

COWRA COUNCIL 116 KENDAL STREET COWRA NSW 2794







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general

PART D.1

This Part provides introductory information for proponents of new subdivision development within the Cowra Shire Local Government Area.

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D.1.1. Types of Subdivision

There are three main forms of subdivision and related land title in NSW. The form of title used will be dependent on the nature of the subdivision and final form of development.

Torrens Title subdivision is the traditional or "single lot" form of subdivision, and is the most common form of subdivision in the Cowra Shire Local Government Area. The Torrens title system is based on a plan of survey, or a plan compiled from survey, which defines the boundaries of a parcel of land at the date upon which it was registered. The majority of urban and rural areas in the Cowra Shire are Torrens Title.

Strata subdivision is defined as 'subdivision' in the Environmental Planning and Assessment Act 1979. Strata subdivision can subdivide buildings and land into separate lots capable of individual ownership, with additional areas of land designated as common property. Those owning lots within the strata scheme have a proportional entitlement to use the common property and also a proportional responsibility for its maintenance. This form of subdivision is most common with medium density forms of residential development aswell as commercial shops.

Community title is a relatively new form of title created under the Community Land Development Act 1989 and the Community Land Management Act 1989. Community title provides individual ownership of lots (with buildings and structures erected on the lots as in conventional subdivision) and a share in the association property. Association property is a lot in the scheme on which community facilities may be erected, including roads and driveways, swimming pools, common open space and the like. Community title can be particularly useful where individually owned lots are required, but where common property and / or facilities are desired or required.

D.1.2. Developer Contributions

Subdivision proposals may create a need for public services and facilities, such as open space, community facilities, utilities and traffic management, for example. Needs will vary depending on the scale of the proposal, the characteristics of the area, the relevant population and standard and capacity of existing services.

Section 7.11 of the Environmental Planning and Assessment Act 1979 is the principle legislation that enables Council to levy contributions for amenities and services. Contributions are imposed by way of a condition of consent and can be satisfied by:

- a. Dedication of land;
- b. A monetary contribution;
- c. A material public benefit; or
- d. A combination of the above.

As an alternative to the payment of a Section 7.11 or a Section 7.12 contribution, the applicant may offer to enter into a Voluntary Planning Agreement with Council. Acceptance of an offer is at the sole discretion of Council and where Council decides not to accept the offer, payment of the Section 7.11 or 7.12 contributions will be required.

In the same way that Section 94 of the Environmental Planning and Assessment Act 1979 enables Council to levy contributions for amenities and services, Section 64 of the Local Government Act 1993 enables Council to levy contributions towards water and sewerage utilities. By adopting a Developer Servicing Plan (DSP) Council is able to levy contributions where the anticipated development will or is likely to increase the demand for water or sewer supply services. Projected population and development growth will place additional demand on the water and sewer supply systems. Generally, additional capacity is required in the water or sewer supply systems to accommodate the increased demands. The principle purpose of the DSP is to identify the demand for capacity in the supply infrastructure as a result of development and to provide for that capacity through development contributions.

Subdivision proponents are encouraged to contact Council staff to determine requirements for the particular proposal.

D.1.3. Bonding of Works

Council will require the completion of all construction works associated with a subdivision development, or stage thereof, prior to the issue of the Subdivision Certificate.

As a general rule, Council will not accept the payment of bonds as security for construction works to allow the issue of the Subdivision Certificate. Exceptions to this rule may be made at the sole discretion of Council.

D.1.4. Adoption of Engineering Standards

Design and construction plans and documentation required by this plan must comply with the relevant provisions of Cowra Shire Council Engineering Standards that relate to that aspect of work, whether specifically mentioned within a particular Section of this DCP or otherwise.

Design documentation must be certified by an appropriately qualified person as being in accordance with the relevant provisions of Cowra Shire Council Engineering Standards.

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greenfield residential subdivision

PART D.2

This Part provides the standards and controls for greenfield residential subdivision development in the Cowra Shire Local Government Area.

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D.2.1. Application of this part

Part D.2 applies to Development Applications for greenfield subdivisions on land that is located within the R1 General Residential zone under Cowra Local Environmental Plan 2012.

For the purposes of this plan, a greenfield subdivision means a subdivision where the ultimate lot yield (all stages) will be more than 25 lots, and where the urban pattern (street and open space network, neighbourhood structure) is not determined by existing development and street / neighbourhood development pattern.

D.2.2. Objectives

- To provide for diversity in housing form, density and choice.
- b. To ensure all essential services are provided to new subdivision allotments.
- c. To maximise residential amenity by ensuring that roads, public transport, community facilities, open space facilities and pedestrian and cycle networks are integrated.
- d. To minimise disturbance to the natural environment.
- e. To minimise damage from natural hazards.
- f. To ensure lots are environmentally sustainable.
- g. To provide lot sizes that meet community and economic needs, while ensuring that environmental and social values are safeguarded.
- h. To maintain or improve the amenity of adjoining properties.
- i. To maximise opportunities for energy efficiency and solar access through subdivision design.

D.2.3. Guiding Principles

The following guiding principles are to be taken into consideration as part of the preparation of a design for a greenfield subdivision to which Part D.2 applies:

- a. Neighbourhood sizes and shapes should be defined by an acceptable walking distance.
- Any neighbourhood centre should be located in a central position at the intersection of important streets that are within a walkable distance to the majority of the neighbourhood it is intended to serve.
- c. Areas of high activity (e.g. neighbourhood centres, open space areas) should be co-located to create opportunities for multiple use of facilities such as car parks.
- d. Medium density housing lots should be planned for in locations which are closer to shops, areas of open space and community facilities.
- e. The locations of active and passive open space areas should be planned to add value to adjacent properties and maximise opportunities for casual and passive surveilance from surrounding land-use.
- f. Street networks should be designed so that local traffic movements are directed onto local streets rather than arterial roads. Travel routes to connector and arterial street networks should be direct.
- g. The subdivision layout should provide a choice of clear and multiple road linkages to adjoining and future urban areas, with a particular focus on linking existing and proposed community facilities, services and areas of open space.
- h. The subdivision layout should maximise opportunities for safe and direct pedestrian and cycle movements that link to shops, areas of open space and community facilities, including those in adjoining neighbourhoods.
- i. The subdivision layout should avoid the creation of rear lanes or narrow linear pathways in between dwellings, except where this is considered necessary around the neighbourhood centres to enable rear parking and or service vehicle access.

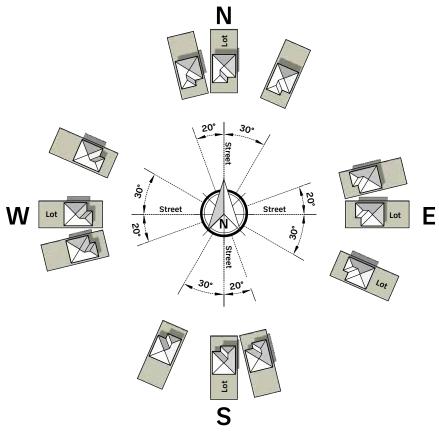
- j. The subdivision design should avoid the placement of innappropriate land-uses in areas identified as having special qualities, including areas of environmental sensitivity and heritage significance, and areas affected by natural hazards such as flooding and bushfire.
- k. The subdivision layout should integrate public open space areas with major drainage networks and water quality facilities where these are compatible.
- Whilst public transport options are limited in Cowra, new residential subdivisions should consider the potential need for residents to access local public transport options.

Examples of appropriate and innappropriate greenfield residential subdivision designs have been included on the following pages.

D.2.4. Lot Size, Layout and Dimensions

- a. Allotments should be of sufficient size and shape to enable efficient siting of a dwelling and provision for outbuildings, acceptable private outdoor space, vehicle access and parking.
- b. Higher densities, where provided, should be located in areas closer to shops, parks, community facilities and public transport routes.
- c. A mix of residential frontage widths and lot sizes should be provided where appropriate.
- d. Allotments should be orientated and configured to maximise opportunities for solar access and solar power generation. The diagram below shows optimum lot orientation for solar access to future dwellings.

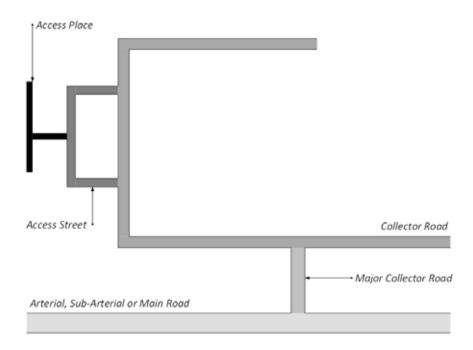
- e. Larger allotments should be provided in response to special environmental conditions such as flora and fauna protection, flooding, riparian corridors.
- f. Larger allotments should be provided on steeper land to reduce the visual effects associated excessive cut and fill on small sites.
- g. Corner allotments should be designed to enable the construction of a dwelling that can comply with the prevailing setback requirements along both street frontages.
- h. The subdivision design should avoid the creation of battle-axe or highly irregular shaped allotments.



D.2.5. Movement Network

- a. The street network should generally conform to the road hierarchy, reinforce the function of the street. The road hierarchy is shown in the diagram at the bottom of this page.
- b. The street network should facilitate walking, cycling, use of public transport for access to daily activities and enable relatively direct local vehicle trips within and between neighbourhoods and to local activity points.
- The choice of direction and possible routes should be maximised, with streets and footpaths substantially capable of surveillance by residents.
- d. Road networks (street length, intersection type, stagger and spacing) should be designed to control traffic speeds to appropriate limits.
- e. The street network should enable developments to front all streets, urban parks and natural areas.

- f. The street network should enable connections to be made to adjacent future urban areas. The location of these connections should consider the future overall network requirements of the district.
- g. Pedestrian and cycle networks should provide suitable connections between residential areas, activity centres and open space systems.
- The location and types of access to a classified road should be negotiated between Council and the relevant roads authority.
- The road network should contribute to the network of pubic open space to move people and goods safely and efficiently and connect places and people. Streets/roads should be designed to improve road safety for users.
- j. The road network should be designed so that they respond positively to existing and new infrastructure and do not negatively effect existing green spaces, waterways, stormwater systems and vegetation.



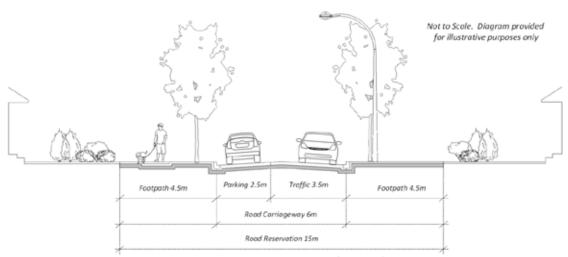
D.2.6. Street Design

The following controls apply to greenfield residential subdivision:

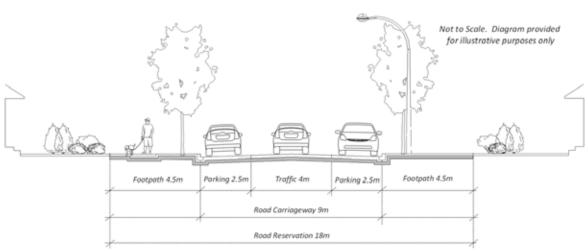
- a. The street network should be designed in accordance with table shown below and constructed in accordance with Cowra Shire Council Engineering Standards.
- b. The street design should consider the whole street, including footpaths, from property line to property line and the interface with the adjacent use.
- c. The street design should improve road safety for all users, including drivers, pedestrians, and cyclists.
- d. The street design should accommodate all necessary utility services and drainage systems.
- e. The horizontal and vertical alignments and cross fall of the street design should reflect the physical land characteristics and satisfy safety and speed criteria.

Road type	Road reserve	Footpath	Traffic Lanes	Parking Lane	Median
Arterial / Sub Arterial	30m	2 x 4.5m	4 x 3.7m	2 x 3.1m	N/A
Collector	22m	2 x 4.5m	2 x 3.5m	2 x 3.0m	N/A
Access Street	20m	2 x 4.5m	2 x 3.0m	2 x 2.5m	N/A
Access Place (>15 lots)	18m	2 x 4.5m	1 x 4.0m	2 x 2.5m	N/A
Access Place (<15lots)	15m	2 x 4.5m	1 x 3.5m	1 x 2.5	N/A

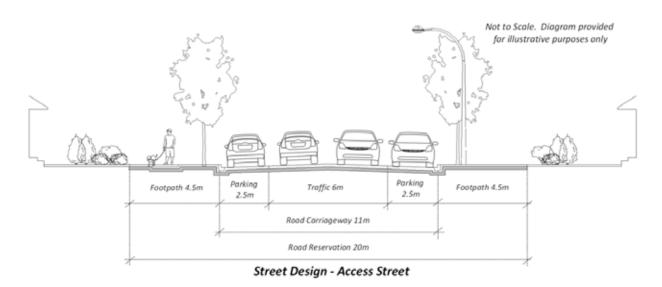
The street design information in the above table has been illustrated in the diagrams on Pages 14 and 15.



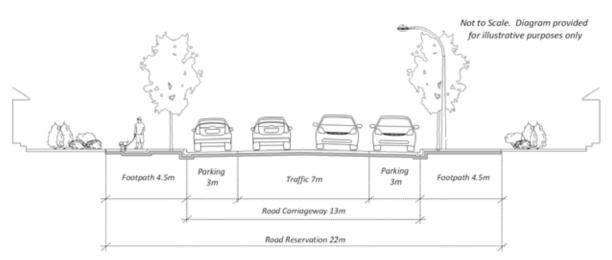
Street Design - Access Place (< 15 lots)



Street Design - Access Place (> 15 lots)

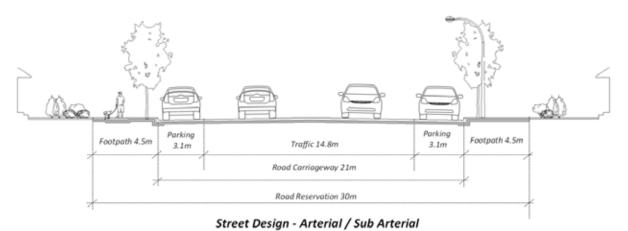


14



Street Design - Collector

Not to Scale. Diagram provided for illustrative purposes only



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D.2.7. Access Provision

- a. The subdivision should provide pedestrian and cycle facilities that are consistent with the Cowra Shire Council Pedestrian & Cycling Plan 2014, Cowra Shire Council Engineering Standards, and all relevant Australian Standards. The design and siting of pedestrian and cyclist facilities should also have regard to the following:
 - The need to link residential neighbourhoods, open space networks and activity centres, including points of attraction beyond the development.
 - The desirability of designing on the basis of the most direct route available, within safety and design guidelines.
 - iii. The need to respect environmental features including the preservation of trees.
 - iv. The opportunities presented by the location of collector and lower order roads.
 - The need to include supporting facilities such as bicycle parking, parking rails, access ramps, signage, seating, drinking water fountains etc.
 - The need to design and develop neighbourhoods which promote walking and cycling to daily activities.
 - vii. The need to minimise risk with public assets and infrastructure.
 - viii. The need to accommodate trees and other significant features of the landscape.
 - The need for casual surveilance of pedestrian and cycle networks from adjoining land-uses.
- Safe and convenient vehicle access with adequate sight distance in both directions should be provided to each allotment in accordance with Cowra Shire Council Engineering Standards.

- c. Vehicle access to proposed allotments should be gained onto the Council's public local road network, and not directly onto a classified road or highway.
- d. Existing access abutting the subdivision, including roads, driveways and concrete footpaths, should be upgraded / replaced where they are assessed to be in poor condition.
- e. Access required to be constructured and / or upgraded to service the subdivision must be in accordance with Cowra Shire Council Engineering Standards, with all costs associated with the work borne by the developer.

D.2.8. Utility Provision

- a. The design and installation of sewerage, water and stormwater should be in accordance with Cowra Shire Council Engineering Standards and relevant Australian Standards.
- b. The design and installation of electricity, street lighting, telephone and gas services should be in accordance with the requirements of the relevant servicing authorities.
- c. Electricity and telecommunications infrastructure should be provided as underground services.
- d. Compatible public utility services should be coordinated in common trenching to minimise construction costs for underground services and reduce restrictions on landscaping within road reservations.
- e. All new residential allotments (including Torrens Title, Strata Title and Community Title) should be provided with a separate and distinct connection to the Council's reticulated water and sewerage supply system in accordance with the relevant Cowra Shire Council Developer Servicing Plan.
- f. Where the connection of reticulated water and sewer infrastructure is not immediately available to the subdivision, or requires upgrading, the developer should make all necessary arrangements for the extension of these services to service each allotment in the subdivision, with all costs associated with the extension of services borne by the developer.

D.2.9. Stormwater, Drainage and Waterways

- a. Post-development runoff rates should be equal to or less than pre-development runoff rates for the full range of design storm events. Drainage from the proposed lots should not significantly alter predevelopment stormwater patters and flow regime.
- b. Stormwater drainage systems should be designed using the major and minor event philosophy, where the major event is the 100 year Average Recurrence Internval (ARI) design storm and the minor event is the 5 year ARI design storm.
- The adopted method of stormwater control should not result in unacceptable environmental damage within existing water courses and receiving waters.
- d. Stormwater from the proposed allotments in the subdivision should discharge to the street gutter or inter-allotment drainage system.
- e. Easements to drain stormwater should provided over all pipelines, inter-allotment drainage, channels and overland flow paths (except natural water courses).
- f. Easements for drainage over downstream properties should be secured for any proposed allotment that does not discharge stormwater flows directly to the street or inter-allotment drainage system.
- g. Water Sensitive Urban Design principles should be designed and implemented throughout the development to promote sustainable and integrated land and water resource management. Best practice stormwater, water conservation and environmental protection measures should be incorporated into the subdivision design.
- h. Subdivisions of land adjacent to or within the catchment of waterways, water bodies and riparian vegetation should be designed to ensure:
 - i. The preservation of fish and aquatic habitat.
 - ii. Barriers to fish passage are not created.

- iii. The development does not pollute or adversely effect quality or quantity of flows of water.
- iv. A riparian buffer of 40 metres should be provided between any waterways, water bodies of riparian vegetation and proposed residential allotments.
- Where the stormwater drainage system requires upgrading, the developer should make all necessary arrangements for the extension of these services to service each allotment in the subdivision, with all costs associated with the extension of services borne by the developer.

D.2.10. Public Open Space

- Quality public open space should be provided and distributed in convenient locations that meets the needs of the neighbourhood.
- b. Public open space areas should be integrated with major drainage networks and water quality facilities, where these are compatible.
- c. Public open space networks should be linked with community facilities and recreational precincts.
- d. Public open space should be provided in a manner that can be economically maintained.
- e. Public open space should be designed having regard to the following:
 - The need to accommodate any natural or cultural features of the land.
 - ii. The need to integrate open space networks with pedestrian and cycle links.
 - iii. The need to maintain public open space in an economically efficient manner.
 - iv. The need for surveillance of reserves and public open spaces.
 - The need for provide usable public open space in safe locations that do not require the crossing of a major roads.
 - vi. The need to provide activity opportunities for a range of age groups.
- f. A sufficient amount public open space should be dedicated to Council, calculated on the basis of 2.83 hectares per 1000 head of estimated population, calculated at a rate of 4 persons per residential allotment. The calculation formula is as follows:
- g. Area of open space required = 2.83/1000 x (4 x No. of lots) x 10,000m²

- h. At least 90% of dwellings should be located within a 400 metre straight line distance from an existing or proposed public open space area.
- The design and location of public open space should be consistent with CPTED principles contained in Part P of this DCP.

D.2.11. Naming of new roads

- a. Where a subdivision proposes the opening of a new public road, the developer should provide Council with suggestions for the naming of the new road that are consistent with guidelines contained in Council Policy 2.17 – Naming and Renaming of Bridges, Roads and Streets.
- completion of the road naming process, including gazettal of the new road names in the NSW Government Gazette, is the responsibility of the relevant roads authority.

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infill residential subdivision

PART D.3

This Part provides the standards and controls for infill residential subdivision development in the Cowra Shire Local Government Area.

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D.3.1. Application of this part

Part D.3 applies to Development Applications for infill subdivision development on land that is located within the R1 General Residential zone under Cowra Local Environmental Plan 2012.

Infill subdivisions are generally more constrained by an existing urban structure that may make it difficult to comply with some of the controls contained in Section D.2.

D.3.2. Objectives

The objectives for infill residential subdivision are:

- a. To facilitate greater diversity in housing choice.
- b. To provide for a range of different housing opportunities that meet community and economic needs, while ensuring that environmental and social values are safeguarded.
- c. To ensure all essential services are provided to new subdivision allotments.
- d. To encourage residential subdivision in areas that are accessible to and can be easily integrated with road and transport networks, community facilities, open space networks and pedestrian and cycle networks.
- e. To minimise disturbance to the natural environment and to minimise damage from natural hazards.
- f. To maintain or improve the amenity of adjoining properties.
- g. To maximise opportunities for energy efficiency and solar access through subdivision design.

D.3.3. Lot size, layout and dimensions

Cowra Local Environmental Plan 2012 (LEP) sets minimum lot size controls for the subdivision of residential zoned land in the Cowra Shire. Applicants are advised to consult the Minimum Lot Size Map Series (LSZ) in the LEP to determine the minimum lot size that will apply to a specific subdivision proposal. Additional minimum lot size controls are also contained in Part 4 of the LEP.

For ease of reference, the minimum lot size (MLS) in Cowra Local Environmental Plan 2012 for R1 Residential zoned land is 700m2. Some R1 Residential zoned land that adjoins the Cowra CBD and in North Cowra has a MLS ofs 450m2.

- a. Allotments should have a minimum frontage and square width that is consistent with the dominant lot size and configuration along the street, or within the immediate vicinity of the development site.
- Allotments should be of sufficient size and shape to enable efficient siting of a dwelling and provision for outbuildings, acceptable private outdoor space, vehicle access and parking.
- c. Higher densities, where provided, should be located in areas closer to shops, parks, community facilities and public transport routes.
- d. Allotments should be orientated and configured, where possible, to maximise opportunities for solar access.
- e. Corner allotments should be designed to enable the construction of a dwelling that can comply with the prevailing setback requirements along both street frontages.
- f. Battle-axe shaped allotments should be avoided in the subdivision where possible, but where these are proposed and Council is satisfied that there is no other means of gaining access to the public road system, they should meet the following requirements:

- The total area of the allotment should not be less than 900sqm, exclusive of the access handle.
- Single access handles should have a minimum width of 4 metres and maximum length of 30 metres.
- Dual access handles should have a minimum combined width of 5 metres (with reciprocal right of carriageway) and maximum length of 30 metres.
- iv. Adequate provision should be made for the collection of garbage.
- v. Adequate provision should be made for the manoeuvring of vehicles.
- vi. The access handle should be sealed, paved or concreted for it's entire length.

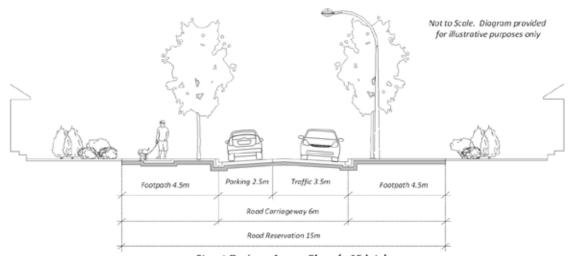
D.3.4. Street Design

The following controls apply to infill residential subdivision:

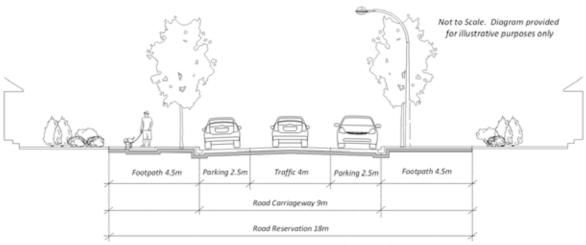
- The street network should be designed in accordance with table shown to the right and constructed in accordance with Cowra Shire Council Engineering Standards.
- b. The street design should facilitate the safe movement of road users.
- c. The street design should accommodate all necessary utility services and drainage systems.
- d. The horizontal and vertical alignments and cross fall of the street design should reflect the physical land characteristics and satisfy safety and speed criteria.
- e. The street design should incorporate traffic calming devices where necessary to achieve a satisfactory road and traffic environment.

Road type	Road reserve	Footpath	Traffic Lanes	Parking Lane	Median
Arterial / Sub Arterial	30m	2 x 4.5m	4 x 3.7m	2 x 3.1m	N/A
Collector	22m	2 x 4.5m	2 x 3.5m	2 x 3.0m	N/A
Access Street	20m	2 x 4.5m	2 x 3.0m	2 x 2.5m	N/A
Access Place (>15 lots)	18m	2 x 4.5m	1 x 4.0m	2 x 2.5m	N/A
Access Place (<15lots)	15m	2 x 4.5m	1 x 3.5m	1 x 2.5	N/A

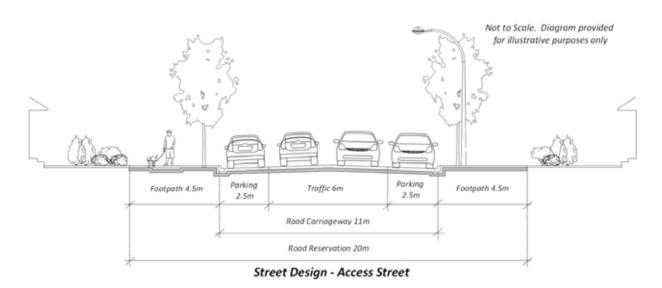
The street design information in the above table has been illustrated in the following diagrams:

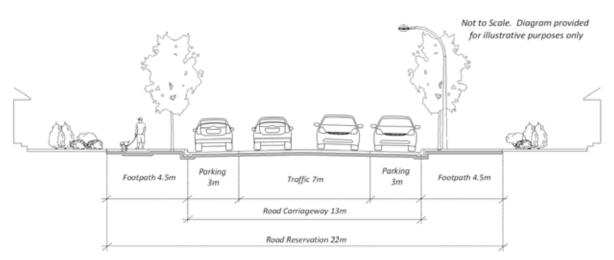


Street Design - Access Place (< 15 lots)



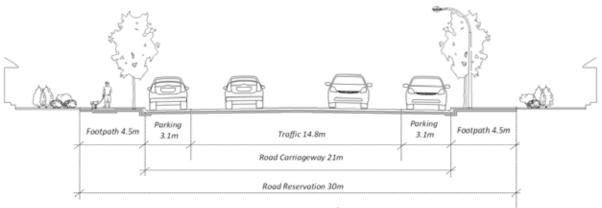
Street Design - Access Place (> 15 lots)





Street Design - Collector

Not to Scale. Diagram provided for illustrative purposes only



Street Design - Arterial / Sub Arterial

D.3.5. Access provision

The following controls apply to infill residential subdivision:

- a. Site frontages of new allotments should be sufficient to permit practical and legal access to the site.
- b. The subdivision design should provide a safe and convenient access to each proposed allotment in accordance with Cowra Shire Council Engineering Standards. Access locations must have adequate sight distance in both directions.
- vehicle access to proposed allotments should be gained onto the Council's public local road network, and not directly onto a classified road or highway.
- d. Where vehicle access is proposed onto a classified road or highway, and Council is satisfied that there are no other practical means of access available to the allotment(s), suitable arrangements should be made for the access to be constructed / upgraded in accordance with the requirements of relevant roads authority.
- e. The subdivision design should limit the number of vehicle accesses provided to the proposed allotments.
- f. Vehicle access points should be grouped at existing or limited access points whenever feasible to minimise the traffic impact and risk on additional access points to the public road system.
- g. Existing access abutting the subdivision, including roads, driveways and concrete footpaths, should be upgraded / replaced where they are assessed to be in poor condition.
- h. Access required to be constructured and / or upgraded to service the subdivision must be in accordance with Cowra Shire Council Engineering Standards, with all costs associated with the work borne by the developer.

D.3.6. Utility provision

- a. The design and installation of sewerage, water and stormwater should be in accordance with Cowra Shire Council Engineering Standards.
- b. The design and installation of electricity, street lighting, telephone and gas services should be in accordance with the requirements of the relevant servicing authorities.
- c. Electricity and telecommunications infrastructure should be provided as underground services.
- d. Compatible public utility services should be coordinated in common trenching to minimise construction costs for underground services and reduce restrictions on landscaping within road reservations.
- e. All new residential allotments (including Torrens Title, Strata Title and Community Title) should be provided with a separate and distinct connection to the Council's reticulated water and sewerage supply system.
- f. Where the connection of reticulated water and sewer infrastructure is not immediately available to the subdivision, or requires upgrading, the developer should make all necessary arrangements for the extension of these services to service each allotment in the subdivision, with all costs associated with the extension of services borne by the developer.

D.3.7. Stormwater, Drainage and Waterways

- a. Post-development runoff rates should be equal to or less than pre-development runoff rates for the full range of design storm events. Drainage from the proposed lots should not significantly alter predevelopment stormwater patters and flow regime.
- b. Stormwater drainage systems should be designed using the major and minor event philosophy, where the major event is the 100 year Average Recurrence Interval (ARI) design storm and the minor event is the 5 year ARI design storm.
- The adopted method of stormwater control should not result in unacceptable environmental damage within existing water courses and receiving waters.
- d. Stormwater from the proposed allotments in the subdivision should discharge to the street gutter or inter-allotment drainage system.
- e. Easements to drain stormwater should provided over all pipelines, inter-allotment drainage, channels and overland flow paths (except natural water courses).
- f. Easements for drainage over downstream properties should be secured for any proposed allotment that does not discharge stormwater flows directly to the street or inter-allotment drainage system.
- g. Water Sensitive Urban Design principles should be designed and implemented where applicable throughout the development to promote sustainable and integrated land and water resource management. Best practice stormwater, water conservation and environmental protection measures should be incorporated into the subdivision design.
- h. Subdivisions of land adjacent to or within the catchment of waterways, water bodies and riparian vegetation should be designed to ensure:
 - i. The preservation of fish and aquatic habitat.
 - ii. Barriers to fish passage are not created.

- iii. The development does not pollute or adversely effect quality or quantity of flows of water.
- iv. A riparian buffer of 40 metres should be provided between any waterways, water bodies of riparian vegetation and locations of proposed development.
- Where the stormwater drainage system requires upgrading, the developer should make all necessary arrangements for the extension of these services to service each allotment in the subdivision, with all costs associated with the extension of services borne by the developer.



large lot residential subdivision

PART D.4

This Part provides the standards and controls for large lot residential subdivision development in the Cowra Shire Local Government Area.

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D.4.1. Application of this part

Part D.4 applies to Development Applications for the subdivision of land that is located within the R5 Large Lot Residential zone under Cowra Local Environmental Plan 2012.

D.4.2. Objectives

- a. To facilitate greater diversity in housing choice.
- b. To provide for a range of different housing opportunities that meet community and economic needs, while ensuring that environmental and social values are safeguarded.
- c. To ensure rural lifestyle lots are located in appropriately zoned areas where infrastructure and service provision can be maximised.
- d. To ensure all available essential services are provided to new subdivision allotments.
- e. To minimise disturbance to the natural environment and to minimise damage from natural hazards.
- f. To protect and conserve land which has been identified as being environmentally sensitive.

D.4.3. Lot Size

Cowra Local Environmental Plan 2012 (LEP) sets minimum lot size controls for the subdivision of land in the R5 Large Lot Residential zone. Applicants are advised to consult the Minimum Lot Size Map Series (LSZ) in the LEP to determine the minimum lot size that will apply to a specific subdivision proposal. Additional minimum lot size controls are also contained in Part 4 of the Local Environmental Plan – Principal Development Standards.

For ease of reference, the minimum lot size (MLS) controls in the LEP for land in the various R5 Large Lot Residential zones have been summarised in the table to the right.

Note: Where the subdivision design incorporates the use of a "right of carriageway" or "battle-axe handle" into the lot design, the area of the "right of carriageway" or "battle-axe handle" will not be taken into account when determining the overall area of the allotment.

Location	Pre-requisite	Minimum Lot Size
East Cowra	No reticulated water	10 ha
	Reticulated water	2 ha
	Reticulated water / Environmentally Sensitive Land	5 ha
North & West Cowra	No reticulated sewer	2 ha
	Reticulated sewer	4,000 m2
South Cowra (Dawson Drive)	N/A	5 ha
Woodstock	N/A	2 ha
Noonbinna	N/A	2 ha
Wattamondara	N/A	5 ha
South Canowindra	Not Environmentally Sensitive Land	3 ha
	Environmentally Sensitive Land	5 ha

D.4.4. Lot Layout and Dimensions

- a. Proposed lots should be of sufficient area and shape to enable the efficient siting of a dwelling and ancillary outbuilding, without adverse impacts on adjoining land-use.
- Proposed lots should be of sufficient area and shape to enable the siting of a dwelling and ancillary outbuildings in accordance with the controls contained in Section 1.4 of Part G of this DCP – Large Lot Residential.
- c. The design of the subdivision should take into account existing drainage lines, waterways, dams and other significant environmental features.
- d. The design of the subdivision should take into account the potential for future subdivisions to take place, where this is permissible in accordance with Cowra Local Environmental Plan 2012.
- e. Allotment with areas larger than the minimum should be provided:
 - i. In the immediate vicinity of agricultural or intensive agriculture.
 - With increasing distance from the town of Cowra.
 - iii. Fronting arterial roads (unless alternative access is provided).
 - iv. Fronting railway lines.
 - Where site conditions require a larger area for farm dam catchments or for on-site waste disposal.
 - vi. To accommodate environmentally sensitive land that is not reserved under public ownership.

- f. The subdivision design should avoid the provision of access to a public road via a "right of carriageway" or "battle-axe", unless it has been demonstrated that, due to unusual site conditions, the "right of carriageway" is the only means of achieving access to the land and the lot layout and design is consistent with the remaining controls in this plan.
- g. Where a "right of carriageway" or "battle-axe' design is deemed acceptable in accordance with (f) above, the minimum width of the restriction to be placed on the title or the width of the access handle should be 9 metres with a constructed access driveway of not less than 3.5m wide, or 5.5m where the driveway services more than one property. The constructed access driveway should be sealed where it connects to a sealed public road.

D.4.5. Street Design

- a. The street network should be designed in accordance with table shown to the right and constructed in accordance with Cowra Shire Council Engineering Standards.
- b. The street design should facilitate the safe movement of road users.
- c. The street design should accommodate all necessary utility services and drainage systems.
- d. The horizontal and vertical alignments and cross fall of the street design should reflect the physical land characteristics and satisfy safety and speed criteria.
- e. The street design should incorporate traffic calming devices where necessary to achieve a satisfactory road and traffic environment.

Location	Road Reserve	Shoulder Width	Road Width
R5 zone – East Cowra	20m	1.2m	7m *
R5 zone – West Cowra	20m	1.2m	7m *
R5 zone - Woodstock	20m	1.2m	7m
R5 zone - Wattamondara	20m	1.2m	7m

^{*}Council will require all new roads to be sealed in accordance with Cowra Shire Council Engineering Standards

D.4.6. Access

- a. The subdivision design should provide a safe and convenient access to each proposed allotment in accordance with Cowra Shire Council Engineering Standards. Access locations must have adequate sight distance in both directions.
- b. Vehicle access to proposed allotments should be gained onto the Council's public local road network, and not directly onto a classified road or highway.
- c. Where vehicle access is proposed onto a classified road or highway, and Council is satisfied that there are no other practical means of access available to the allotment(s), suitable arrangements should be made for the access to be constructed / upgraded in accordance with the requirements of relevant roads authority.
- d. The subdivision design should limit the number of vehicle accesses provided to the proposed allotments.
- e. Vehicle access points should be grouped at existing or limited access points whenever feasible to minimise the traffic impact and risk on additional access points to the public road system.
- f. Existing access roads abutting the subdivision should be upgraded where they are assessed to be in poor condition.
- g. Vehicular access roads that are required to be constructured and / or upgraded to service the subdivision must be in accordance with Cowra Shire Council Engineering Standards, with all costs associated with the work borne by the developer.

D.4.7. Water Supply

- Suitable arrangements should be made for the connection of each new subdivision allotment to a reticulated water supply.
 - Note 1: Section 64 Headworks Contributions may apply in accordance with the Cowra Shire Council Developer Servicing Plan (DSP).
 - Note 2: In relation to the R5 Zone at Woodstock, Headworks Contributions may apply in accordance with the Cowra Shire Council and also Central Tablelands Water Developer Servicing Plan (DSP).
 - Note 3: "Reticulated water supply" means an integrated distribution network of water mains and facilities with minimum 100 millimetre diameter water mains catering for development in the locality but does not include mains which have been constructed to provide the supply of water from a bulk source to a reticulated area or private service pipeline from a main or bulk source main.
 - Note 4: Applicants are responsible for meeting all costs associated with mains extensions, upgrades and water connections.
- Despite control (a), reticulated water supply is being progressively augmented to land in the R5 Large Lot Residential zone east of the Cowra Township. In this zone, the following controls apply:
 - All new rural residential allotments must be connected to the reticulated water supply scheme where a supply is immediately available to be connected (no extension required).

- ii. All other land within the R5 Large Lot Residential zone may be connected to the reticulated water supply scheme subject to the extension of any mains.
- iii. Applicants are to meet all costs associated with individual connections, mains extensions and any applicable Headworks Contributions in accordance with the Cowra Shire Council Developer Servicing Plan (DSP) for Water.
- iv. All construction works associated with new water connections / mains extensions will be required to be carried out in accordance with Cowra Shire Council Engineering Standards.
- c. Where the subdivision is not able to be connected to a reticulated water supply, each lot in the proposed subdivision should have the ability to catch enough surface water in a farm storage dam for stock and domestic purposes, with catchment calculations based on the guidelines of the NSW Office of Water.

D.4.8. Effluent Management

The following controls apply to large lot residential subdivision:

a. A geotechnical report, prepared by a suitably qualified engineer, should be submitted with the Development Application to Council, demonstrating that the proposed lots are of sufficient land area to accommodate a dwelling and an effluent disposal system (and associated disposal area) that complies with the necessary buffer requirements in the most current version of the Environmental Health Protection Guidelines On-site Sewage Management for Single Households (see table below).

Location	Road Reserve
All land application systems	100 metres to permanent surface waters (e.g. river, streams, lakes). 250 metres to domestic groundwater well. 40 metres to other waters (e.g. farm dams, intermittent waterways).
Surface spray irrigation	6 metres if area up-gradient of driveways and property boundaries. 3 metres if area down-gradient of driveways and property boundaries 15 metres to dwellings. 3 metres to paths and walkways. 6 metres to swimming pools.
Surface drip and trickle irrigation	6 metres if area up-gradient and 3 metres if area down-gradient of swimming pools, property boundaries, driveways and buildings.
Subsurface irrigation	6 metres if area up-gradient and 3 metres if area down-gradient of swimming pools, property boundaries, driveways and buildings.
Absorption system	12 metres if area up-gradient and 6 metres if area down-gradient of property boundary. 6 metres if area up-gradient and 3 metres if area down-gradient of swimming pools, driveways and buildings.

Note – the values are the recommended minimum, based on ideal site and soil conditions. If these conditions are less than ideal, the minimum buffer distances should be increased.

D.4.9. Utilities

The following controls apply to large lot residential subdivision:

- a. The design and installation of sewerage, water and stormwater should be in accordance with Cowra Shire Council Engineering Standards.
- b. The design and installation of electricity, street lighting, telephone and gas services should be in accordance with the requirements of the relevant servicing authority..
- Suitable arrangements should be made for the provision of electricity and telephone services.
 Electricity and telecommunications infrastructure should be provided as underground services.
- d. Compatible public utility services should be coordinated in common trenching to minimise construction costs for underground services.

D.4.10. Naming of new roads

The following controls apply to large lot residential subdivision:

 a. Where a subdivision proposes the opening of a new public road, the developer should provide Council with suggestions for the naming of the new road that are consistent with guidelines contained in Council Policy 2.17 – Naming and Renaming of Bridges, Roads and Streets.

Completion of the road naming process, including gazettal of the new road names in the NSW Government Gazette, is the responsibility of the relevant roads authority.

D.4.11. Fencing Requirements

The following controls apply to large lot residential subdivision:

- a. Unfenced boundaries are to be fenced to a minimum standard in accordance with the requirements of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 relating to the fencing of land in the R5 Large Lot Residential zone.
- b. Any boundary fencing that does not meet with the requirements of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 relating to the fencing of land in the R5 Large Lot Residential zone, must be detailed on the plans submitted to Council for approval with the Development Application.

Note: Council will require all fencing to be constructed prior to the issue of the Subdivision Certificate for the subdivision, or each stage thereof.



village subdivision

PART D.5

This Part provides the standards and controls for village subdivision development in the Cowra Shire Local Government Area.

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D.5.1. Application of this part

Part D.5 applies to Development Applications for subdivision development on land that is located within the RU5 Village zone under Cowra Local Environmental Plan 2012.

D.5.2. Objectives

- a. Facilitate greater diversity in housing choice.
- b. Provide for a range of different housing opportunities that meet the needs of village and surrounding rural areas, whilst ensuring that environmental and social values are safeguarded.
- c. Ensure all essential services are provided to new subdivision allotments.
- d. Minimise disturbance to the natural environment and to minimise damage from natural hazards.
- e. Maintain or improve the amenity of adjoining properties.
- f. Maximise opportunities for energy efficiency and solar access through subdivision design.

D.5.3. Lot Size, Layout and Dimensions

Cowra Local Environmental Plan 2012 (LEP) sets minimum lot size controls for the subdivision of land in the RU5 Village zone. Applicants are advised to consult the Minimum Lot Size Map Series (LSZ) in the LEP to determine the minimum lot size that will apply to a specific subdivision proposal. Additional minimum lot size controls are also contained in Part 4 of the LEP.

For ease of reference, the minimum lot size (MLS) controls in the LEP for RU5 Village zoned land is 2000m2, except for the Village of Wyangala which has a MLS of 1000m2 where reticulated sewer can be provided to lots.

Village subdivisions should comply with the following controls:

- Allotments should be of sufficient size and shape to enable efficient on-site effluent management, design and siting of a dwelling and provision for outbuildings, acceptable private outdoor space, vehicle access and parking.
- Allotments should be orientated and configured, where possible, to maximise opportunities for solar access.
- c. Allotments should have a minimum frontage and square width that is consistent with the dominant lot size and configuration along the street, or within the immediate vicinity of the development site.
- d. Corner allotments should be designed to enable the construction of a dwelling that can comply with the prevailing setback requirements along both street frontages.
- e. Battle-axe shaped allotments should not be created in Village areas.

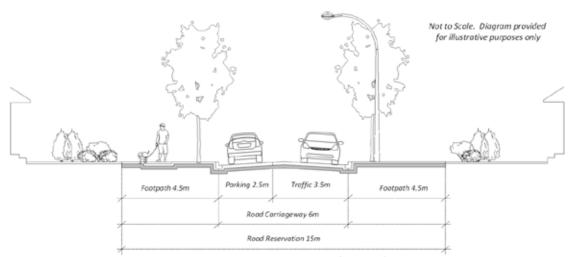
D.5.4. Street Design

The following controls apply to village subdivisions involving the creation of a new public road, or extension to an existing public road:

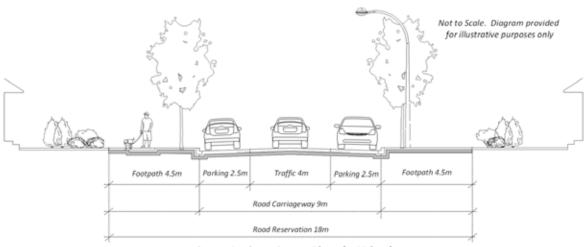
- a. The street network should be designed in accordance with table shown below and constructed in accordance with Cowra Shire Council Engineering Standards.
- b. The street design should facilitate the safe movement of road users.
- c. The street design should accommodate all necessary utility services and drainage systems.
- d. The horizontal and vertical alignments and cross fall of the street design should reflect the physical land characteristics and satisfy safety and speed criteria.
- e. The street design should incorporate traffic calming devices where necessary to achieve a satisfactory road and traffic environment. Traffic calming devices consist of physical design and other measures put in place to reduce vehicle speeds and improve safety for pedestrians and cyclists. These can include road narrowing, islands, chicances, roundabouts, service roads, cycleways or strategic tree plants.

Road type	Road reserve	Footpath	Traffic Lanes	Parking Lane	Median
Arterial / Sub Arterial	30m	2 x 4.5m	4 x 3.7m	2 x 3.1m	N/A
Collector	22m	2 x 4.5m	2 x 3.5m	2 x 3.0m	N/A
Access Street	20m	2 x 4.5m	2 x 3.0m	2 x 2.5m	N/A
Access Place (>15 lots)	18m	2 x 4.5m	1 x 4.0m	2 x 2.5m	N/A
Access Place (<15lots)	15m	2 x 4.5m	1 x 3.5m	1 x 2.5	N/A

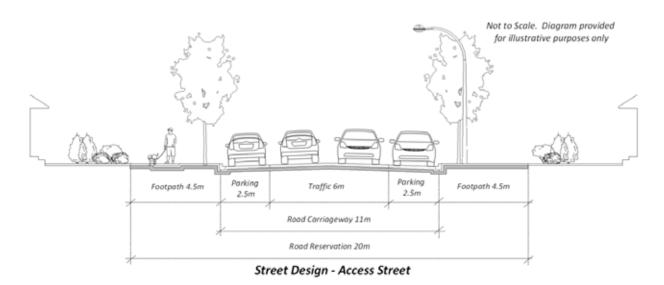
The street design information in the above table has been illustrated in the following diagrams:



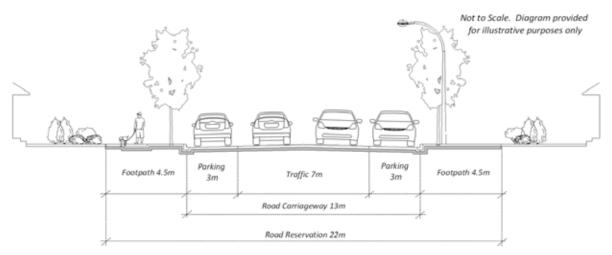
Street Design - Access Place (< 15 lots)



Street Design - Access Place (> 15 lots)

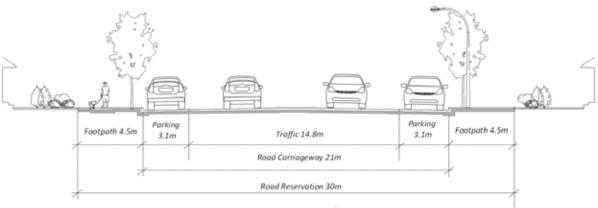


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Street Design - Collector

Not to Scale. Diagram provided for illustrative purposes only



Street Design - Arterial / Sub Arterial

D.5.5. Access provision

The following controls apply to village subdivision:

- a. Site frontages of new allotments should be sufficient to permit practical and legal access to the site.
- b. The subdivision design should provide a safe and convenient access to each proposed allotment in accordance with Cowra Shire Council Engineering Standards. Access locations must have adequate sight distance in both directions.
- Vehicle access to proposed allotments should be gained onto the Council's public local road network, and not directly onto a classified road or highway.
- d. Where vehicle access is proposed onto a classified road or highway, and Council is satisfied that there are no other practical means of access available to the allotment(s), suitable arrangements should be made for the access to be constructed / upgraded in accordance with the requirements of relevant roads authority.
- e. The subdivision design should limit the number of vehicle accesses provided to the proposed allotments.
- f. Vehicle access points should be grouped at existing or limited access points whenever feasible to minimise the traffic impact and risk on additional access points to the public road system.
- g. Existing access abutting the subdivision, including roads, driveways and concrete footpaths, should be upgraded / replaced where they are assessed to be in poor condition.
- h. Access required to be constructured and / or upgraded to service the subdivision must be in accordance with Cowra Shire Council Engineering Standards, with all costs associated with the work borne by the developer.

D.5.6. Effluent Management

The following controls apply to village subdivision:

a. A geotechnical report, prepared by a suitably qualified engineer, should be submitted with the Development Application to Council, demonstrating that the proposed lots are of sufficient land area to accommodate a dwelling and an effluent disposal system (and associated disposal area) that complies with the necessary buffer requirements in the most current version of the Environmental Health Protection Guidelines On-site Sewage Management for Single Households (see table below).

Location	Road Reserve
All land application systems	100 metres to permanent surface waters (e.g. river, streams, lakes). 250 metres to domestic groundwater well. 40 metres to other waters (e.g. farm dams, intermittent waterways).
Surface spray irrigation	6 metres if area up-gradient of driveways and property boundaries. 3 metres if area down-gradient of driveways and property boundaries 15 metres to dwellings. 3 metres to paths and walkways. 6 metres to swimming pools.
Surface drip and trickle irrigation	6 metres if area up-gradient and 3 metres if area down-gradient of swimming pools, property boundaries, driveways and buildings.
Subsurface irrigation	6 metres if area up-gradient and 3 metres if area down-gradient of swimming pools, property boundaries, driveways and buildings.
Absorption system	12 metres if area up-gradient and 6 metres if area down-gradient of property boundary. 6 metres if area up-gradient and 3 metres if area down-gradient of swimming pools, driveways and buildings.

Note – the values are the recommended minimum, based on ideal site and soil conditions. If these conditions are less than ideal, the minimum buffer distances should be increased.

D.5.7. Stormwater, Drainage and Waterways

The following controls apply to village subdivision:

- a. Post-development runoff rates should be equal to or less than pre-development runoff rates for the full range of design storm events. Drainage from the proposed lots should not significantly alter predevelopment stormwater patters and flow regime.
- b. Stormwater drainage systems should be designed using the major and minor event philosophy, where the major event is the 100 year Average Recurrence Internval (ARI) design storm and the minor event is the 5 year ARI design storm.
- c. The adopted method of stormwater control should not result in unacceptable environmental damage within existing water courses and receiving waters.
- d. Stormwater from the proposed allotments in the subdivision should discharge to the street gutter or inter-allotment drainage system.
- e. Easements to drain stormwater should provided over all pipelines, inter-allotment drainage, channels and overland flow paths (except natural water courses).
- f. Easements for drainage over downstream properties should be secured for any proposed allotment that does not discharge stormwater flows directly to the street or inter-allotment drainage system.
- g. Water Sensitive Urban Design principles should be designed and implemented where applicable throughout the development to promote sustainable and integrated land and water resource management. Best practice stormwater, water conservation and environmental protection measures should be incorporated into the subdivision design.
- h. Subdivisions of land adjacent to or within the catchment of waterways, water bodies and riparian vegetation should be designed to ensure:
 - i. The preservation of fish and aquatic habitat.
 - ii. Barriers to fish passage are not created.
 - iii. The development does not pollute or adversely effect quality or quantity of flows of water.

- iv. A riparian buffer of 40 metres should be provided between any waterways, water bodies of riparian vegetation and locations of proposed development.
- Where the stormwater drainage system requires upgrading, the developer should make all necessary arrangements for the extension of these services to service each allotment in the subdivision, with all costs associated with the extension of services borne by the developer.

D.5.8. Naming of new roads

Village subdivisions should comply with the following controls:

 a. Where a subdivision proposes the opening of a new public road, the developer should provide Council with suggestions for the naming of the new road that are consistent with guidelines contained in Council Policy 2.17 – Naming and Renaming of Bridges, Roads and Streets.

Completion of the road naming process, including gazettal of the new road names in the NSW Government Gazette, is the responsibility of the relevant roads authority.

D.5.9. Utility provision

The following controls apply to village subdivision:

- The design and installation of sewerage, water and stormwater should be in accordance with Cowra Shire Council Engineering Standards.
- b. The design and installation of electricity, street lighting, telephone and gas services should be in accordance with the requirements of the relevant servicing authorities.
- c. Electricity and telecommunications infrastructure should be provided as underground services.
- d. Compatible public utility services should be coordinated in common trenching to minimise construction costs for underground services and reduce restrictions on landscaping within road reservations.
- e. All new residential allotments (including Torrens Title, Strata Title and Community Title) should be provided with a separate and distinct connection to the Council's reticulated water supply system and also to a reticulated sewerage supply system (where this is available).
- f. Where the connection of reticulated water and sewer infrastructure is not immediately available to the subdivision, or requires upgrading, the developer should make all necessary arrangements for the extension of these services to service each allotment in the subdivision, with all costs associated with the extension of services borne by the developer.



rural subdivision

PART D.6

This Part provides the standards and controls for rural subdivision development in the Cowra Shire Local Government Area.

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D.6.1. Application of this part

Part D.6 applies to Development Applications for the subdivision of land that is located within the RU1 Primary Production or RU4 Primary Production Small Lots zones under Cowra Local Environmental Plan 2012.

D.6.2. Objectives

- a. Protect agricultural land from fragmentation for inappropriate purposes.
- b. Provide for housing opportunities in rural areas that support the agricultural use of the land.
- c. To protect and conserve land which has been identified as being environmentally sensitive.
- d. To minimise disturbance to the natural environment and to minimise damage from natural hazards.

D.6.3. Lot Size

Cowra Local Environmental Plan 2012 (LEP) sets minimum lot size controls for the subdivision of land in the RU1 Primary Production and RU4 Primary Production Small Lots zones. Applicants are advised to consult the Minimum Lot Size Map Series (LSZ) in the LEP to determine the minimum lot size that will apply to a specific subdivision proposal.

Additional minimum lot size controls are also contained in Part 4 of the Local Environmental Plan – Principal Development Standards.

For ease of reference, the minimum lot size (MLS) controls in Cowra Local Environmental Plan 2012 for land in the RU1 Primary Production and RU4 Primary Production Small Lots zones have been summarised in the table shown to the right.

Location	Pre-requisite	Minimum Lot Size
RU1 Primary Production	Agricultural purposes only	Any area
and Ru4 Primary Production Small Lots	Agricultural & (Future) Ancillary Dwelling	100ha
	Agricultural & Existing Dwelling	100ha

D.6.4. Road and access design

The following controls apply to rural subdivision:

- a. The subdivision design should provide a safe access to each proposed allotment, with adequate sight distance in both directions, in accordance with Cowra Shire Council Engineering Standards.
- b. Access to proposed allotments should be gained onto the Council's public local road network, and not directly onto a classified road or highway.
- c. Where access is proposed onto a classified road or highway, and Council is satisfied that there are no other practical means of access available to the allotment(s), suitable arrangements should be made for the access to be constructed / upgraded in accordance with the requirements of relevant roads authority.

- d. The subdivision design should limit the number of accesses provided to the proposed allotments.
- e. Access points should be grouped at existing or limited access points whenever feasible to minimise the traffic impact and risk on additional access points to the public road system.
- f. Access points should be grouped at existing or limited access points whenever feasible to minimise the traffic impact and risk on additional access points to the public road system.
- g. New rural roads should be designed in accordance with table shown below and constructed in accordance with Cowra Shire Council Engineering Standards.

Road Reserve	Road Shoulder	Width
20m	1.2m	5.5m
30m	1.2m	6.0m
30m	1.2m	6.5m
30m	1.8m	6.5m
30m	1.8m	7.0m
	20m 30m 30m 30m	20m 1.2m 30m 1.2m 30m 1.2m 30m 1.8m

D.6.5. Fencing Requirements

The following controls apply to rural subdivisions:

- a. Unfenced boundaries are to be fenced to a minimum standard in accordance with the requirements of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 relating to the fencing of land in the RU1 Primary Production Zone or RU4 Primary Production Small Lots Zone.
- b. Any boundary fencing that does not meet with the requirements of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 relating to the fencing of land in the RU1 or RU4 Zones, must be detailed on the plans submitted to Council for approval with the Development Application.

Note: Council will require all fencing to be constructed prior to the issue of the Subdivision Certificate for the subdivision, or each stage thereof.



industrial subdivision

PART D.7

This Part provides the standards and controls for industrial subdivision development in the Cowra Shire Local Government Area.

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D.7.1. Application of this part

Part D.7 applies to Development Applications for the subdivision of land that is located within the IN1 Industrial or IN2 Light Industrial zones under Cowra Local Environmental Plan 2012.

D.7.2. Objectives

- a. Encourage the development of well designed industrial areas serving the full range of general and light industrial needs throughout the Shire.
- b. Provide the safe and efficient movement of traffic to and from new industrial allotments.
- c. Provide for infrastructure and services in a cost effective and efficient manner, consistent with the operational needs of industrial users.
- d. Protect the amenity of adjacent land uses, where necessary, from the effects of industrial development.
- e. Ensure opportunities for the provision of landscaping to new industrial allotments.
- f. Ensure that stormwater is managed appropriately and does not adversely impact the downstream environment.

D.7.3. Minimum Lot Size Requirement

Council recognises that lot sizes for the different types of industrial subdivision will vary according to function and purposes. No minimum lot sizes are specified within Cowra Local Environmental Plan 2012 or this plan, as the land area required for a particular industrial activity or activities should reflect the most efficient and beneficial utilisation of the land involved.

D.7.4. Lot Design

The following controls apply to industrial subdivision:

- a. Allotments should be generally regular in shape and should be of sufficient size and shape to enable the siting of future industrial buildings and ancillary structures, acceptable vehicle access and on-site parking.
- b. The design of the subdivision should enable the allotments to be developed in a manner that is compatible with adjacent land-use.
- c. The design of the subdivision should be generally consistent with the overall pattern of subdivision in the locality. A variety of allotment sizes should be created, suitable to accommodate a wide range of industrial activities.
- d. The design of the subdivision should not include cul-de-sac and battle-axe shaped lots, which do not easily facilitate the movement of large and cumbersome vehicles.
- e. Allotment sizes should be sufficient to accommodate the industrial operations and buildings envisaged, allowing for possible future expansion and the proper and efficient functioning of the site, taking into account:
 - i. The need for the provision of safe ingress and egress for heavy vehicles
 - ii. The need for efficient vehicular movement within the new industrial lots (i.e. delivery vehicles, service vehicles and customers).
 - iii. The need to accommodation on-site car parking.
 - iv. The need to provide storage and bin areas.
 - v. The provision of landscaped areas.
 - vi. The provision of buffer areas between future industrial activities and adjacent or nearby sensitive land-uses.
 - vii. The need to accommodate building setback requirements.

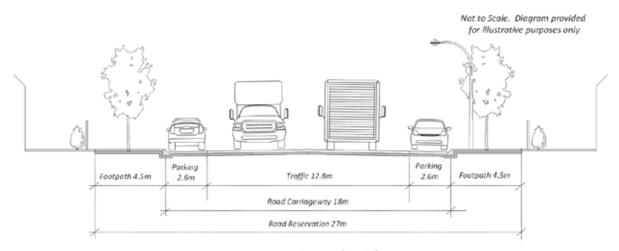
D.7.5. Street Design

The following controls apply to industrial subdivision involving the opening of new public roads:

- a. The street newtork should be designed in accordance with table shown to the right and constructed in accordance with Cowra Shire Council Engineering Standards.
- b. The street design should facilitate the safe movement of road users.
- c. The street design should accommodate all necessary utility services and drainage systems.

- d. The horizontal and vertical alignments and cross fall of the street design should reflect the physical land characteristics and satisfy safety and speed criteria.
- e. The street design should incorporate traffic calming devices where necessary to achieve a satisfactory road and traffic environment.
- f. Industrial subdivisions should be designed with a simply layout that provides a clear hierarchy of roads. Roads which may attract unrelated fast moving traffic from nearby congested routes should be avoided.

Road type	Road reserve	Footpath	Traffic Lanes	Parking Lane	Median
All new industrial roads	27m	2 x 4.5m	2 x 6.4m	2 x 2.6m	N/A



Street Design - Industrial

D.7.6. Access provision

The following controls apply to industrial subdivision:

- Site frontages of new allotments should be sufficient to permit practical and legal vehicular and pedestrian access to the site.
- b. The subdivision design should provide a sealed access, with adequate sight distance in both directions, to each proposed allotment in accordance with Cowra Shire Council Engineering Standards.
- Access to proposed allotments should be gained onto the Council's public local road network, and not directly onto a classified road or highway.
- d. Where access is proposed onto a classified road or highway, and Council is satisfied that there are no other practical means of access available to the allotment(s), suitable arrangements should be made for the access to be constructed / upgraded in accordance with the requirements of relevant roads authority.
- e. The subdivision design should minimise the amount of new access points onto the public road system by combing new entrances where possible.
- f. Access points should be grouped at existing or limited access points whenever feasible to minimise the traffic impact and risk on additional access points to the public road system.

D.7.7. Utility provision

The following controls apply to industrial subdivision:

- a. The design and installation of sewerage, water and stormwater should be in accordance with Cowra Shire Council Engineering Standards.
- b. The design and installation of electricity, street lighting, telephone and gas services should be in accordance with the requirements of the relevant servicing authorities.
- c. Electricity and telecommunications infrastructure should be provided as underground services. Above ground servicing can be provided for infill industrial lots in areas where services are already established above ground.
- d. Compatible public utility services should be coordinated in common trenching to minimise construction costs for underground services and reduce restrictions on landscaping within road reservations.
- e. Separate and distinct reticulated water and sewer connections should be provided to each proposed allotment in accordance with Cowra Shire Council Engineering Standards and approved standards referenced therein.
- f. Where the connection of reticulated water and sewer infrastructure is not immediately available to the subdivision, or requires upgrading, the developer should make all necessary arrangements for the extension of these services to service each allotment in the subdivision, with all costs associated with the extension of services borne by the developer.

D.7.8. Stormwater, Drainage and Waterways

The following controls apply to industrial subdivision:

- a. Post-development runoff rates should be equal to or less than pre-development runoff rates for the full range of design storm events. Drainage from the proposed lots should not significantly alter predevelopment stormwater patters and flow regime.
- b. Stormwater drainage systems should be designed using the major and minor event philosophy, where the major event is the 100 year Average Recurrence Internval (ARI) design storm and the minor event is the 5 year ARI design storm.
- c. The adopted method of stormwater control should not result in unacceptable environmental damage within existing water courses and receiving waters.
- d. Stormwater from the proposed allotments in the subdivision should discharge to the street gutter or inter-allotment drainage system.
- e. Easements to drain stormwater should provided over all pipelines, inter-allotment drainage, channels and overland flow paths (except natural water courses).
- f. Easements for drainage over downstream properties should be secured for any proposed allotment that does not discharge stormwater flows directly to the street or inter-allotment drainage system.
- g. Water Sensitive Urban Design principles should be designed and implemented where applicable throughout the development to promote sustainable and integrated land and water resource management. Best practice stormwater, water conservation and environmental protection measures should be incorporated into the subdivision design.
- h. Subdivisions of land adjacent to or within the catchment of waterways, water bodies and riparian vegetation should be designed to ensure:
 - i. The preservation of fish and aquatic habitat.
 - ii. Barriers to fish passage are not created.
 - iii. The development does not pollute or adversely effect quality or quantity of flows of water.

- iv. A riparian buffer of 40 metres should be provided between any waterways, water bodies of riparian vegetation and locations of proposed development.
- Where the stormwater drainage system requires upgrading, the developer should make all necessary arrangements for the extension of these services to service each allotment in the subdivision, with all costs associated with the extension of services borne by the developer.

D.7.9. Naming of new roads

The following controls apply to industrial subdivision:

 a. Where a subdivision proposes the opening of a new public road, the developer should provide Council with suggestions for the naming of the new road that are consistent with guidelines contained in Council Policy 2.17 – Naming and Renaming of Bridges, Roads and Streets.

Completion of the road naming process, including gazettal of the new road names in the NSW Government Gazette, is the responsibility of the relevant roads authority.



strata + community title subdivision

PART D.8

This Part provides the standards and controls for strata and community title subdivision development in the Cowra Shire Local Government Area.

D.8.1. Strata and community title subdivision

Subdivisions carried out by strata or community title differ from conventional subdivisions in respect to the creation of neighbourhood or community property that is jointly owned by the owners of other lots. The neighbourhood or community property may include access ways, services, shared recreational facilities, or other facilities. For this reason, proposals for strata and community title subdivision should be discussed with Council's planning staff early in the design process.

Strata and community title subdivisions are generally more appropriate for development types and scenarios found in urban areas. Examples of development types commonly subdivided under strata or community title include townhouses and other medium density housing, industrial units and shops with outside areas such as gardens, driveway and car parking spaces usually being part of the common property lots.

The following controls apply to strata and community title subdivisions:

- a. Each strata or community title subdivision should:
 - Be provided with a separate and distinct connection to Council's reticulated water and sewerage supply system and other essential services. Community or neighbourhood lots may be excepted in appropriate circumstances.
 - ii. Be provided with physical and legal access to the public road system.
- b. A draft of the Strata Scheme or Management Statement should be provided with the development application for subdivision.
- c. Council will not consent to a strata or community title subdivision of land which will result in an existing building contravening the provisions of the Building Code of Australia.



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