushland character of the area.	A5.1 The use of Colourbond fence materials is not encouraged.
P6 Front fences enable outlook from the development to the street or open space to facilitate surveillance and safety. Front fences provide noise attenuation on classified roads. Front fences provide security in areas where there is a difference of land use (eg residential, commercial or industrial).	A6.1 Front fences have a maximum height of 1.2 metres if solid or less than 20% transparent and 1.5 metres if greater than 50% transparent. A6.2 A front fence on the secondary frontage may have a maximum height of 1.8 metres for 50% of the length of the boundary to the secondary road, which is measured from the corner splay of the primary road boundary. In addition, • The fence is constructed of materials which are consistent with those used in development on the site and is consistent with the bushland setting of the site. • The fence is softened with the use of landscaping.
P7 Fencing style and materials reflect the local streetscape and do not cause undue overshadowing of adjoining development.	A7.1 Side fences on corner allotments are setback and/or articulated to provide for vegetation screening to soften the visual impact of the fence. A7.2 Side fences forward of the building line are not constructed of solid metal panels or chain wire fencing (including factory pre-coloured materials).

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Performance criteria The streetscape character objectives may be achieved where:	Acceptable solutions The acceptable solutions illustrate one way of meeting the associated performance criteria:
P8 Fencing on corner allotments does not impede motorists' visibility at the intersection.	A8.1 Fencing is either splayed, setback, reduced in height or transparent to maintain visibility for motorists.
P9 Gates are designed to ensure pedestrian and motorist safety.	A9.1 Where a driveway is provided through a solid fence, adequate visibility for the driver is maintained.

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Element 2. Building Setbacks

Objectives

- To ensure that the setback of a building from the property boundaries, the height and length of walls, site coverage and visual bulk are acceptable in the neighbouring setting.
- To ensure habitable rooms of dwellings and private open space within the development and in adjacent development can receive adequate sunlight, ventilation and amenity.

Performance criteria The building setback objectives may be achieved where:	**Acceptable solutions** The acceptable solutions illustrate one way of meeting the associated performance criteria:
P1 The setback of the development from the front boundary of the allotment is consistent with established setbacks, or is consistent with the desired amenity of the locality. Residential development on corner allotments shall address both street frontages. Note: The setback is measured from the property boundary to the first vertical structural element of the development. No portico, posts, etc shall be any closer than the stated setback. This applies to a dwelling house and any ancillary structure that is attached or detached to a dwelling house.	A1.1 Minimum setback of 10 metres from the front property boundary where no streetscape setback has been established. A1.2 The secondary (side) setback is 5 metres. Where the corner is splayed, residential development is designed accordingly.
P2 The setback of the development from the side and rear boundaries of the allotment is consistent with established setbacks or is consistent with the desired amenity of the locality.	A2.1 A minimum setback of 5 metres from the side and rear property boundary is to be provided to the residential development.
P3 The location of garages and carports does not diminish the attractiveness of the streetscape, does not dominate views of the dwelling from the street and integrates with features of associated dwellings.	A3.1 Garages and carports are setback a minimum of 10 metres from the front property boundary and in line with or behind the alignment of the front façade of the dwelling.

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Performance criteria The building setback objectives may be achieved where:	Acceptable solutions The acceptable solutions illustrate one way of meeting the associated performance criteria:
P4 The location of garages and carports does not diminish the attractiveness of the locality and integrates with features of associated dwellings.	A4.1 Garages and carports are setback such that they comply with the requirements of the Building Code of Australia.

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Element 3. Solar Access

Objectives

- To ensure all development provides an acceptable level of solar access for occupants.
- To ensure development does not significantly impact on the solar access and amenity of adjoining and adjacent allotments.

Performance criteria The solar access objectives may be achieved where:	**Acceptable solutions** The acceptable solutions illustrate one way of meeting the associated performance criteria:
Solar access P1 Development is designed to ensure solar access is available to habitable rooms, solar collectors (photovoltaic panels, solar hot water systems etc.) private open space and clothes drying facilities.	A1.1 On lots with an east/west orientation, the setback on the northern side of the lot is increased to allow for maximum solar access to habitable rooms located on the north-side of the dwelling. A1.2 A roof area sufficient to meet the space requirements for a solar hot water service is provided where it faces within 20^{o} of north and receives direct sunlight between the hours of 9 am and 3 pm on 22 June. A1.3 Outdoor clothes drying areas are located to ensure adequate sunlight and ventilation are provided between the hours of 9 am and 3 pm on 22 June to a plane of 1 metre above the finished ground-level under the drying lines.
P2 The proposed development does not reduce the level of solar access currently enjoyed by adjoining or adjacent allotments.	A2.1 Habitable rooms of adjoining development receive a minimum of four hours solar access between the hours of 9 am and 3 pm on 22 June.

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Performance criteria The solar access objectives may be achieved where:	**Acceptable solutions** The acceptable solutions illustrate one way of meeting the associated performance criteria:
	A2.2 Landscaping is designed to ensure that when mature, required areas of private open space or established BBQ/pergola areas on adjoining allotments maintain solar access on 22 June in accordance with A2.2. A2.3 The solar impact of development shall be shown with the submission of shadow diagrams taken on 22 June (winter solstice).

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Element 4. Private Open Space and Landscaping

Objectives

- To provide private outdoor open space that is well-integrated with the development and is of sufficient area to meet the needs of occupants.
- To provide a pleasant, safe and attractive level of residential amenity.
- To ensure landscaping is appropriate in nature and scale for the site and the local environment.

Performance criteria The private open space and landscaping objectives may be achieved where:	**Acceptable solutions** The acceptable solutions illustrate one way of meeting the associated performance criteria:
Private open space P1 Private open space is of an area and dimension facilitating its intended use.	A1.1 Dwelling houses and dual occupancy developments shall have a Principal Private Open Space (PPOS) area, in addition to the general Private Open Space (POS). A1.2 The PPOS area has a minimum area per dwelling of 30 m^2 and a minimum dimension of 5 metres. This area can include covered (not enclosed) outdoor entertainment areas.
P2 Private open space is easily accessible by the occupants of the development and provides an acceptable level of privacy.	A2.1 All Principal Private Open Space (PPOS) is directly accessible from the main living area. A2.2 All private open space is located behind the front building line and is screened to provide for the privacy of occupants and the occupants of adjoining properties.
P3 Landscaping is located to not impact infrastructure, development on the site or development adjoining the site.	A3.1 Species are selected and located taking into consideration the size of the root zone of the tree at maturity and the likelihood of potential for the tree to shed/drop material. A3.2 Landscape species are selected and located to ensure the amenity of adjoining and adjacent properties is not impacted.

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Performance criteria The private open space and landscaping objectives may be achieved where:	**Acceptable solutions** The acceptable solutions illustrate one way of meeting the associated performance criteria:
	This shall ensure that inappropriate vegetation is not provided that reduces the level of solar access enjoyed by adjoining and adjacent properties and is likely to provide any safety impacts to residents.
P4 Landscaping activities are undertaken in an environmentally sustainable manner which limits the time and costs associated with maintenance.	A4.1 Existing native trees are retained where possible. A4.2 Species selected are suitable for the local climate. A4.3 Species selected require a minimal amount of watering (Waterwise Garden). A4.4 Landscaping does not impact ground-water levels by over watering resulting in ground-water level increases or the pollution of waters. A4.5 Landscaping is provided with a timed watering system and moisture meter to determine if watering is required. A4.6 Sensors are used to control watering systems (see also Element 9).

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Element 5. Vehicular access and car parking

Objectives

- To provide adequate and convenient parking for residents, visitors and service vehicles.
- To ensure street and access ways provide safe and convenient vehicle access to dwellings and can be efficiently managed.
- To avoid parking and traffic difficulties in the development and the neighbourhood.

Performance criteria The vehicular access and car parking objectives may be achieved where:	Acceptable solutions The acceptable solutions illustrate one way of meeting the associated performance criteria:
Parking provision P1 Car parking is provided according to projected needs, the location of the land and the characteristics of the immediate locality.	A1.1 Dwelling houses and dual occupancy development provides the following vehicle parking: One bedroom dwelling – one car parking space per dwelling, situated behind the front building setback. Dwelling with two or more bedrooms – two car parking spaces per dwelling. At least one of the required spaces shall be situated behind the front building setback.
Design P2 Car parking facilities are designed and located to: Conveniently and safely serve users including pedestrians, cyclists and vehicles. Enable efficient use of car spaces and access ways including adequate manoeuvrability for vehicles between the street and the lot. Conform to the adopted street network hierarchy and objectives of the hierarchy and along with any related local traffic management plans. Be cost effective. Protect the streetscape.	A2.1 The dimensions of car spaces and access comply with AS2890.1. A2.2 Access ways and driveways are designed to enable vehicles to enter the designated parking space in a single turning movement and leave the space in no more than two turning movements.

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Performance criteria The vehicular access and car parking objectives may be achieved where:	Acceptable solutions The acceptable solutions illustrate one way of meeting the associated performance criteria:
Emergency vehicle access P3 Standing and turning areas for service, emergency or delivery vehicles are provided where access to any dwelling from a public street is remote or difficult.	A3.1 Access ways are designed to cater for an 'AUSTROADS 8.8 metre length Design Service Vehicle'.

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Element 6. Visual and Acoustic Privacy

Objectives

- To limit overlooking of private open space and views into neighbouring development.
- To substantially contain noise within each dwelling and to limit noise from communal areas or shared facilities affecting nearby dwellings.
- To protect internal living and sleeping areas from inappropriate levels of external noise.

Performance criteria The visual acoustic and privacy objectives may be achieved where:	**Acceptable solutions** The acceptable solutions illustrate one way of meeting the associated performance criteria:
Visual privacy P1 Private open space and living rooms of adjacent residential accommodation are protected from direct overlooking by an appropriate layout, screening device and distance. Note: No screening is required if: - Bathrooms, toilets, laundries, storage rooms or other non-habitable rooms have translucent glazing or sill heights of at least 1.5 m. - Habitable rooms having sill heights of 1.5 m or greater above floor level or translucent glazing to any window less than 1.5 m above floor level. - Habitable rooms facing a property boundary have a visual barrier of at least 1.5 m high (fences and barriers other than landscaping are not to be any higher than 1.8 m) and the floor level of the room is less than 0.6 m above the level of the ground at the boundary.	A1.1 Windows of habitable rooms with an outlook to habitable room windows in adjacent development within 10 metres: - Are offset a minimum distance of 1 metres from the edge of the opposite window in the proposed development; - Have a sill height of 1.5 metres above floor level; - Have a fixed obscure glazing in any window pane below 1.5 metres above floor level; or - Have screens which obscure the view from habitable room windows, balconies, stairs, landings, terraces and decks or other private, communal or public areas within a development into private open space and/or habitable rooms of existing residential accommodation. A1.2 Screens are solid, translucent or perforated panels or trellis which: - Have a minimum of 25% openings; - Are permanent and fixed; - Are of durable materials such as galvanised steel, iodised aluminium or treated timber;

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Performance criteria The visual acoustic and privacy objectives may be achieved where:	Acceptable solutions The acceptable solutions illustrate one way of meeting the associated performance criteria:
	- Are painted or coloured to blend in with the surrounding environment. A1.3 Windows and balconies of residential accommodation shall be designed to prevent overlooking of more than 50% of the private open space of any adjoining residential accommodation.
Acoustic Privacy P2 The transmission of noise to and the impact upon habitable rooms within the proposed development and adjoining and adjacent development is minimised.	A2.1 Living rooms or garages of residential development does not adjoin or abut bedrooms of adjacent residential development. A2.2 The plumbing of residential development and is separate and contained sufficiently to prevent transmission of noise. A2.3 Electrical, mechanical or hydraulic equipment or plant generating a noise level no greater than 5dBA above ambient L90 sound level at the boundary of the property. A2.4 Dividing walls and floors between residential uses are constructed in order to comply with the requirements of P art F5 of the BCA (Class 2 and 3 buildings only). A2.5 Residential development is constructed to ensure habitable rooms are not exposed to noise levels in excess of the standards contained in the relevant Australian Standard(s) including AS 3671 – Road Traffic.

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	A2.6 Residential development adjacent to the Newell Highway are to be constructed in accordance with the recommendations of a detailed Acoustic Study prepared by a suitably qualified acoustic consultant.

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