

COROWA SHIRE DEVELOPMENT CONTROL PLAN 2013



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1.0 Introduction

1.0 INTRODUCTION

1.1 Title

The title of this Plan is the Corowa Development Control Plan 2013 (CDCP).

1.2 Land to which this CDCP applies

The CCDCP applies to all land within the Local Government Area of Corowa.

1.3 Purpose

The purpose of the CDCP is:

- to reflect the objectives of the Environmental Planning and Assessment Act 1979 (EP&A Act);
- to assist in implementing the Corowa Shire Strategic Land Use Plan 2010-2030;
- to assist in the administration of Corowa Local Environmental Plan 2012 (CLEP);
 and
- to provide good planning outcomes for development in the Shire.

1.4 Operation

The CDCP has been prepared in accordance with Section 74C of the EP&A Act.

It was adopted by Council on 19th February 2013 and came into effect on that day.

1.5 Relationship with other planning instruments

The CDCP should be read in conjunction with:

the CLEP; and

any relevant State Environmental Planning Policies (SEPPs).

Where there is a conflict between a provision in the CDCP and one in an Environmental Planning Instrument (namely a State Environmental Planning Policy or Local Environmental Plan), the provisions of the Environmental Planning Instrument shall prevail to the extent of that inconsistency.

1.6 Structure

The CDCP is made up of a number of chapters that address particular development matters. More than one chapter may be relevant to development proposals.

1.7 Application

Where a development application is required, a person shall not develop land except in accordance with the provisions of the CDCP.

1.8 Variation to standards

Variations to the standards in the CDCP may be considered by Council. Details as to the process of seeking a variation to a development standard expressed in the CDCP are detailed in each chapter.

1.9 Notes

Notes expressed in the CDCP are for information purposes only and do not form a formal part of the CDCP.

1.10 Record of amendments to the CDCP

No.	Date commenced	Details of change
1	23/07/2015	Amendment to Clause 3.8 – Non industrial activities to read "Retailing and the display of goods in association with industrial activities will be permitted where it is ancillary to the principal industrial use on-site and that the retail area does not occupy an area greater than 20% of the floor area of the industrial premises".
2.	24/11/2015	Removal of superseded site specific development plan.
3.	16/02/2016	Amendment to SSDP – Dawe and Gallipoli Streets.

2.0

Residential Development

2.0 RESIDENTIAL DEVELOPMENT

PURPOSE

This chapter of the CDCP applies to all forms of residential development in the Shire for which a development application is required.

The overall purpose of the controls in this chapter is to create well-designed and liveable residential environments for current and future residents of the Shire.

The controls in this chapter are expressed firstly as the objective Council is seeking for residential development and secondly the development standards considered by Council to deliver these outcomes. Compliance with all development standards should result in consistency with the objectives and consequently the granting of development consent (if SEPP and LEP requirements are also met). In exceptional circumstances Council may consider a variance to a development standard but only where the applicant has demonstrated in writing and/or with plans that the objective can still be achieved.

APPLICATION

The development standards are grouped under different components of residential development. Within each component there are general development standards that relate to all types of proposals as well as specific development standards for specific types of residential development. The specific types of residential development are:

- Higher density being generally but not exclusively groups of three or more dwellings on single or multiple small lots located within the Residential 1 (R1) and Village (RU5) zones.
- Average density being generally one or two single detached dwellings located on conventional urban sized lots within the R1 and RU5 zones. The majority of residential development undertaken in the Shire is within this category.
- Lower density being generally but not exclusively single detached dwellings within the Low Density Residential (R2) zone.
- Rural being generally but not exclusively dwellings within the Large Lot Residential (R5), Primary Production (RU1) and Environmental Management (E3) zones.

In applying the development standards to a particular development proposal, both the general and specific development standards to that particular type of development are applicable. Where there is conflict between a general and a specific development standard, the specific

development standard shall apply to the extent of the inconsistency.

Note: Proposed dwellings compliant with the prerequisites and standards expressed in the *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008* ("the Codes SEPP") can be approved as 'complying development' and are exempt from the provisions of the CDCP. Any proposed dwelling not compliant with the Codes SEPP will require a development application and be subject to the provisions of the CDCP.

OBJECTIVES

The specific objectives of the controls in this chapter are:

- to encourage development that is energy efficient;
- to encourage residential buildings that offer visual interest and variety in their appearance and style;
- to encourage developments that provide high quality and well-designed landscaping where visible from the public domain;
- to ensure that new development is consistent and compatible with the established form in the neighbourhood;
- to ensure residential development within a low density or rural is complementary and in harmony with the natural surrounds; and
- to ensure that all development takes account of the amenity of adjoining and surrounding land with respect to sunlight, views, privacy and convince and safety.

2.1 Neighbourhood character

Objectives

- A mix of compatible dwelling types.
- Aesthetically pleasing residential areas.
- Residential areas providing high levels of amenity.
- A transition in density from lower density to higher density residential areas
- Integration of residential development in rural areas with natural features.
- Avoid development that would detract from the rural landscape.
- To encourage building styles that are sympathetic in design and building medium with the existing landscape.

Standards

General

- 1. Proposals are to be designed to suit the existing scale, density, setbacks and character of the neighbourhood.
- 2. No more than two dwellings should be provided within any one building (unless proposed as a residential flat building).

Average density

3. The density of proposals in the R1 and/or RU5 zones at the interface with the R2 and/or R5 zones shall be varied to provide a transition from higher to lower residential density.

Higher density

- 4. Proposals located within the 'head' of a court (cul-de-sac) or dead-end street shall be regarded as inconsistent with the objectives of this section.
- 5. Proposals on 'green field' subdivisions are to be located upon allotments with the following minimum frontages and widths:
 - 15m in the case of development with an offset access way with dwellings on one side of the allotment; and
 - 30m in the case of development with a centralised access way with dwellings either side.
- 6. Proposals should be located preferably in close proximity to open space areas and commercial centres.
- 7. No more than two proposals are to be located adjoining each other.

2.2 Streetscape

Objectives

- Ensure residential design makes a positive contribution to the streetscape.
- The provision of passive surveillance to the street.
- The integration of new development into the streetscape.

Standards

General

- 1. Dwellings are to 'face' street frontages.
- 2. The rear or service areas of a dwelling (bathrooms, laundry, etc) shall not face a primary street frontage or be visible from a secondary street frontage.
- 3. Fences on street frontages and side boundaries forward of the front building line are to be a maximum height of 900mm except for properties on:
 - eastern side of River Street, South Corowa
 - eastern side of Thomas Avenue, Corowa
 - eastern side of Talbot Crescent, Corowa
 - · eastern side of Banksia Drive, Corowa
 - Redlands Road, Corowa
 - Honour Avenue, Corowa
 - · Federation Drive, Corowa
 - · Spring Drive, Corowa
 - Melbourne Street, Mulwala
 - Corowa Road, Mulwala
 - eastern side of Lang Street, Mulwala

for which masonry fences up to 1.8m in height are permitted.

- 4. All fences forward of the front building line are to be designed to make a positive contribution to the streetscape.
- 5. High quality materials and finishes should be used for residential building exteriors as well as any fences constructed as part of the development.
- 6. Double garages must not extend across more than 50% of the lot frontage.

Higher density

Standards

- 7. The dwelling closest to the street shall be orientated to, and 'face' that frontage.
- 8. Blank building walls with little or no articulation and/or fenestration facing the street will be regarded as inconsistent with the objectives of this control.

2.3 Site requirements

Objectives

- To provide a balance between the built and open space areas of a site.
- To prevent over development of a site.
- To provide for residential amenity.
- To protect the neighbourhood character.
- To encourage development that responds to the characteristics of the site.
- To encourage energy efficiency.

Standards

Average density

1. As per *General Housing Code* in Subdivision 2, Division 2, Part 3 of *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.*

Higher density

- 2. Proposals shall not occupy more than the following proportion of the allotment on which the development is carried out:
 - In the case of a single-storey or split level building 45%
 - In the case of a two-storey building 40%
- 3. The minimum lot size for attached dual occupancy developments is 550m² and for detached dual occupancy developments 650m².
- 4. The design of proposals shall be based on a thorough site analysis that responds to:
 - opportunities for northern orientation;
 - shaded areas:
 - adjacent sources of noise and overlooking;
 - · the siting of buildings on adjoining land;
 - the location of private open space and living areas of adjoining development;
 - the location and form of fences and trees;
 - site gradient, drainage and easements; and
 - BASIX requirements.

Rural

5. As per Rural Housing Code in Subdivision 2, Division 3, Part 3A of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.

2.4 Building heights

Objectives

- Ensure buildings are not obtrusive or dominate the streetscape or landscape.
- Minimise impacts on adjoining properties from overshadowing and overlooking.

Standards

Average density

1. As per General Housing Code in Clause 3.13, Subdivision 3, Division 2, Part 3 of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.

Rural

2. As per Rural Housing Code in Subdivision 3, Division 3, Part 3A of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.

2.5 Building setbacks

Objectives

- Attractive streetscapes through consistency in front building setbacks.
- The maintenance of

Standards

Note: This section does not apply to land to which the Mulwala Foreshore Land chapter of the CDCP applies (Chapter 7).

General

1. A 1m wide articulation zone for no more than 25% of the frontage of the building is permitted within the front building setback.

- existing character in residential areas (e.g. average density, lower density, etc.).
- Adequate separation between dwellings.
- Maintain and ensure reasonable access to views for all.
- Maintain sight distance for vehicular safety.
- Provide privacy and areas for landscaping.

Standards

2. A garage must be setback a minimum 1m behind the front building line if the building is at the minimum setback distance.

Average density

3. As per *General Housing Code* in Subdivision 3, Division 2, Part 3 of *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.*

Note: The minimum lot size for subdivision in the R1 zone is 550m² hence standards in the *General Housing Code* relating to lots smaller than this are not relevant.

Higher density

- 4. A minimum 4.5m from the front (primary) property boundary or the average of the setback of the adjoining buildings.
- 5. A minimum 2m from the side and rear property boundaries.
- A minimum 4m to the side (secondary) property boundary on a corner site (does not apply to detached dwellings that face the second frontage to which the front setback applies).
- 7. A minimum 1m from the vehicular access way.
- 8. A minimum 8m between the main entrance of a dwelling and the main entrance of another dwelling which is visible by direct line of sight.
- 9. A minimum 2m between each group of dwellings or each detached dwelling.
- 10. A zero lot line setback may be permitted from a single car, single storey garage or carport to a side or rear boundary.

Lower density

- 11. For areas with a minimum lot size for subdivision of 1ha, a minimum 10m from the front (primary) property boundary.
- 12. For areas with a minimum lot size for subdivision of 1ha, a minimum 5m from the side and rear property boundaries.

Rural

13. As per Rural Housing Code in Subdivision 3, Division 3, Part 3A of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.

2.6 Privacy & amenity

Objectives

- The protection of privacy and amenity of neighbouring properties.
- Privacy and amenity for residents within medium density developments.

Standards

General

- Balconies that permit overlooking in to a neighbouring property's living areas or private open space areas will be considered inconsistent with the objective of this control.
- Noise transmission between attached dwellings is to comply with the Building Code of Australia. Swimming pools and other recreational areas are not encouraged close to neighbour's living areas and bedrooms.
- 3. External lighting shall be baffled so there is no light spillage onto adjoining properties.

Average density

4. As per *General Housing Code* in Subdivision 3, Division 2, Part 3 of *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.*

Higher density

- 5. Dwellings must be designed so that their main entrance doors are not directly opposite one another unless the doors are more than 8m apart by straight line distance. Alternatively, either entrance door must be set at a minimum angle of 45° to the opposite entrance.
- 6. Windows of habitable rooms in dwelling on opposite side of an accessway are to be screen by landscaping. The landscaping should reach a mature height of 1.5m. Alternatively, the windows should be located or designed to respect the privacy of other dwellings. Techniques include window offsetting, angling to the accessway, minimum sill heights of 1.5m or opaque entrance.

Standards

- 7. Buildings must be designed so that the number of windows in upper storeys directly overlooking adjacent dwellings is kept to a minimum. Where windows do face neighbouring properties, they must be opaque, have high sills (at least 1350mm) or be screened by planting.
- B. Bedrooms should also not be within 3m of shared driveways and parking areas.

2.7 Landscaping

Objectives

- Front landscaping that contributes to an attractive streetscape.
- Enhancement of the natural environment.
- Reduction in stormwater run-off from allotments.
- Landscaping that contributes to the solar efficiency of the dwelling.

Standards

General

- 1. A minimum of 15% of a lot area should have a surface permeable to water.
- 2. Existing mature trees should be incorporated in the development wherever possible. Selection of species should have regard to the surrounding context and Council's preferred species list.
- 3. Wherever possible native plant species are to be utilised in landscaping with preference given to drought tolerant species.
- 4. Deciduous species of trees to be used in open space located on the northern side of living areas.
- 5. Landscaping must comply with that shown on the approved BASIX certificate for the dwelling.

Average density

6. As per *General Housing Code* in Clause 3.24, Subdivision 4, Division 2, Part 3 of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.

Higher density

- 7. Where an access way is located adjacent to a side boundary, the access way is to be separated from the fence by a minimum one metre wide landscaping strip. This strip should be densely planted with shrubs (mature height of around 1.5m) and groundcovers.
- 8. The western side boundary, whether it is a landscape strip, courtyard area, common open space, private open space, or a dwelling setback, is to be planted with an advanced tree (minimum 1.5m high) every 5m. The tree species should be indigenous and fast growing with a mature height of around 5m and a spread of at least 3m.
- A Landscape Plan detailing the site features, hardstand areas, number and type of plant species and planting locations should be submitted with any application for consideration by Council.

Rural

10. As per Rural Housing Code in Subdivision 4, Division 3, Part 3A of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.

2.8 Private open space

Objectives

- A private outdoor space for residents.
- Practical and useable outdoor areas for residents.
- Outdoor areas that enhance residential amenity.
- Private outdoor areas to maximise solar access.

Standards

General

- 1. Private open space (i.e. space that is not visible at ground level from a public place or adjoining property) is to be provided at the rate of:
 - 30m² for a one bedroom dwelling.
 - 50m² per two or more bedroom dwelling.
- 2. The principal private open space is to be in close proximity to the main living area of the dwelling.

Average density

3. As per General Housing Code in Clause 3.25, Subdivision 4, Division 2, Part 3 of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.

Higher density

Standards

- 4. Each dwelling is to be provided with a principal private open space area of minimum dimensions 5m x 5m. This space is to be functional and not constrained by slope or other constraints affecting its use.
- 5. The primary private open space area must have a northern orientation. 'Northern orientation' means open space that faces a point between Northwest and East without obstruction (within the property) apart from privacy or boundary fencing.
- 6. The primary private open space area must receive a minimum of three hours direct sunlight between 9.30am and 2.30pm at the Winter Solstice.

2.9 Car parking & access

Objectives

- Sufficient on-site parking for residents and their visitors.
- Safe movement of vehicles within a site.
- High standard of construction and appearance of hardstand areas associated with vehicle movement and parking.

Standards

Average density

1. As per *General Housing Code* in Subdivision 5, Division 2, Part 3 of *State Environmental Planning Policy (Exempt and Complying Development Codes)* 2008.

Higher density

- 2. One on-site car parking space shall be provided for each dwelling and freely accessible at all times.
- 3. On-site designated visitor spaces at the following rates:
 - · One to three dwellings: None
 - Four or more dwellings: 1 space for every 2 dwellings or part thereof.
- 4. Visitor parking is not to be located within the front building setback.
- 5. Car spaces are to have the following dimensions:
 - Garage and carport 6m x 3m, minimum internal clearance between piers.
 - Open car space and visitor space 2.7m x 5.5m.
- 6. Car parking may be provided in a double garage or carport, if it meets the required setbacks. No more than two fully enclosed garage or carports may be attached (including roofline), regardless of the dwelling(s) to which they are attached or related. The minimum separation between two garages/carport and anther single or double set is to be 1m (including roofline).
- All vehicle turning circles to visitor parking spaces, garages and carports are to comply (as a minimum) with the turning template for an 85th percentile design vehicle.
- 8. All accessways, visitor parking spaces and individual dwelling driveway areas (the common vehicular areas) are to be formed and drained to a discharge point approved by Council.
- 9. Driveways and vehicle crossings are to be located at least six metres from road intersection points.
- 10. Only one vehicle crossing to the street is to be provided to each higher density development.
- 11. Vehicles are to be capable of entering and exiting the site in a forward direction.
- 12. All driveways and parking areas shall be provided with an impervious surface such as concrete, paving or other approved materials.
- 13. Shared driveways longer than 20m shall be a minimum 5m wide or 3m with 5m wide passing bay(s).
- 14. Shared driveways shall incorporate minor deviations in their alignment.

Rura

15. As per Rural Housing Code in Subdivision 5, Division 3, Part 3A of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.

2.10 Earthworks & drainage

Objectives

- To prevent erosion.
- To avoid sediment transfer off site via stormwater.
- To protect drainage infrastructure.
- To protect water quality.

Standards

Average density

1. As per General Housing Code in Subdivision 6, Division 2, Part 3 of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.

Rural

2. As per *Rural Housing Code* in Subdivision 6, Division 3, Part 3A of *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.*

2.11 Ancillary development

Objectives

 To protect residential amenity.

Standards

Average density

 As per General Housing Code in Subdivision 7, Division 2, Part 3 of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.

Higher density

2. Fences will be required to the site's side boundaries (behind the building alignment) and the site's rear boundaries, and between each dwelling's private open space areas. These fences are to be a maximum of 1.8m in height (above the finished ground level of the site) and are to be constructed of approved materials such as lapped and capped timber, brick or colorbond metal, in colour complementary to the dwellings.

Rural

3. As per *Rural Housing Code* in Subdivision 7, Division 3, Part 3A of *State Environmental Planning Policy (Exempt and Complying Development Codes)* 2008.

2.12 Outbuildings

Objectives

- Outbuildings not to be detrimental to residential amenity.
- Outbuildings to be in proportion with the size of the lot they are placed.

Standards

Higher, average & lower density

- 1. Outbuildings will be subject to notification in accordance with Council's Notification Policy to all potentially affected neighbours.
- 2. Where valid objections are received to an application for an outbuilding, it will be deemed to be inconsistent with the objectives for this section.
- 3. Outbuildings must be necessary and ancillary to the residential use of the land.
- 4. Outbuildings must not be used for or associated with commercial or industrial purposes, unless permissible and approved by Council.
- Outbuildings must be constructed of material matching the colour of the associated residence or be generally compatible with other development in the neighbourhood.
- Outbuildings shall be located behind the dwelling.
- Outbuildings shall not detrimentally impact on the amenity of the surrounding area.
- 8. Outbuildings shall be set back at least 1m from the side and rear boundaries or with consideration to any other relevant constraints.
- 9. The maximum wall height for outbuildings shall be:
 - 2.7m for floor area less than 60m²
 - 3m for floor area 60m² or more.
- 10. The maximum roof height for outbuildings shall be 3.9m above natural ground level.
- 11. Outbuildings shall be constructed of material that is deemed to have a low-

Standards

- reflective surface by the Council's Director Environmental Services.
- 12. Outbuildings shall not be erected on vacant land unless consent for a dwelling has been approved.

2.13 Development standards for particular land

Objectives

 To reduce the risk of harm to persons and property through bushfire and flooding.

Standards

Average density

1. As per *General Housing Code* in Subdivision 9, Division 2, Part 3 of *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.*

Rural

2. As per Rural Housing Code in Subdivision 9, Division 3, Part 3A of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.

2.14 Site facilities

Objectives

- Site facilities not to detract from the public aesthetics of the building.
- Site facilities not to be detrimental to residential amenity.

Standards

General

- 1. Service metres shall not be placed on the street frontage of the building.
- 2. Clothes drying facilities are to be provided within the private open space of each dwelling.
- 3. The mail box design and location should be complementary to the front setback landscaping and the dwelling design.
- 4. Garbage bins for each unit are to be stored within the building or private open space. If a common bin storage area is proposed, it shall be located in a screened enclosure central to the development.

2.15 Security

Objectives

- Living environments that enhance residents' feelings of safety and security.
- Building and layout designs that allow surveillance of common and public spaces by residents.
- Environments that reduce opportunistic crime.

Standards

General

- 1. The site layout is to be designed to enhance personal safety and minimise the potential for fear, crime and vandalism.
- 2. The design of dwellings enables residents to survey streets, public areas and dwelling entries to enable surveillance of the neighbourhood to take place.
- 3. Adequate lighting must be provided for all paths, access ways, parking areas and building entries.
- 4. Private open space should only be accessed from within the site i.e. not accessible directly from the street or other public space.

Higher density

To be provided with bollard lighting at 10m intervals along any shared vehicular access way. The lighting shall be capable of remote activation.

2.16 Energy efficiency

Objectives

- Buildings to meet projected user requirements for daylight access.
- Siting and design buildings to promote energy efficiency.

Standards

General

- 1. Buildings should be oriented in accordance with the diagram below to make appropriate use of solar energy, be sited and designed to ensure energy efficiency of existing dwellings is not unreasonably reduced.
- 2. Living areas and private open space should be located on the north side of development where practicable.
- 3. Developments should be designed so that solar access to north facing windows is

Standards

maximised.

- 4. Buildings should be articulated with appropriate vertical and horizontal variations to ensure an appropriate year round variation of shade and sunlight according to the heating/cooling needs and shadow patterns across glazed surfaces during seasonal changes through the year.
- 5. Buildings should be constructed of materials and using designs which improve thermal mass.
- 6. Buildings should provide for natural cross-ventilation.
- 7. Buildings shall be designed to ensure living areas and private open space of adjoining residences maintain at least three hours direct sunlight between 9am and 3pm at the Winter Solstice. An overshadowing diagram may need to be provided to demonstrate this development standard can be achieved.

2.17 Subdivision

Objectives

■ To provide lots with areas and dimensions that enable the appropriate siting and construction of a dwelling, solar access, private open space, vehicle access and parking, water management, easements and the retention of significant vegetation and site features.

Standards

General

- Compliance with Council's Design Manual for the Subdivision of Land in regards to:
 - Road layout
 - Road pavement
 - Sub-surface drainage
 - Stormwater drainage
 - Site works (e.g. cut & fill)
 - Soil & water management (e.g. erosion)
 - · Waterfront development
 - · Cycleway & pedestrian paths
 - · Bushfire protection
 - Water reticulation
 - · Sewerage system

Average

2. Minimum lot widths should be provided in accordance with the following table.

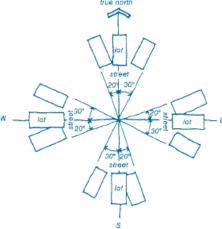
Allotment Type	Minimum Width (at the building line)
Non-corner lot*	15m
Corner lot*	15m
Battle-axe lot*	15m (within the allotment – not including the access handle)
Lots where the slope exceeds 12%*	25m

Standards

- 3. A minimum of 70% of allotments in a subdivision are to have favourable northern orientation as per the figure opposite.
- 4. Allotments orientated in a north-south direction can be longer and narrower than required to allow good solar access to yards and living areas.
- Allotments orientated in east-west direction need to be wider than required to provide greater opportunity for solar access to yards and living areas.
- 6. Battle-axe allotments are not encouraged. However, where they are necessary the minimum access handle within is to be 5m and the maximum length to the land is to be 30m. Shared access handles may be a minimum of 5m in width.
- 7. No more than two battle-axe allotments should adjoin on another or share an access handle.

Rural

- 8. Battle-axe allotments must have:
 - · a minimum access width of 20m; and
 - · a maximum access length of 100m.
- 9. For the area of the allotment (excluding the access) an average width to depth, ratio of not less than 1:3.



3.0

Industrial Development

3.0 INDUSTRIAL DEVELOPMENT

This chapter of the CDCP applies to all forms of industrial development within the Shire for which a development application is required.

The overall purpose of the controls in this chapter is to create well-designed precincts that cater for the wide range of industrial activities.

The controls in this chapter are expressed firstly as an objective Council is seeking for industrial development and secondly the development standards considered by Council to deliver these objectives. Compliance with all development standards should result in consistency with the objectives and consequently the granting of development consent (if SEPP and LEP requirements are also met). In exceptional circumstances Council may consider a variance to a development standard but only where the applicant has comprehensively demonstrated in writing and/or with plans that the objective can still be achieved.

OBJECTIVES

The specific objectives of the controls for industrial development are:

- Provide for a range of industrial activities in industrial precincts.
- Provide a level of amenity in industrial areas for those that visit and work there.
- Ensure that development incorporates safe and functional movement of vehicles on and off site.
- Encourage a high standard of design in industrial areas.

3.1 Appearance

Objectives

 Buildings and sites to make a positive contribution to the streetscape.

Standards

- 1. Buildings are to have their main building facade and entries addressing the primary street frontage.
- 2. High quality materials and finishes should be used for building exteriors as well as any fences.
- 3. Sites are to be maintained in a neat and tidy condition at all times.
- 4. For buildings facing the highway, front facades must provide visual interest through articulation and use of varied building materials and colours.
- 5. Office components shall be located at the street frontage of the structure to enable the placement of windows and doors to 'break up' the façade.

3.2 Landscaping

Objectives

- Front landscaping that contributes to an attractive streetscape.
- Landscaping as a means of screening outdoor areas from adjoining properties and from public places (including roads).

Standards

- 1. All industrial sites are to be appropriately landscaped.
- 2. Proposed landscaping elements are to be clearly identified on development application plans submitted to Council with a comprehensive landscape plan required to show all areas of vegetation, pathways and vehicles access areas.
- 3. All landscaping is to be maintained in good condition at all times. Dead plants should be removed and replaced at the earliest opportunity.
- 4. A range of species types are to be used in the landscaping and these should be various heights to create interest and help screen storage and car parking areas.
- 5. Landscaping areas are to be protected from vehicle activity areas by a minimum 100mm high kerb, wheel stops or other similar barrier devices to prevent the damage to these vegetated areas.
- 6. The landscaping must have an irrigation system installed.
- 7. Existing mature trees should be incorporated in the development where possible.
- 8. Where ever possible native plant species are to be utilised in landscaping with preference given to drought tolerant species.

3.3 Building setbacks

Objectives

 Opportunities to embellish the front of industrial sites to present an attractive streetscape.

Standards

- 1. All buildings shall be setback a minimum of:
 - 9m from the street alignment of a main road; and
 - 4.5mfrom the street alignment of any other road.
- 2. In the case of corner allotment, the minimum setback required for the secondary frontage is 5 metres, provided that this frontage does not address a main road.
- 3. Side and rear setbacks from adjoining properties should comply with the standards detailed in the *Building Code of Australia*.
- 4. Where a development occurs on land adjoining a residential property, the minimum setback to the common boundary is 3m.
- 5. A minimum 1m strip along the front boundary area shall be landscaped, incorporating use of native vegetation wherever possible.
- 6. Fencing is permissible within the front setback if it is:
 - open type fencing (e.g. green coloured open mesh security fencing), provided that it is not closer than 5m to a road; and/or
 - low solid fencing (less than 500mm high) which does not obstruct the view of landscaping from the street and the driver's view from driveway to road.

3.4 Parking & access

Objectives

- Sufficient on-site parking for employees and visitors.
- Safe movement of vehicles and pedestrians within a site.
- High standard of construction areas associated with vehicle movement and parking.

Standards

Parking

1. Parking is to be provided on-site at the rates contained in the following table.

Land Use	Minimum Parking Spaces Required
Agricultural produce industry	1 per employee
Boat repair facility	1 per employee
Commercial port facility	At Council's discretion
Electricity generating works	1 per employee
Freight transport facility	1 per employee
Home industry	1 per employee not resident at the site
Industry (hazardous, heavy, light, offensive & retail outlets)	1 per 80m² GFA (minimum 2 spaces per single occupation)
Liquid fuel depot	1 per employee plus tanker parking
Materials recycling or recovery centre	1 per 2 employees plus 1 per 200m² site area
Mine	At Council's discretion
Rural industry	At Council's discretion
Transport depot	1 per employee
Truck depot	1 per employee
Vehicle body repair shop	4 per service bay plus 1 per 200m² outdoor active use area
Vehicle repair station	4 per service bay plus 1 per 200m² outdoor active use area
Warehouse or distribution centre	1 per 100m² GFA
Waste management facility	At Council's discretion
Wholesale supplies	1 per 50m² GFA

- Council may consider a reduction in these standards if it can be demonstrated
 the proposed use of the premises does not warrant such provision. However
 applicants must demonstrate there is sufficient space on the site to provide
 parking in accordance with the standards should the use of the premises
 change.
- 3. Council may require on-site parking at a rate in excess of the above if the proposed use of the premises warrants such an outcome.
- 4. The parking area, if possible should be located immediately behind the minimum setback area and in front of the industrial activity on the site.
- 5. Parking spaces must be physically separated from access ways, loading and unloading areas, and manoeuvring areas.
- 6. All parking areas are to be constructed so as to allow for the catchment and disposal of stormwater to a point of discharge agreed to by Council.

Access

7. Driveways should generally comprise a width of at least 8m, allowing two-way 'in' and 'out' movements.

Standards

- 8. Internal layout must ensure all vehicles (including trucks) are able to enter and exit the site in a forward direction without interfering with parked vehicles, buildings, landscaping or outdoor storage and work areas.
- 9. Development shall be designed to accommodate the largest vehicle expected to access the site. If the development is likely to be accessed by larger vehicles, the appropriate access and manoeuvring areas are to be shown on plans provided with the development application.
- 10. All parking, loading or unloading of vehicles is to be carried out on the development site.

3.5 Outdoor areas

Objectives

 Outdoor areas that don't have a detrimental impact on the amenity of the area.

Standards

General

- 1. Outdoor storage areas are to be substantially screened from public roads and adjoining lots by dense landscaping.
- 2. Outdoor storage areas are not to encroach within 3m of any boundary for fire safety reasons.
- Outdoor storage areas must be surfaced to prevent dust raising from vehicle movements or wind.

3.6 Amenity

Objectives

- Placing industrial activities in locations that minimise detrimental offsite impacts.
- Ensuring the Industrial areas provide a high level of amenity.

Standards

General

- 1. All development is required to comply with the requirements of the *Protection* of the *Environment Operations Act 1997* (as amended) and it's Regulation.
- 2. Applications for potentially hazardous or offensive development are to submit information demonstrating compliance *with SEPP 33- Hazardous and Offensive Development.*
- 3. All stormwater is to be contained within the site and discharged to the point and facility nominated by Council.
- 4. A trade waste agreement with Council for disposal of liquid waste to the sewerage system may be required.
- 5. Exterior light sources shall be directed away from adjoining properties.
- 6. Land uses or development considered by Council to potentially have a detrimental impact on adjoining properties through noise or air emissions (e.g. dust or odour) are to provide information in respect to the likely impacts and proposed mitigation measures of these impacts.
- 7. Activities that have the potential to create noise levels that are in excess of the relevant standards when measured at the nearest residence or future residential land will not be supported without the submission of an Noise Impact Statement (NIS) by the applicant demonstrating otherwise. Compliance with the NIS will then become a condition of consent.
 - 8. Buildings shall comply with the *Disability (Access to Premises—Buildings)*Standards 2010 to ensure that dignified, equitable, cost-effective and reasonably achievable access to buildings, and facilities and services within buildings, is provided for people with disability.

3.7 Signage

Objectives

- Signage of a high standard prepared to a professional standard.
- Signage to the minimal extent necessary.
- Signage kept in good condition.

Standards

General

- 1. Signage to be restricted to identifying and promoting the business activity occupying the site and the goods and services it offers.
- 2. For single occupant industrial sites with highway frontage, one low level free standing advertising sign may be located between the building line and the road boundary. The sign is to generally be no more than 1m high and 6m in length and is to be integrated with landscaping.
- 3. For single occupant industrial sites without frontage to a highway, a free standing pole or pylon sign may be used as an alternative to a low level sign may be used as an alternative to a low level sign. Consent may be assumed for a free standing pole or pylon sign (one per site only) not exceeding a maximum height of 5m which incorporates a sign panel not exceeding 4.5m² in area.
- 4. Signage relating to a product, activity or service unrelated to the business on the site is not permitted.
- 5. Advertising signs and structures shall be of a size, colour and design which are compatible with the building to which they relate.
- 6. Signs should not visually dominate the area of building walls nor should they extend above the roof of the building.

3.8 Non-industrial activities

Objectives

- Non-industrial activities that are not the prime use of a site.
- Non-industrial activities that complement industrial activities.

Standards

General

- The extent to which industrial retail outlets are permissible is defined in Clause 5.4(4) of the CLEP.
- Retailing and the display of goods in association with industrial activities will be permitted where it is ancillary to the principal industrial use on-site and that the retail area does not occupy an area greater than 20% of the floor area of the industrial premises.
- 3. Neighbourhood shops, take-away food and drink premises or like developments are permitted within industrial areas where they provide for the daily convenience needs of the workforce in the surrounding industrial area.
- 4. Office space is to be ancillary to the principal industrial land use onsite.
- 5. An office shall not detrimentally affect the trading performance, singularly or cumulatively, of existing commercial centres.
- 6. A managers or caretakers residence shall be:
 - no more than 100m² in gross floor area;
 - subservient and incidental to the industrial use of the site;
 - only used in association with an approved industrial activity on the site;
 - justified on site due to the nature of the industrial activity;
 - restricted in associated with or in the vicinity of hazardous or offensive industries; and
 - restricted to sites within close proximity to the amenities and services of existing townships.

3.9 Subdivision

Objectives

 To provide lots for industrial purposes that allow for the appropriate siting of

Standards

General

10. Compliance with Council's *Design Manual for the Subdivision of Land* in regards to:

industrial buildings and the manoeuvring of heavy vehicles.

Standards

- · Road layout
- · Road pavement
- · Sub-surface drainage
- Stormwater drainage
- Site works (e.g. cut and fill)
- Soil & water management (e.g. erosion)
- · Waterfront development
- · Cycleway and pedestrian paths
- · Bushfire protection
- · Water reticulation
- Sewerage system

4.0

Commercial Development

4.0 COMMERCIAL DEVELOPMENT

This chapter of the CDCP applies to all forms of commercial development within the Shire for which a development application is required.

The overall purpose of the controls in this chapter is to create attractive and functional buildings that contribute to the character of town centres.

The controls in this chapter are expressed firstly as an objective Council is seeking for commercial and secondly the development development standards considered by Council to deliver these objectives. Compliance with all development standards should result in consistency with the objective and consequently the granting of SEPP consent and LEP development (if requirements are also met). In exceptional circumstances Council may consider a variance to a development standard but only where the applicant has demonstrated in writing and/or with plans that the objectives can still be achieved.

OBJECTIVES

The specific objectives are:

- to encourage orderly and economic development within the Shire having regard to its commercial and retail needs;
- to accommodate the expansion of retail, commercial, professional services and community facilities for local residents in convenient locations within the Shire;
- to ensure an integrated shopping centre by reinforcing existing pedestrian movements and creating pleasant and interesting linkages to other areas:
- to separate pedestrian movements from parking, manoeuvring and loading/unloading areas;
- to ensure that any extension to a commercial centre is in keeping with the character of the existing centre and is compatible with adjoining nearby residences;
- to encourage the provision and retention of existing landscaping to create an attractive streetscape within commercial areas.
- to promote a variety of uses within the Corowa, Mulwala and Howlong town centres that enhances their role as local retail, commercial and civic centres; and
- to encourage where possible mixed use buildings that operate during the day and night

4.1 Location

Objectives

- To consolidate existing town centres.
- To discourage isolated commercial development.
- To encourage infill development within existing town centres.

Standards

- New commercial development to be located within the existing commercial centres.
- Only small local businesses servicing local neighbourhoods will be supported in locations outside of commercial centres.
- Commercial activities are to be located in areas accessible to residents and visitors.

4.2 Appearance & design

Objectives

- A high standard of commercial development.
- Growth in the town centres.
- Consolidation of town centres.
- A positive contribution to the existing character of the town centres.

Standards

- Buildings to be constructed to the street frontage in the main commercial precincts of Corowa, Mulwala and Howlong
- 2. Building facades to be constructed of timber, brick or masonry.
- 3. Shopfronts predominantly in glass to be provided on commercial buildings constructed to the front building line.
- 4. Shopfronts are to be inviting and interact with passers-by.
- 5. Large expanse of walls along the street frontage will not be supported.
- 6. Colours used on walls visible to the public shall be subdued and blend in with the streetscape.
- 7. Development to be located within established commercial areas.
- 8. A front awning shall be provided (post-supported verandahs are preferred).
- 9. The extent of front awnings should match those provided on any adjoining commercial property.

4.3 Energy efficiency

Objectives

 Energy efficient buildings that minimise greenhouse gas emissions.

Standards

1. Building design to maximise solar access through orientation and location of glass where possible.

4.4 Parking

Objectives

- To match the supply of off-street car parking with the demand likely to be generated by customers and employees.
- To provide off-street car parking and manoeuvring areas to a high standard.
- Minimisation of the visual impact of large areas of car park.
- Buffer between car parks and adjoining property.
- Safe car parks (particularly at night).
- Pedestrian and vehicular movement through commercial areas in a functional, safe and integrated fashion by

Standards

- 1. Surface car parking is to be located to the side or rear of the development.
- 2. Car parking spaces to be provided at the rate specified in Table 4.1 below.
- 3. Parking spaces should be designed in accordance with *Australian Standard* 2890.1 and 2890.2.
- 4. Car parks adjoining public land (including a road) shall be provided with a landscape strip at the interface.
- 5. Car parking to be accessible at all times during the business hours of the premises.
- Car parks to be designed to provide pedestrian connectivity and minimise conflicts between vehicles and pedestrians.
- 7. Loading facilities are to be located at the rear or side of the building and not adjacent to any residential property.
- 8. Loading and unloading facilities are to be provided in accordance with the provisions of Policies Guidelines and Procedures for Traffic Generating Development.
- 9. Loading and unloading areas are to be located separate from other vehicle manoeuvring areas, car parking areas and pedestrian movement areas.

TABLE 4.1: STANDARDS FOR CAR PARKING PROVISION

Land Use	Minimum Parking Spaces Required (GFA refers to Gross Floor Area)
Amusement centre	1 per 40m ² GFA
Backpackers accommodation	At Council's discretion
Bed & breakfast accommodation	1 per guest room
Bulky goods premises	1 per 50m² GFA
Business premises	1 per 40m² GFA
Caravan park/camp site	1 per site plus 1 per 10 sites for visitors
Car rental	1 per 5 rental vehicles on-site plus 1 per employee
Cellar door premises	1 per 50m² GFA
Charter & tourism boating facility	At Council's discretion
Child care centre	1 per employee plus 1 per 10 children plus set down and pickup points for cars
Entertainment facility	At Council's discretion
Farm stay accommodation	1 per guest room
Food & drink premises	1 per 5 seats or 1 per 10m ² GFA, whichever is the greater, plus 1 per 2 employees (or 1 per 40m ² GFA for development in the B2 Local Centre zone)
Function centre	1 per 5 seats or 1 per 4m ² GFA, whichever is the greater.
Funeral chapel	At Council's discretion
Funeral home	At Council's discretion

Land Use	Minimum Parking Spaces Required (GFA refers to Gross Floor Area)
Health consulting rooms	3 per surgery, consultation or treatment room
Health services facility	3 per surgery, consultation or treatment room
Highway service centre	1 per 5 customer seats or 1 per 10m ² GFA (whichever is the greater) plus 1 per 2 employees
Home-based child care or family day care home	1 per employee plus 1 per 2 child intake capacity
Home business	1 per employee not resident at the site
Home occupation	Nil
Home occupation (sex services)	1 per person offering sex services, in addition to the number required for the residential accommodation
Hostel	At Council's discretion
Hotel or motel accommodation	1 per unit plus 1 per 2 employees
Kiosk	1 per employee Any additional at Council's discretion
Landscape & garden supplies	1 per 2 employees, plus 1 per 100m² display area
Market	2.5 per stall for customers plus 1 per stall operator
Medical centre	3 per surgery, consultation room or treatment room or 1 per 25m ² GFA (whichever is the greater)
Mixed use development	As required for each land use within the development
Neighbourhood shop	1 per 20m² GFA plus 1 per 3 employees
Office premises	1 per 40m² GFA
Pub	1 per 3.5m² GFA
Registered club	1 per 5 seats or 1 per 10m ² GFA, whichever is the greater, plus 1 per 2 employees
Restaurant	1 per 5 seats or 1 per 10m ² GFA, whichever is the greater, plus 1 per 2 employees (or 1 space per 40m ² GFA for development in the B3 Commercial Core & B4 Mixed Use Zones)
Restricted premises	1 per 40m² GFA
Retail premises (including shops & shopping centres) (a) <3000m ² GFA (b) >3000m ² GFA	(a) 1 per 40m ² GFA (b) 1 per 30m ² GFA
Roadside stall	4
Rural supplies	1 per 40m² GFA
Sex services premises	1 per person offering sex services, in addition to the number required for the residential accommodation
Serviced apartment	1 per unit plus 1 per 2 employees
Service station	4 per service bay plus 1 per 200m² site area, and 1 per 20m² GFA of convenience store area
Take-away food or drink premises	1 per 5 customer seats or 1 per 10m ² GFA (whichever is the greater) plus 1 per 2 employees
Timber & building supplies	1 per 2 employees, plus 1 per 100m² display area
Tourist & visitor accommodation	1 per unit plus 1 per 2 employees
Vehicle showroom	At Council's discretion
Veterinary hospital	3 per surgery

4.5 Signage

Objectives

- Signage does not detrimentally affect the character and amenity of the area.
- Signage does not distract road users.

Standards

- 1. Signage to be kept to a minimum and commensurate with the type of commercial activity being undertaken.
- 2. Signage to be of a scale in proportion of the building (i.e. not to dominate).
- 3. Signage to be modest in size and colour and not provide a distraction to motorists.
- 4. Signage not to be a hazard for pedestrians or motorists.
- Moving and/or flashing signs will be considered incompatible with the objectives for this control..

4.6 Amenity

Objectives

 Provide amenity for users of commercial buildings.

Standards

- 1. Cooling and heating units are to comply with the relevant noise standard for such equipment.
- 2. Natural and artificial lighting is to be used to reduce poorly lit or dark areas to deter crime and vandalism.
- 3. Development is designed having regard to safety and where possible implements measure for *Crime Prevention Through Environment Design*.
- 4. Buildings shall comply with the *Disability (Access to Premises—Buildings)*Standards 2010 to ensure that dignified, equitable, cost-effective and reasonably achievable access to buildings, and facilities and services within buildings, is provided for people with disability.

5.0

Heritage Conservation Areas

5.0 HERITAGE CONSERVATION AREAS

This chapter of the CDCP applies to the Corowa Heritage Conservation Area shown as red hatching on the Heritage Map (Sheet HER_006A) within the Corowa Local Environmental Plan 2012. An extract from that map is included below.

This chapter does not apply to any development for which a Development Application is not required (e.g. exempt or complying development).

COROWA HERITAGE CONSERVATION AREA



OBJECTIVES

The objectives of the controls are:

- to set out matters which Council will consider in determining development applications that might affect the environmental heritage of a Conservation Area:
- to provide development guidelines to assist applicants in addressing the particular considerations for a Conservation Area;
- to detail specific considerations in relation to a Conservation Area;
- to provide residents, landowners and developers with a document which details Council's policies on building and associated development; and
- to protect and enhance the character of Corowa and, in particular, that of a Conservation Area.

DECISION GUIDELINES

Proposed developments will be considered on their merits in terms of heritage impacts. In considering development applications within a Conservation Area, Council will make an assessment of:

- the heritage significance of a heritage Conservation Area and the contribution which any building, work, relic, tree or place affected by the proposed development makes to this heritage significance,
- the impact that the proposed development would have on the heritage significance of a heritage Conservation Area,
- the compatibility of any proposed development with nearby original buildings and the character of a heritage Conservation Area, taking into account the size, form, scale, orientation, setbacks, materials and detailing of the proposed development.
- the measures proposed to conserve the significance of a heritage Conservation Area and its setting,
- whether any landscape or horticultural features would be affected by the proposed development,
- whether any archaeological site or potential archaeological site would be affected by the proposed development,
- the extent to which the carrying out of the proposed development in accordance with the consent would affect any historic subdivision pattern, and
- the issues raised by any submission received in relation to the proposed development in response to the notification or advertising of the application.

5.1 Inventory forms

Objective

- To maintain a record of heritage items within Shire.
- To provide continuation of understanding of heritage significance in the Shire.

Standards

- 1. For a development involving alteration, addition, renovation, restoration to an existing identified heritage building(s) or place(s), an assessment, where relevant, is required to be made of the inventory form applicable to the respective building or place and Council must be satisfied that the proposal is consistent with the building's heritage character.
- 2. Council may require an assessment of the heritage impact to be provided with an application or alter, add to, renovate, restore or demolish an existing identified heritage building(s) or place(s).

5.2 Verandahs & awnings

Objective

- Retain and reinstate the characteristic architectural elements of the heritage items and Conservation Area.
- To respect and respond to the heritage context of particular areas of the Shire.

Standards

- Verandahs and upper floor balconies are required to remain open, other than by use of traditional lattice work or blinds.
- Verandahs must be retained unless exhaustive research has been undertaken and the applicant is able to demonstrate that there is no other economic option available.
- 3. All new commercial development shall incorporate the continuation of existing awning levels and where appropriate existing styles.

5.3 Parapets

Objective

 Retain and reinstate the characteristic architectural elements of the heritage items and Conservation Areas.

Standards

1. All existing above awning parapets are to be retained or reinstated.

5.4 Building height

Objectives

 Ensure new building constructer positively to the skyline of the townscape.

Standards

- 1. The height of new buildings within a Conservation Area must not exceed plus or minus 10% of the height of the existing adjacent buildings.
- 2. Dwelling houses within a conservation area are not to exceed two storeys in height.

5.5 Roof forms & pitch

Objectives

 Ensure roof forms and pitch retain the vital historical importance of the Shire.

Standards

- 1. Alterations to existing buildings are to reflect and integrate with existing roof forms.
- 2. The roof forms for all new construction are to be similar to that of the existing adjacent forms.
- 3. The roof pitch for all new buildings and alterations are to be similar to that of the existing adjacent roof lines.

5.6 Setbacks

Objectives

 Ensure a continuity of buildings lines within significant heritage areas of the Shire.

Standards

 Building setbacks for all new developments are to be relative to adjacent buildings.

5.7 Materials

Objectives

- Retain architectural elements.
- Recognise and promote the heritage character of the Shire

Standards

- 1. Building materials used in construction for all alterations to the exterior of existing building are to be of similar type of compatible to those used in the original construction of the building; and
- 2. The colours to be used in construction of the building works should be in keeping with the original building's colour and in sympathy with the existing streetscape.

5.8 Fenestration

Objectives

 Encourage architectural detailing and building features which recognise and respond to the identified heritage themes of the Shire.

Standards

1. The building design for all works to be carried out on both new and existing buildings are to ensure an ordered symmetry or rhythm of wall area to window and door openings is achieved; including style, size, proportion and position of the openings for windows and doors.

5.9 Advertising & signage

Objectives

 Ensure creative and sympathetic advertising and signage to enhance the appearance of the building and add vitality to the area.

Standards

 Signage is required to be below awning advertising which completes the historical nature of the building, adjoining buildings or the historical streetscape.

5.10 Fences

Objectives

 To ensure fences create a positive contribution to the sense of continuity in a streetscape.

Standards

1. Fences must be uniform and reflect the historical period of the building.

5.11 Footpaths, kerbs & gutters

Objectives

 Retain the existing streetscape.

Standards

 Footpaths, kerbs and gutters must be consistent with the existing forms of structures.

5.12 Infill development

Objectives

 Ensure it is compatible with existing buildings and streetscape.

Standards

1. Council may seek the preparation, at the applicant's expense, of a Conservation Report for the proposed works to ensure the development successfully integrates with the existing historical development.

6.0

Strategic Land Use Plan

6.0 STRATEGIC LAND USE PLAN

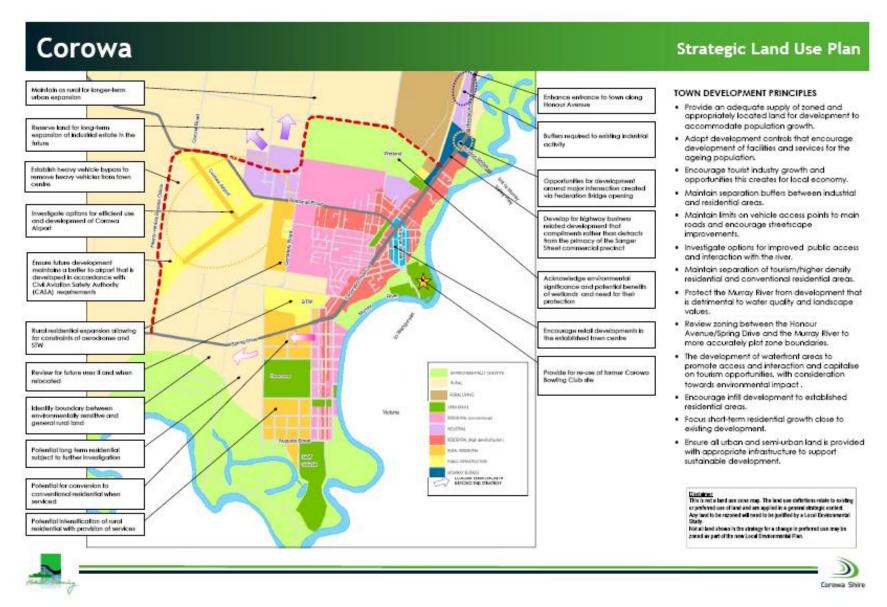
This chapter of the CDCP relates to application of Council's Strategic Land Use Plan (SLUP). The SLUP was prepared as the strategic planning basis for the *Corowa Local Environmental Plan 2012* ("the LEP").

The overall purpose of the SLUP is to guide the future development and use of land within the Shire for the next 20 years and beyond. More specifically the purpose of the SLUP is to assist in:

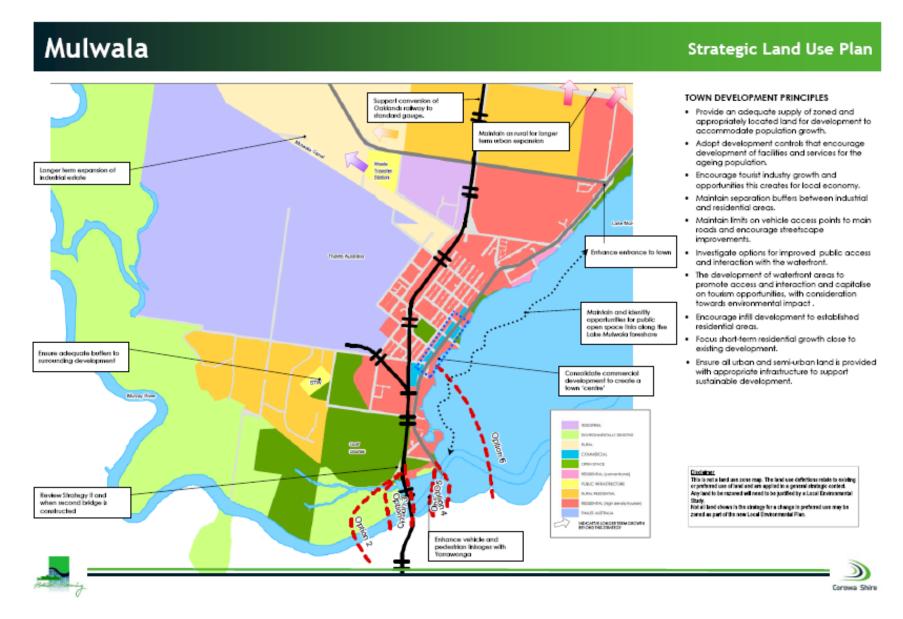
- preparing a new Shire-wide Local Environmental Plan and in particular land zoning;
- providing the community with a degree of certainty for the location of various land uses in the future;
- protecting the riverine environment from use and development detrimental to it;
- separating incompatible land uses;
- reducing development speculation;
- · considering tourist development proposals; and
- discouraging development on flood prone land.

All development proposals should have regard to the township structure plans for Corowa, Howlong and Mulwala.

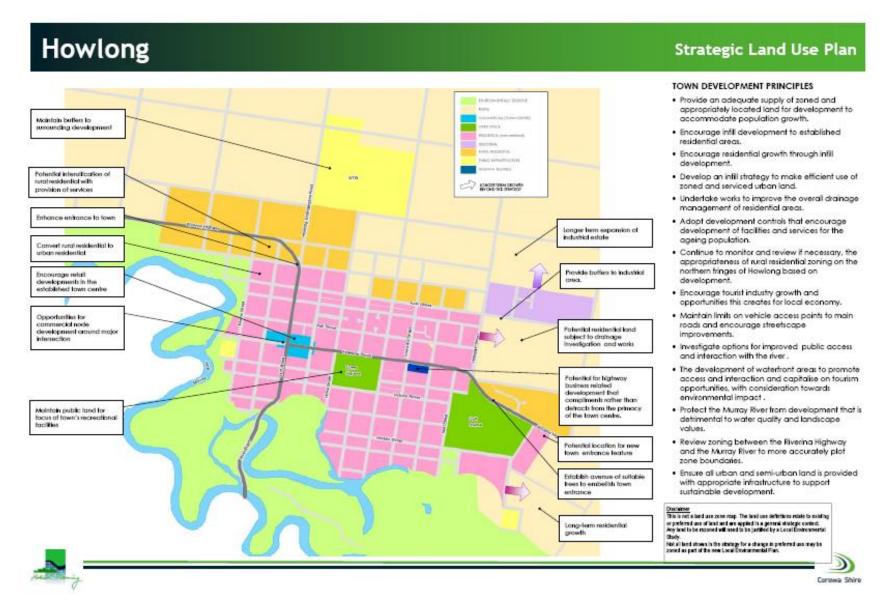
COROWA DEVELOPMENT CONTROL PLAN 2013 6.0 STRATEGIC LAND USE PLAN



COROWA DEVELOPMENT CONTROL PLAN 2013 6.0 STRATEGIC LAND USE PLAN



COROWA DEVELOPMENT CONTROL PLAN 2013 6.0 STRATEGIC LAND USE PLAN



Mulwala Foreshore Land

7.0 MULWALA FORESHORE LAND

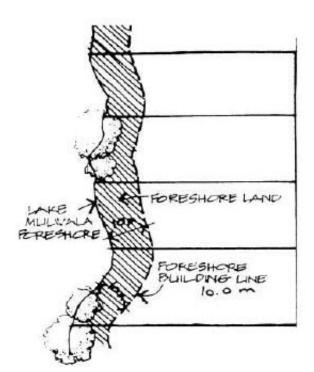
This chapter of the CDCP applies to 'foreshore land' and adjoining land around Lake Mulwala within the township of Mulwala.

DEFINITIONS

For the purposes of this chapter of the CDCP, the following definitions apply:

- "Foreshore land" means land situated between the foreshore building line and the Lake Mulwala foreshore.
- "Foreshore building line" means a line between two boundaries of an allotment of land, on which no point is less than 10m from the Lake Mulwala foreshore.
- "Lake Mulwala foreshore" means:
 - a) the existing retaining walls constructed on or before 18 February 1986; or
 - the prolongation of the alignment of existing retaining walls as at 18 February 1986 which have been opened for the purpose of constructing boat ramps or similar facilities; or
 - the natural bank of Lake Mulwala at surcharge level (AHD reduced level of 125.08m) where no retaining wall or artificial level has been constructed.

The following diagram visually depicts these definitions to assist in their interpretation.



OBJECTIVES

The objectives of this chapter are:

- to improve the appearance. stability and amenity of the foreshore areas of Lake Mulwala;
- to improve awareness of and access to Lake Mulwala and public foreshore lands;
- to provide for public walkways linking foreshore public lands, and in the longer term provide continuous public pedestrian access along the lake foreshore:
- to maintain the existing low rise, small scale character of the built environment; and
- to encourage development sympathetic to natural landforms.

Note: This chapter should be read in conjunction with Clauses 4.3 and 7.6 of the CLEP for *Height* of buildings and *Development* on river front areas, which are also applicable to foreshore land and that adjoining.

7.1 Application requirements

Objectives

 To accurately and clearly define the location of the foreshore building line.

Standards

1. Any development proposal on land within or adjoining foreshore land must be accompanied by a site plan (to scale) on which the foreshore building line is clearly shown.

7.2 Development on foreshore land

Objectives

- To provide sufficient building setback from the lake to accommodate an appropriate landscape buffer and foreshore public access.
- To preserve views and privacy.

Standards

- 1. A reference in this chapter to a building does not include a reference to a boat ramp or boat jetty; an aerial, mast or pole; a ventilator or chimney stack; or a fence which has a height of less than 1.3m.
- 2. Any buildings or any part of a building proposed to be erected on foreshore land shall be considered by Council as inconsistent with the objectives of this section.

7.3 Building envelope

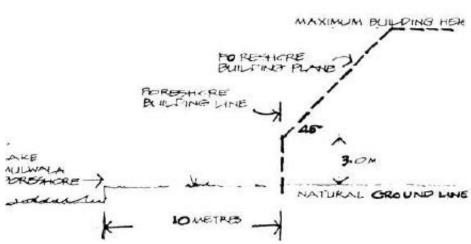
Objectives

- To soften the appearance of building along the lake foreshore.
- To avoid buildings dominating the foreshore landscape.

Standards

1. Any building to be erected on land adjoining foreshore land shall be contained within the building envelope depicted in the diagram below.

Note: The maximum building height is specified in Clause 4.3 of the CLEP.



- The 45° foreshore building plane is intended to form part of the limiting envelope for buildings adjoining foreshore land. It will not necessarily dictate the actual building profile.
- 3. Building elements that are of an open nature and specifically intended to assist in climate control, landscaping or softening the external appearance of building, may be permitted to extend beyond the building envelope. Such elements might include trellises, pergolas, open balustrades, window boxes or roof planting boxes.

7.4 Landscaping

Objectives

 To achieve a more natural appearance of the foreshores when viewed from the lake.

Standards

- Landscaping is required within the foreshore land in order to partially screen building from the lake. Tree and shrub species should be used which are sympathetic to the natural riverine environment.
- 2. Proposals are encouraged to soften roofline with roof landscaping and to soften facades with element such as window boxes, trellises' and pergolas planted with vines and creepers, especially for upper storeys.

7.5 Visual amenity

Objectives

 To soften the appearance of buildings along the lake foreshore.

Standards

- 1. On buildings facades or roofs visible from the lake or from foreshore public land, applicants should avoid:
 - highly reflective or very brightly coloured surfaces;
 - large flat unbroken expanses of wall or roof;
 - repetitive facades:
 - high solid fences; and
 - any other design element which will detract from the natural appearance of the lake foreshores.

7.6 Signage

Objectives

 To ensure views of the foreshores from the lake are not unduly affected by signage.

- Advertising signs on foreshore land and that adjoining must not be visible from Lake Mulwala.
- 2. Advertising signage will only be acceptable where the content relates to the use of the land upon which it is located.
- 3. Any signage Council considers to be excessive in size will be regarded as inconsistent with the objectives of this control.
- 4. All signage must not be intrusive in structure, design and colouring relative to the immediate character of the area in which it is located or from which is can be seen.

8.0

Urban Release Areas

8.0 URBAN RELEASE AREAS

This chapter of the CDCP applies to land shown on the Urban Release Area (URA) Map of the *Corowa Local Environmental Plan 2012* ("the LEP"). This land is essentially the 'greenfields' development areas to accommodate the future growth of Corowa, Howlong and Mulwala townships.

The overall objective of the chapter is to ensure the logical and cost-effective development of future urban land.

The chapter is in response to the direction of the Department of Planning and Infrastructure for Council to include Part 6 in the LEP relating to *Urban release areas*. Clause 6.3 of Part 6 prevents any

development within the URA unless in accordance with a DCP that addresses a range of development matters.

These requirements duplicate many of those already required by other chapters of the CDCP. Consequently compliance can be achieved by simply cross-referencing to the relevant section of other chapters.

Through this cross-referencing the requirements of Clause 6.3 of the LEP are deemed to be satisfied.

URA DCP REQUIREMENT	REQUIREMENTS FOR COMPLIANCE
A staging plan for the timely and efficient release of urban land making provision for necessary infrastructure and sequencing.	Satisfactory response to Section 2.17 of Chapter 2.0 of this CDCP.
An overall transport movement hierarchy showing the major circulation routes and connection to achieve a simple and safe movement system for private vehicles, public transport, pedestrians and cyclists.	Satisfactory response to Section 2.17 of Chapter 2.0 of this CDCP.
An overall landscaping strategy for the protection and enhancement of riparian areas and remnant vegetation, including visually prominent locations, and detailed landscaping requirement for both public and private domain.	Satisfactory response to Section 2.17 of Chapter 2.0 of this CDCP.
A network of passive and active recreational areas.	Satisfactory response to Section 2.17 of Chapter 2.0 of this CDCP.
Stormwater and water quality management controls.	Satisfactory response to Section 2.17 of Chapter 2.0 of this CDCP.
Amelioration of natural and environmental hazards, including bushfire, flooding and sire contamination and, in relation to natural hazards, the safe occupation of, and the evacuation from, any land so affected.	Satisfactory response to Section 2.17 of Chapter 2.0 of this CDCP.
Detailed urban design controls for significant development sites.	There are no "significant development sites" within the nominated URA areas. Consequently no response is necessary for this requirement.
Measure to encourage higher density living around transport, open space and service nodes.	The nominated URA areas are on the fringe of townships and unlikely to be developed for "higher density living". Consequently no response is necessary for this requirement.
Measures to accommodate and control appropriate neighbourhood commercial and retail uses.	No "neighbourhood commercial and retail uses" are planned for the nominated URA areas. Consequently no response is necessary for this requirement.
Suitably located public facilities and services, including the provisions for appropriate traffic management facilities and parking.	Satisfactory response to Section 2.17 of Chapter 2.0 of this CDCP.

9.0

Vegetation Removal

9.0 VEGETATION REMOVAL

This chapter of the CDCP applies to vegetation removal and should be read in conjunction with sections 5.9 and 5.9AA of the LEP. The purpose therefore of this chapter is to prescribe the species of tree and vegetation to which Section 5.9 of the LEP applies.

Section 5.9 of the LEP relates to the "preservation of trees or vegetation". It requires a development application to be lodged to "ringbark, cut down, top, lop, remove, injure or wilfully destroy" certain species of trees or vegetation nominated in a CDCP.

For the purpose of Clause 5.9 of the LEP, trees which meet the following criteria are prescribed:

(1) located in one of the following zones or areas:

RU5 Village;

R1 General Residential;

R2 Low Density Residential; and

R5 Large Lot Residential.

(2) are five metres or more in height; or trunk diameter of 20cm or more one metre above the ground and; (3) is of the following species:

River Red Gum Eucalyptus camaldulensis White Cypress Pine Callitris columellaris Black Cypress Pine Callitris endlicheri Blakely's Gum Eucalyptus blakelyi Yellow Box Eucalyptus melliodora **Grey Box** Eucalyptus microcarpa White Box Eucalyptus albens Cootamundra Wattle Acacia baileyana Gold Dust Wattle Acacia acinacea Pin Bush Wattle Acacia burkitti Jacaranda Jacaranda mimosifolia Flame Tree Brachychiton acerifolium

For trees and vegetation not covered by this chapter the relevant provisions of the

- Native Vegetation Act 2003
- Threatened Species Conservation Act 1995
- National Parks and Wildlife Act 1974

still applyunder which approval for vegetation removal may be required from a state government agency.

NOTE:

Although a particular species of tree or vegetation is nominated above, development consent may not be required to ringbark, cut down, top, lop, remove, injure or wilfully destroy it in certain circumstances. Reference should be made to Section 5.9 of the LEP to ascertain these circumstances and clarification sought from Council if necessary.

Under Section 5.9AA of the LEP consent is not required to ringbark, cut down, top, lop, remove, injure or destroy any tree or other vegetation not nominated in the above list.

10.0

Riparian Land

10.0 RIPARIAN LAND

The overall purpose of this chapter of the CDCP is to provide controls to minimise environmental impacts of development on riparian lands within the Shire. It also provides guidance regarding development and activity on the land and rivers to which it applies.

The land to which this chapter of the CDCP applies is land zoned in the *Corowa Local Environmental Plan 2012* (CLEP) as E3 Environmental Management, W1 Natural Waterways and W2 Recreational Waterways.

The controls should be read in conjunction with Sections 7.5, 7.6, and 7.7 of the CLEP relating to development on "wetlands", "river front areas" and "river bed and banks of the Murray River". In addition regard should be had for the requirements of Murray Regional Environmental Plan No. 2 – Riverine Land.

Note:

The term "top of the bank" is not defined in planning legislation or any environmental planning instrument (including the LEP). Consequently it falls to Council officers to make this interpretation when required. In most cases the "top of the bank" will be easily discernible, often being the erosion line or point at which the principal bank has collapsed. This criterion is likely to be adequate to determine the "top of the bank" along most sections of river within the Shire. In other cases the bank can be identified simply by a distinct change in slope between land in the river bed and that which isn't. It is appreciated that in some locations the bank may be difficult to identify in which case Council will make a determination based on the available evidence and information at hand.

OBJECTIVES

The specific objectives of this chapter are:

- (a) to protect environmentally significant riparian lands including environmentally sensitive land, wetlands, floodways and areas providing habitat for regionally representative flora and fauna;
- (b) to minimise riverbank erosion and avoid catchment run-off which would have a detrimental effect on water quality;
- to enhance the natural attributes of the river and riparian lands by supporting the natural ecosystems, rehabilitating degraded lands and enhancing visual amenity;
- (d) to provide adequately for all appropriate uses of the waterways in ways which avoid or reduce environmental degradation and minimise conflict between users and users;
- to provide for a wide range of recreational and tourist activities and facilities which are compatible with and enhance the values of riparian lands;
- (f) to restrict permissible activities to appropriate locations within the area to which this Plan applies; and
- (g) to ensure that development does not impede flood flow or flood storage.

The controls in this chapter are expressed firstly as an objective Council is seeking for development within watercourses and riparian land and secondly the development standards considered by Council to deliver these objectives. Compliance with all development standards should result in consistency with the objective and consequently the granting of development consent (if other SEPP and LEP requirements are also met). In exceptional circumstances Council may consider a variance to a development standard but only where the applicant has demonstrated in writing and/or with plans that the objectives can still be achieved.

INFORMATION REQUIREMENTS

When submitting an application for development on land to which this chapter applies, applicants will be required to provide an environmental report containing sufficient information for Council to give proper consideration to the proposal.

The extent of the information and the detail required will vary according to the size and complexity of the proposal and the sensitivity of the site. Applicants should seek early advice from Council when preparing an application, and must include information on any matters specifically requested.

The following checklist should be treated as a guide, to be read in conjunction with the matters listed in the CLEP and the requirements of other instruments or policies.

- (a) Description of the existing situation
 - A site plan or plans, and written information sufficient to describe clearly:
 - The boundaries and dimensions and relative location of the site;
 - The site topography including contours and natural drainage flows;
 - Existing buildings, fences, roads, tracks and paths;
 - Existing vegetation. Isolated species and main vegetation associations should be located and named on a site plan.
 - Existing agricultural uses and land capability;
 - Buildings and activities on adjacent properties;
 - Any flood-liable land or environmentally sensitive land, on the subject site or adjacent properties;
 - Any other relevant matter or requirement of Council.
- (b) Assessment of the likely impact of the proposed development:
 - Information in written and/or graphic form, explaining to Council's satisfaction, the likely impact of the proposal on:
 - Existing vegetation, particularly any trees which the applicant proposes to remove
 - The potential for regeneration of native flora
 - Native fauna and their habitat areas
 - Any wetland or environmentally sensitive land or area of heritage significance
 - Water quality and resources
 - Bank stability
 - Residential and visual amenity
 - Recreational and commercial use of the river

10.1 Visual amenity

Objectives

- To maintain and enhance the visual amenity afforded by the river and its environs.
- To ensure that development does not detract from the visual amenity of river users.
- To ensure that development on land to which this Plan applies is sympathetic to the existing rural character in terms of form, materials, exterior paint schemes and landscaping.

Standards

- All structures and buildings are to be designed to minimise the visual impact on the natural environment.
- 2. Large or bulky buildings and structures should not be located where they will be clearly visible from the river, roads, reserves or adjacent properties.
- 3. Buildings and structures are to utilise building materials and colours that blend with the natural environment. Materials and colours should be carefully chosen to complement the rural landscape. Bright or reflective colours (unless necessary for safety reasons) and materials will not be supported by Council.
- 4. In landscaping proposals, particular attention should be paid to rehabilitation of riverbank vegetation which will provide visual screening and assist bank stabilisation.
- 5. Siting of buildings and structures should take advantage of existing landforms and vegetation to provide substantial visual screening from the river, roads, public reserves and adjacent properties, to the satisfaction of the Council. Such natural advantages should be enhanced by appropriate landscaping.
- 6. Council may request a visual assessment be provided to accompany an application for development.

10.2 Riparian environment

Objectives

- To recognise and plan for the increasing community interest in protection of natural resources, for ecological, economic and recreational reasons.
- To ensure conservation, protection and management of the riparian environment.

- 1. In considering any application for development of land to which this chapter applies, the Council, will give priority to the protection, conservation and enhancement of :
 - (a) wetlands, floodways, sandhills or escarpments;
 - (b) environmentally sensitive land and areas of heritage significance;
 - (c) vegetation and/or wildlife corridors which can contribute to a linked network of nature conservation;
 - (d) areas which exhibit plant and animal communities which are representative of the natural species of the locality;
 - (e) areas which provide a habitat for rare and endangered species;
 - (f) areas displaying high ecological diversity;
 - (g) areas which are important breeding, nesting or feeding habitats, or seasonal refuges for fauna; and
 - (h) areas which can reinforce, act as buffers to, or otherwise complement the conservation value of existing State Forests or other substantial public reserves.
- In addition, Council will require and consider hydrological studies where a
 development will impede flood flow or flood storage. Council may consider limiting
 stock and public access where this is likely to degrade or prevent the regeneration
 of riparian lands.

10.3 Water quality & resources

Objectives

- To maintain or improve the quality of water in the Shire's water bodies.
- To maintain or improve the water yield characteristics of riparian lands in the Shire.
- To maintain or improve the quality of groundwater resources on riparian lands in the Shire.
- To maintain the attractiveness and recreational value of riparian lands and the Shire's water bodies.

Standards

- 1. A proposal for development on riverfront land should:
 - (a) avoid the entry of runoff from recreation areas, roads, parking areas or stock grazing areas directly to waterways, or ensure acceptable runoff quality;
 - (b) rehabilitate degraded lands which contribute to excess sedimentation of water bodies;
 - (c) ensure the viability of riparian vegetation by assisting regeneration and possibly restricting stock access to designated watering points;
 - (d) protect existing and proposed vegetated areas from destruction or damage;
 - (e) eliminate or adequately control river-bank erosion; and
 - (f) ensure toxic and chemical residues do not enter the water.
- 2. Council may require an applicant to prepare a plan of management for the proposed development including:
 - (a) measures proposed to ensure the maintenance or improvement of water quality in the vicinity and downstream of the proposed development;
 - (b) water quality targets;
 - (c) a water quality monitoring program; and
 - (d) contingency arrangements in the case of unsatisfactory performance.

10.4 Regeneration

Objectives

 To retain and enhance the natural distribution of riparian flora and fauna.

- 1. Development for any purpose on land to which this chapter applies must have no adverse impact on existing riparian flora or on its ability to regenerate.
- 2. Native species listed in the table appended to this chapter should be used in landscaping, rehabilitation works, and the enhancement of buffer areas and habitat corridors.
- 3. Planting for these purposes should provide a diversity of vegetation structure which will enhance the habitat value of vegetated areas for native fauna.
- 4. Appropriate native flora should be used for specific management works, e.g. for stabilisation of river banks, in preference to Willow trees.
- 5. Locally extinct flora should be re-introduced where appropriate, only after prior consultation with the relevant State Government department.
- 6. Where appropriate, weed control programs should be included in management plans.

10.5 Flora & fauna

Objectives

- To ensure the protection, conservation and enhancement of flora and fauna which serve important riparian functions.
- To encourage the provision of buffer areas and/or habitat corridor which will act to protect, expand and link existing area of conservation significance..

Standards

- 1. Vegetation within land to which this part applies is to be protected, conserved and enhanced if it:
 - (a) is rare/endangered;
 - (b) is characteristic of local plant association;
 - (c) mitigates soil erosion and salinity;
 - (d) enhances wildlife and fisher value;
 - (e) protects stream beds, banks and water quality;
 - (f) provides or has the potential to provide a buffer zone or wildlife corridor;
 - (g) assists in the rehabilitation of degraded lands;
 - (h) provides stock and/or crop shelter; and
 - (i) enhances visual amenity.

10.6 Buffer areas & habitat corridors

Objectives

 To encourage the provision of buffer areas and/or habitat corridors which will act to protect, expand and link existing areas of conservation significance.

Standards

- 1. A report is required that shall:
 - (a) identify any State Forest or public reserve adjacent to the site;
 - (b) identify any wetland or environmentally sensitive land contained by or adjacent to the site;
 - (c) identify areas which are adjacent to and capable of providing a buffer area for such areas;
 - (d) identify areas which are capable of providing a habitat corridor connecting with one or more of such areas;
 - (e) propose measure to assist weed eradication and the regeneration of native vegetation in proposed buffer areas and habitat corridors; and
 - (f) propose measure to protect proposed buffer areas and habitat corridors, by fencing or other means from intrusion by stock or vehicles or from other adverse impacts.
- 2. the measures nominated in 1(f) above may be included in a Plan of Management for the land if so required.

10.7 Liability & public safety

Objectives

 To protect the public from harm or injury from using approved river structures

- Any pontoons or walkways are to be provided with an engineer's certificate validating the structural integrity.
- 2. All private structures are to have restricted access and appropriate signage to prohibit unauthorised use.
- 3. Owners of public facilities are to supply Council with a copy of their public liability insurance.

10.8 Landscaping

Objectives

- To restore the riverine vegetation within the Murray Shire.
- To screen buildings and structures from the river.

Standards

- 1. All development applications are to include a landscaping plan.
- 2. Landscaping must utilise indigenous species of riparian vegetation.
- 3. Where land is degraded, landscaping shall include measures to rehabilitate these areas.
- 4. Landscaping must be designed to screen or at least soften the appearance of buildings and structures.

10.9 Unauthorised structures

Objectives

 To remove any unauthorised structures

Standards

- 1. All unauthorised structures must be removed from the watercourse. No retrospective development approvals will be issued on existing structures.
- 2. All removal of structures and remediation work is at the expense of the land owner.
- Any disturbance to the bank of the watercourse or surrounding area shall be rehabilitated at the land owner's expense and undertaken to the satisfaction of Council.

10.10 Management Plans

Objectives

- To ensure the establishment and continuation of appropriate management processes for riparian lands which may be affected by development activity.
- To make provision for monitoring of the effects of development.
- To establish contingency measures in case of future adverse impacts.

- The Council may require a Management Plan to be prepared and submitted as part
 of a development application or as a condition of consent for development on land
 to which this plan applies.
- Where a Management Plan is required to be prepared for any development activity on land to which this Plan applies, it shall describe the methods proposed to ensure conservation, protection and ongoing management and review of areas likely to be affected by the proposed development, whether or not such areas are on the same site as the proposed development.

11.0

Flood Risk Management

11.0 FLOOD RISK MANAGEMENT

The overall purpose of this chapter of the CDCP is to control development on flood liable land.

The land to which this chapter applies is that shown on the flood planning maps of the *Corowa Local Environmental Plan 2012* (CLEP) as "flood planning area".

Council may deem other land to be subject to this chapter where a flood history is known but the land is not included on the flood planning maps.

This chapter should be read in conjunction with Section 7.2 of the CLEP for *Flood planning*. In addition regard should be had for the requirements of *Murray Regional Environmental Plan No. 2 – Riverine Land*.

The chapter is based on the DCP prepared as part of the *Floodplain Risk Management Study* (FRMS) for Corowa, Howlong and Mulwala in 2009.

OBJECTIVES

The specific objectives of this chapter are:

- (a) to provide detailed controls and criteria for the assessment of development applications on land affected by flooding in Corowa Shire;
- (b) to minimise the potential impact of development and other activity upon the aesthetic, recreational and ecological value of the waterway corridors;
- (c) to increase public awareness of the hazard and extent of land affected by all potential floods, including floods greater than the 100 year average recurrence interval (ARI);
- (d) to ensure essential services and land uses are planned in recognition of all potential floods;
- (e) to inform the community of Council's policy for the use and development of flood prone land;
- (f) to reduce the risk of loss to human life and damage to property caused by flooding through controlling development on land affected by potential floods;
- (g) to apply a merit-based approach to all development decisions which takes account of social, economic, ecological and flooding considerations;
- (h) to control development and other activity within the Murray River floodplain within the LGA having regard to the characteristics and level of information available, in particular the availability of Corowa, Howlong and Mulwala FRMS's and FRMP's prepared in accordance with the Manual; and
- (i) to deal equitably and consistently with development applications on land affected by potential floods, in accordance with the principles contained in the Manual.

DEFINITIONS

The following definitions have been adopted for the purposes of this chapter.

Australian Height Datum (AHD)

Is a common national plain of level corresponding approximately to mean sea level.

Average Recurrence Interval (ARI)

Is the long-term average number of years between the occurrence of a flood as big as or larger than the selected event. For example, floods with a discharge as great as or greater than the 20 year ARI flood event will occur on average once every 20 years. ARI is another way of expressing the likelihood of occurrence of a flood event (see AEP).

Basement car parking

Car parking area generally below ground level or above natural ground level and enclosed by bunding, where inundation of the surrounding areas may raise water levels above the entry level to the basement, resulting in rapid inundation of the basement of depth greater than 0.8metres. Basement car parks are areas where the means of drainage of accumulated water in the car park has an outflow discharge significantly less than the potential inflow capacity.

Compensatory Works

Earthworks where material is excavated (or "cut") from one location in the floodplain and placed (or "filled")) at another location in the floodplain, with no net importation of fill material, such that the volume available for storage of flood waters is not altered for all food.

Conveyance

A direct measure of the flow carrying capacity of a particular cross-section of a system or stormwater channel. (for example if the conveyance of a channel cross-section is reduced by half, then the flow carrying capacity of that channel cross-section will also be halved)

Dam Crest Flood

The flood event which, when routed through the reservoir results in a still water level in the reservoir, excluding wave effects, which:

- For an embankment is the lowest point of the embankment crest;
- For a concrete dam is the uppermost level of crest, excluding handrails, and normally parapets unless the parapet is capable of supporting the flood surcharge load;
- For a concrete faced rockfill dam, is the lowest point of the crest, unless a parapet is capable of supporting the flood surcharge load.

Design floor level or ground level

Is the minimum floor level that applies to the development. If the development is concessional development, this level is determined based on what land use category would apply if it was not categorised as Concessional Development. The floor level standards specified for the relevant land use category (excluding Concessional Development) in the low flood risk precinct are to be applied.

Effective warning time

Is the time available after receiving advice of an impending flood and before the floodwaters prevent appropriate flood response action being undertaken. The effective warning time is typically use to move farm equipment, move stock, raise furniture, evacuate people and transport their possessions.

Extreme flood

An estimate of the probable maximum flood and/or dambreak flood, which is the largest flood likely to ever occur.

Filling

Is the placement of earth material onto a site above existing ground levels. This is excluding where this results in the increase of ground levels by up to 100mm across 50% of the sire or 250 square metres (whichever is the lesser), or the raising of ground levels across part of a site as a result of compensatory earthworks. Such works are to form part of a proposed use, which is otherwise permitted and assessed as part of that proposal.

Flood

Is a relatively high stream flow which overtops the natural and artificial banks in any part of a stream, river, estuary, land or dam, and/or local overland flooding associated with major drainage as defined by the Manual before entering a watercourse.

Flood awareness

Is an appreciation of the likely effects of flooding and a knowledge of the relevant flood warning and evacuation procedures.

Flood compatible building components

A combination of measures incorporation in the design and/or construction and alteration of individual buildings or structure subject to flooding, and the used of flood compatible materials for the reduction or elimination of flood damage.

Flood effects

Refer to the definition of the term 'not increase flood effects elsewhere'

Flood evacuation strategy The proposed strategy for the evacuation of areas within effective warning time during periods of flood as specified within any policy of Council, the FRMP, the relevant SES Flood Plan, by advices received from the State Emergency Services (SES) or as determined in the assessment of individual proposals.

Flood prone land

(being synonymous with *flood liable* and *floodplain*) is the area of land which is subject to inundation by the probable maximum flood (PMF).

Flood storage areas

Flood storage areas are those parts of the floodplain utilised for the temporary storage of floodwaters during the passage of a flood. Substantial reduction of the capacity of flood storage in an area may cause a significant redistribution of flood flows or increase peak discharge downstream.

Floodplain Development Manual (Manual) The document gazetted in May 2005, published by the New South Wales Government and entitled "Floodplain Development Manual: the management of flood liable land"

Floodplain Risk Management Plan (FRMP) A plan prepared for one or more floodplains in accordance with the requirements of the Manual.

Floodplain Risk Management Study (FRMS) A study prepared for one or more floodplains in accordance with the requirement of the Manual.

Floodway

The area of the floodplain where is significant discharge of water occurs during flood. Should the area within this boundary be fully or practically blocked, a significant distribution of flood flows or increase in flood levels would occur.

Freeboard

A factor of safety expressed as the height above the design flood level. Freeboard provides a factor of safety to compensate for uncertainties in the estimation of flood levels across the floodplain, such and water action, localised hydraulic behaviour and impact that are specific even related, such as levee and embankment settlement, and other effect such as "greenhouse" and climate change.

Habitable Floor Area

- In a **residential situation**: a living or working area, such as a lounge room, dining room, rumpus room, kitchen, bedroom or workroom;
- In a industrial or commercial situation: and area used for offices or to store valuable possessions susceptible to flood damage in the event of a flood.

Hazard

A source of potential harm or a situation with a potential to cause loss. In relation to this plan, the hazard is flood which has the potential to cause harm or loss to the community.

Increase Flood Effects

(refer to the definition of the term 'not increase flood effects elsewhere').

Local overland flooding

means inundation by local runoff rather than overbank discharge from a stream, river, estuary, lake or dam.

Merit approach

is an approach, the principles of which are embodied in the Manual which weighs social, economic and ecological impacts of land use options for different flood prone areas together with flood damage, hazard and behaviour implications, environmental protection and well being of the State's rivers and floodplains.

Not increase flood effects elsewhere, or no increase in flood effects elsewhere For land beyond the sire the subject of the proposal:

- (a) No increase in flood levels or velocities in all floods up to and including the 100 year ARI flood; and
- (b) For the probable maximum flood (PFM) and all flood between the PMF and the 100 year flood no significant increase in flood levels and velocities.

Outbuilding

A building which is ancillary to a principal residential building and includes sheds,

garages, car ports and similar buildings.

Probable Maximum Flood (PMF)

The largest flood that could conceivably occur at a particular location usually estimated from probable maximum precipitation.

Probable Maximum Precipitation (PMP)

The greatest depth of precipitation for a given duration meteorologically possible over a given size storm area at the particular location at a particular time of the year, with no allowance made for long-term climatic trends (World Meteorological Organisation, 1986). Is it the primary input to the estimation of the probable

maximum flood.

Probability A statistical measure of the expected change of flooding (see ARI)

Rebuilt dwelling The construction of a new dwelling on an allotment where an existing dwelling is

demolished.

During a flood means the ability for people to safely evacuate an area subject of Reliable access

flooding, having regard to the depth and velocity of floodwaters, the suitability of the evacuation route, and without a need to travel areas where water depth increase.

Risk The chance of something happening that will have an impact. It is measured in

terms of consequences and probability (likelihood). In the context of this chapter, it

is the likelihood of consequences arising from the interaction of floods.

communities and the environment.

Site emergency response flood plan (not being the SES

Survey Plan

Is a management plan that demonstrates the ability to safely evacuate person and include a strategy to move goods above the flood level within the available warning time. This Plan must be consistent with any flood evacuation strategy, flood plan or

Flood Plan) similar plan adopted by Council.

> A plan prepared by a registered surveyor which shows the information required for the assessment of an application in accordance with the provisions of this Chapter.

11.1 Decision guidelines

Proposed developments will be considered on their merits in terms of flooding impacts. Issues to be taken into consideration regarding the particular merits of development on flood liable land include the following:

The criteria for determining applications for development potentially affected by flooding are structured in recognition that different controls are applicable to different land uses and levels of potential flood inundation and hazard.

The procedure to determine what controls apply to proposed development involves:

- firstly, identifying the land use category of the development (Table 11.3);
- secondly, determine which part of that floodplain the land is located within (Section 11.5) and
- then apply the relevant controls.

Clauses provide specific requirements for fencing in the floodplain and special considerations which will apply only to some development in specific circumstances.

- The objectives represent the outcomes that the Council wishes to achieve from each control.
- The performance criteria represent a means of assessing whether the desired outcomes will be achieved.
- The prescriptive controls are preferred ways of achieving the outcome. While adherence to the prescriptive controls may be important, it is paramount that the objectives and the performance criteria are clearly satisfied.

Eight major land use categories have also been identified adopted for the purposes of this plan. The specific uses, as defined by the applicable Environmental Planning Instruments, which may be included in each category are shown in Table 11.3 below.

11.2 Special Considerations

When assessing proposals for development or other activity within the area to which this Policy applies, Council will take into consideration the following specific matters:

- (a) The proposal does not have a significant direct or cumulative detrimental impact on:
 - (i) water quality;
 - (ii) native bushland vegetation;
 - (iii) riparian vegetation;
 - (iv) estuaries, wetlands, lakes or other water bodies considered to be a flood dependent ecosystem;
 - (v) aquatic and terrestrial ecosystems;
 - (vi) indigenous flora and fauna; or
 - (vii) fluvial geomorphology.
- (b) Development pursued to mitigate the potential impact of flooding (e.g. house raising) must be undertaken in a manner which minimises the impact upon the amenity and character of the locality.
- (c) The proposal must not constrain the orderly and efficient utilisation of the waterways for multiple purposes.
- (d) The proposal must not adversely impact upon the recreational, ecological, aesthetic or utilitarian use of the waterway corridors, and where possible, should provide for their enhancement, in accordance with ecologically sustainable development principles.
- (e) Proposals for house raising must provide appropriate documentation including a report from a suitably qualified engineer to demonstrate the raised structure will not be at risk of failure from the forces of floodwaters and the provision of details such as landscaping and architectural enhancements which ensure that the resultant structure will not result in significant adverse impacts upon the amenity and character of an area.

Note: Council will not permit any type of development that would be inconsistent with the objective of discouraging further development in areas of high risk.

Table 11.3 – Land Use categories

Land Use Category	Activities								
Critical Uses and Facilities	Community facility which may provide an important contribution to the notification or evacuation of the community during flood events; Hospitals; Nuclear activities; Nuclear facility; and Nursing Homes.								
Sensitive Uses and Facilities	Assisted accommodation; Communications facility; Hazardous or offensive industry or storage establishment; Housing for older persons or persons with a disability (or aged or disabled persons); Institutions; Educational establishments; Liquid fuel depot; Utility installations or undertakings (including generating works) undertakings which are essential to evacuation during periods of flood or if affected would unreasonably affect the ability of the community to return to normal activities after flood events; Telecommunication facilities; and Waste disposal.								
Subdivision	Subdivision of land that involves the creation of new allotments, with potential for further development.								
Residential	Bed and breakfast premises; Boarding houses; Camp or caravan park—long-term ⁽¹⁾ sites only; Cottage industry; Dual occupancy housing; Dwelling; Dwelling house; Exhibition home; Exhibition village; Family day care centre; Group homes; Health consulting rooms; Home-based child care service; Home business; Home occupation; Integrated housing; Multiple dwellings; Permanent group home; Residential flat building; Serviced apartments; Transitional group home; and Utility installations or undertakings (other than critical utilities) (1) As defined by the <i>Local Government (Caravan Park and Camping Grounds) Transitional Regulation 1993</i> .								
Commercial or Industrial	Abattoir; Animal boarding or training establishment; Brothels; Bulky goods salesroom or showroom; Business premises; Child care centre; Commercial facilities; Heliports; Heavy Industry; Highway service centre; Hotel; Industry; Light Industry; Materials recycling yard; Medical centre; Motel; Motor showroom; Office premises; Passenger transport terminal; Place of public worship; Plant hire; Public building; Recreation facility; Registered club; Research establishment; Research facility; Restaurant; Road transport terminal; Roadside stall; Rural industry; Sawmill; Service station; Shop; Transport depot; Vehicle body repair workshop; Vehicle repair station; Veterinary hospital; and Warehouse or distribution centre.								
Tourist Related Development	Caravan park – short term sites ⁽¹⁾ only ⁽¹⁾ As defined by the <i>Local Government (Caravan Park and Camping Grounds) Transitional Regulation 1993.</i>								
Recreation or Non- urban Uses	Agriculture; Aquaculture; Dam; Extractive industry; Forestry; Helicopter landing site; Intensive livestock agriculture; Intensive plant agriculture; Leisure area; Mine; Marina; Recreation areas and minor ancillary structures (e.g. toilet blocks or kiosks); Retail plant nursery; stock and sale yard; and Turf farming.								
Concessional	(a) In the case of residential development:								
Development	(i) An addition or alteration to an existing dwelling of not more than 30m ² (or 50 m ² on land not zoned for urban purposes) or 10% (whichever is the lesser) of the habitable floor area which existed at the date of commencement of this Plan;								
	(ii) The construction of an outbuilding with a maximum floor area of 20m ² (or 50m ² on land not zoned for Urban purposes); or								
	(iii) Rebuilt dwellings which substantially reduces the flood risk having regard to property damage and personal safety; or								
	(iv) In the case of other development:								
	(v) an addition to existing premises of not more than 10% of the floor area which existed at the date of commencement of the CDCP;								
	(vi) Rebuilding of an development which substantially reduces the flood risk having regard to property damage and personal safety;								
	(vii) A change of use which does not increase flood risk having regard to property damage and personal safety; or								
	(viii) Subdivision that does not involve the creation of new allotments with potential for further development.								

11.3 Required Information

The following provides a list of required information for development undertaken with land identified as being flood prone.

- 1. Applications must include information which addresses all relevant matters listed above, and the following matters as applicable.
- Applications for Concessional Development to an existing dwelling on Flood Prone Land shall be accompanied by documentation from a registered surveyor confirming existing floor levels.
- Development applications affected by this plan shall be accompanied by a survey plan showing:-
 - (a) The position of the existing building/s or proposed building/s;
 - (b) The existing ground levels to Australian Height Datum around the perimeter of the building and contours of the site; and
 - (c) The existing or proposed floor levels to Australian Height Datum.
- 4. Applications for earthworks, filling of land and subdivision shall be accompanied by a survey plan (with a contour interval of 0.25m) showing relative levels to Australian Height Datum.
- For large scale developments, or developments in critical situations, particularly where an existing catchment based flood study is not available, a flood study using a fully dynamic one or two dimensional computer model may be required.

For smaller developments the existing flood study may be used if available and suitable (e.g. it contains sufficient local detail), or otherwise a flood study prepared in a manner consistent with the publication entitled "Australian Rainfall and Runoff – A Guide To Flood Estimation|| (Institution of Engineers, Australia, Revised Edition 1987)||, Council's Drainage Design Code and the Floodplain Development Manual, will be required.

- 6. Where the controls for a particular development proposal require an assessment of structural soundness during potential floods, the following impacts must be addressed:
 - (f) hydrostatic pressure;
 - (g) hydrodynamic pressure;
 - (h) impact of debris; and
 - (i) buoyancy forces.

Foundations need to be included in the structural analysis.

11.4 Assessing Flood Effects

In order to satisfy the requirement that the development will "not increase flood effects elsewhere", the applicant must demonstrate (and in some cases be certified by an engineer) that:

(a) for a range of flood sizes:

- (i) up to and including the 100 year ARI flood; and
- (ii) greater than the 100 year ARI flood, and including the probable maximum flood (PMF);
- (a) the requirements of **Table 11.4** (below) are satisfied having regard to:
 - (i) changes in flood storage volume;
 - (ii) changes in flood conveyance; and
 - (iii) cumulative impacts.

This section describes the methods for assessing flood effects of all proposed developments. The two methods are:

- Assessment Method 1 Cross-section Analysis (No Computer Modelling);
- Assessment Method 2 Use of Existing Flood Study or Preparation of Site-Specific Flood Study (Computer Modelling).

Method 1 will be used for all assessments. For larger developments, developments in sensitive areas, or where special circumstances exist, both Methods 1 and 2 must be used.

Both Assessment Methods need to be carried out by an experienced flood engineer using method(s) as appropriate to the development. In some circumstances, Council may determine the method(s) to be used.

ASSESSMENT METHOD 1 — Cross-section Analysis (No Computer Modelling)

This method does not require computer modelling. It checks for changes in conveyance and flood storage volume at critical cross sections only through the proposed development.

This approach, whilst simpler than computer modelling, assumes a thorough knowledge of the flood behaviour. This ensures the cross-section locations are representative of the principal impacts of the development.

In addition to the survey plan to be prepared in accordance with Section 12.3 above, the following information shall be submitted in plan form, accompanied by appropriate supporting written information:

- flood levels and extents for this method, this information would be normally available from previous studies or Council's GIS data base. All available flood sizes would be shown;
- 2. **Flood Risk Precincts** this information would be normally available from previous studies or Council's GIS data base;
- cross-sections through site as a guide, the following cross-section information would be provided:
 - (a) a minimum of 5 cross-sections, at a maximum distance of 20m apart, should be

taken through the site, perpendicular to the likely flow path (i.e. the direction of the cross-section may not necessarily be in a single straight line);

- one cross-section should be at the upstream end and one cross-section at the downstream end of the proposed development site;
- (ii) cross-sections should extend at least as high as the highest flood level available at the site and be wide enough to cover the full width of the floodplain at that location;
- (iii) the cross-sections should be plotted at a suitable exaggerated scale (i.e. the vertical scale is not necessarily the same as the horizontal scale).
- 4. pre-development and post development ground surface levels this information should be shown on each cross-section, with areas of cut and fill clearly shown.
- check on —Loss of Flood Storage Volume the total cut and fill volumes should be calculated using the ground surface information on the cross-sections described above.

If there is NO NET FILLING as part of the proposed development, then the development will —NOT INCREASE FLOOD EFFECTS ELSEWHERE|| due to —LOSS OF FLOOD STORAGE VOLUME||.

If there is NET FILLING because of the proposed development, refer to Table 1 to determine if the development will "increase flood effects elsewhere||.

If there is NET FILLING because as part of the proposed development, Council may not consider the development further, particularly if the site lies within a *Flood Storage Area*.

If Council is to consider the development further, then Assessment Method 2 is likely to be required.

Check on —Loss of Flood Conveyance- the flood conveyance should be calculated at each cross-section for pre-development and postdevelopment conditions. Flood conveyance should be calculated at a range of water levels (say 5), at each cross-section, including the 100 year and PMF. All assumptions, particularly those relating to hydraulic roughness, must be documented, especially where the development results in a change in hydraulic roughnesses. If there is NO CHANGE IN THE FLOOD CONVEYANCE because of the proposed development, it is unlikely that the development will —INCREASE FLOOD EFFECTS ELSEWHERE|| due to a -LOSS OF FLOOD CONVEYANCE||.

If there is a CHANGE IN THE FLOOD CONVEYANCE because of the proposed development, refer to Table 1 to determine if the development will —increase flood effects elsewherell.

If the proposed development lies within the *Floodway*, then there is likely to be an —increase in flood effects elsewhere|| and Council will not consider it further, unless there are special circumstances.

If there is a CHANGE IN THE FLOOD CONVEYANCE because of the proposed development, Council may not consider the development further.

If Council is to consider the development further, then Assessment Method 2 is likely to be required.

ASSESSMENT METHOD 2 — Use of Existing Flood Study or Preparation of Site-Specific Flood Study (Computer Modelling)

This method requires computer modelling. An existing flood study model may be used if available and suitable (e.g. it contains sufficient local detail).

For large scale developments or developments in critical situations, a flood study using a fully dynamic one or two dimensional hydraulic computer model may be required.

Such a flood study would be prepared in a manner consistent with Australian Rainfall and Runoff — A Guide to Flood Estimation (Institution of Engineers, Australia, 1987), Council's Drainage Design Code and the Floodplain Development Manual.

In addition to the survey plan information to be submitted in accordance with Section 12.3 above, the following information shall be submitted in plan form for both predevelopment and post-development scenarios for a range of flood sizes:

- water surface contours these should be provided in metres to Australian Height Datum (m AHD);
- flood profiles these should be provided at a suitable vertical and horizontal scale such that any changes in flood levels are easily identified;
- velocity vectors these show direction and relative size of flood velocities and should be provided in metres per second (m/s);
- contours of flood velocities multiplied by depth of flooding over ground level — these should be provided to one decimal place;

A range of flood sizes should be chosen so that the full impacts of the development can be assessed. Typically, the flood sizes to be considered would be: a 5 year ARI, 20 year ARI, 50 year ARI, 100 year ARI, 200 year ARI, 500 year ARI and a probable maximum flood.

For the post-development scenario, all proposed works and structures, including any revegetation and enhancements should be included in the analysis.

The delineation of flood risk precincts relevant to the individual floodplains should also be depicted in plan form.

All assumptions relating to hydraulic roughness should be clearly documented.

Refer to **Table 11.4** below to determine if the development will —*increase flood effects elsewhere*||. Note that flood levels and velocities need to be computed not only at the site but also at an appropriate distance upstream and downstream to allow the principal impacts of the development to be determined.

Note that when reporting and comparing flood levels, levels should be quoted in m AHD to two decimal places (i.e. to the nearest 10mm) (e.g. 7.56m AHD, 67.45m AHD, 567.35m AHD, etc). Differences in flood levels should also be provided to two decimal places. Similarly velocities should be quoted to one decimal place in metres per second (e.g. 1.2m/s, 3.4m/s, etc). Differences in flood velocities should also be provided to one decimal place.

Note that a zero difference in flood level or flow velocity may not necessarily imply that the development will "not increase flood effects elsewhere|| — only that the change is less than 10mm for flood levels or 0.1m/s for flow velocities.

Similarly, establishing that the change in level or velocity is within the accuracy of the modelling does not, by itself, establish that there is "no increase in flood effects elsewhere".

Table 12.3 – Assessment of Flood Effects

	FLC	OOD SIZES FOR ASSESSMENT		
CONSIDERATION	100	Year ARI and Smaller Floods	PM	F and Floods between the 100 Year ARI and the PMF
Change in Flood Storage Volume — leading to an increase in downstream flood flows and/or flood	1.	No reduction in the existing flood storage volume will be permitted as this will lead to an increase in flood flows and flood levels downstream for these floods.	1.	No significant increases in downstream flood flows and/or flood levels will be permitted. Council will determine the definition of 'significant' on a case-by-
levels	2.	Where a <i>Flood Storage Area</i> has been defined, any development involving filling inside this area will be unsuitable, except for _net filling' (see Note 2).		case basis.
	3.	Elsewhere within the Medium and High Flood Risk Precincts, any development involving filling will be unsuitable except for _net filling (see Note 2) or where permitted under a filling policy approved by Council.		
	4.	If the development is wholly located within the Low Flood Risk Precinct, it will not be inundated by these floods and therefore assessment for 100 year ARI and smaller floods is not required.		
Change in Flood Conveyance — leading to redistribution of flood velocities and/or an increase in	1.	No reduction in the existing flood <i>conveyance</i> will be permitted as this will lead to an increase in upstream flood levels and/or redistribution of flood velocities.	1.	No significant increases in upstream flood levels and/or significant changes in velocity distributions will be permitted. Council will determine the definition of
upstream flood levels	2.	See Assessment Procedures in this Schedule to determine conveyance changes and flood changes resulting from the development.	2.	'significant' on a case-by-case basis. See Assessment Procedures in this Schedule to determine conveyance changes and flood changes
	3.	Where a <i>Floodway</i> has been defined, any development inside this area will be unsuitable (see Note 1).		resulting from the development.
	4.	If the development is wholly located within the Low Flood Risk Precinct, it will not be inundated by these floods and therefore assessment for 100 year ARI and smaller floods is not required.		
Cumulative Impacts —of multiple potential developments	1.	An assessment of cumulative impacts will not be required if there is n flood conveyance. In addition, where the development is located who assessment will generally not be required, except in special circumsta	lly in t	the Low Flood Risk Precinct, cumulative impact
	2.	The nature of the cumulative development scenario to be tested will r	need t	o be determined in consultation with Council.
	3.	Generally, any increase in flood levels for floods up to the 100 year A problems.	.RI wil	I be unacceptable as it will exacerbate existing flood
	4.	For these and larger floods, Council, by reference to its Floodplain Riconsideration of the social, economic and environmental issues and t		
	5.	Such cumulative assessments are best carried out as part of Council	's <i>Fl</i> o	odplain Risk Management Studies

11.5 Flood Risk Precincts

Each of the floodplains within the local government area can be divided based on different levels of potential flood risk. The relevant Flood Risk Precincts (FRP's) for each of the floodplains are outlined below.

High Flood Risk Precinct (High Hazard Floodway)

This has been defined as the area of land below the 100 year ARI flood that is either subject to a high hydraulic hazard or where there are significant evacuation difficulties. Note: The high flood risk precinct is where high flood damages, potential risk to life, evacuation problems would be anticipated or development would significantly and adversely affect flood behaviour. Most development should be restricted in this precinct. In this precinct, there would be a significant risk of flood damages without compliance with flood related building and planning controls.

Medium Flood Risk Precinct (Low Hazard Flood Fringe)

This has been defined as land below the 100 year ARI flood that is not subject to a high hydraulic hazard and where there are no significant evacuation difficulties. Accordingly, the area in this precinct is all the land lower than the 100 year ARI flood level that is not in the High Flood Risk Precinct. Note: In this precinct there would still be a significant risk of flood damage, but these damages can be minimised by the application of appropriate development controls, especially where this precinct immediately abuts land above the 100 year ARI flood level.

Low Flood Risk Precinct (Outer Floodplain)

This has been defined as all other land within the floodplain (i.e. within the extent of the probable maximum flood) but not identified within either the High Flood Risk or the Medium Flood Risk Precinct. Note: The Low Flood Risk Precinct is where risk of damages is low for most land uses. The Low Flood Risk Precinct is that area above the 100 year flood and not within a flood storage area, and most land uses would be permitted within this precinct.

11.6 Development Controls

The development controls apply to all land within a Flood Risk Precinct described above. The type and stringency of controls have been graded relative to the severity and frequency of potential floods, having regard to categories determined by the Corowa, Howlong and Mulwala Floodplain Risk Management Study and Plan.

11.6.1 Murray River Floodplain Planning & development controls

		Low Flood Risk (Outer Floodplain)							Medium Flood Risk (Low Hazard Flood Fringe)							Н	High Flood Risk (High Hazard Floodway)							
Planning Consideration	Critical Uses & Facilities	Sensitive Uses & Facilities	Subdivision	Residential	Commercial & Industrial	Tourist Related Development	Recreation & Non-Urban	Concessional Development	Critical Uses & Facilities	Sensitive Uses & Facilities	Subdivision	Residential	Commercial & Industrial	Tourist Related Development	Recreation & Non-Urban	Concessional Development	Critical Uses & Facilities	Sensitive Uses & Facilities	Subdivision	Residential	Commercial & Industrial	Tourist Related Development	Recreation & Non-Urban	Concessional Development
Floor Level		3		2,6,7	5,6,7	2,6,7	1,6	4,7				2,6,7	5,6,7	2,6,7	1,6	4,7				1,2,5	1,2, 5		1,6	4,7
Building Components		2		1	1	1	1	1				1	1	1	1	1				1	1		1	1
Structural Soundness		3		2	2	2	2	2				1	1	1	1	1				3	3		1	1
Flood Effects		2	2	2	2	2	2	2			1	2	2	2	2	2				2	2		1	1
Evacuation		2,3, 4	6	2,3	1 or 2,3	2,3	4,3	2,3			6	2,3	1,3	2,3	4,3	2,3				1,2,3,5	1,2, 3,5		4,3	2,3
Management & Design		4,5	1		2,3,5	2,3,5	2,3,5	2,3,5			1		2,3,5	2,3,5	2,3,5	2,3,5							2,3, 5	2,3,5
			Not F	Relevant						Pote	entially	Unsuita	ble Land	d Use					Specia	al Conditio	ns (Gen	eral No	te 4)	

General Notes

- 1 Freeboard equals an additional height of 500mm.
- The relevant environmental planning instruments (generally the Local Environmental Plan) identify development permissible with consent in various zones in the LGA. Notwithstanding, constraints specific to individual sites may preclude Council granting consent for certain forms of development on all or part of a site. This matrix identifies where flood risks are likely to determine where certain development types will be considered "potentially unsuitable" due to flood related risks.
- 3 Filling of the site, where acceptable to Council, may change the FRP considered to determine the controls applied in the circumstances of individual applications.
- The rear portion of a dwelling is able to be located within either the High or Medium Flood Risk Precinct, subject to habitable rooms being located 500mm above the 100 year ARI level and the front of the dwelling is located on a minimum of 550 m2 land that is above the 100 year ARI flood level and has direct access to land that is above the 100 year ARI flood level.
- From time to time, Council may adopt mapping showing the *Flood Precincts* for this floodplain. Refer to Council to find out if these areas have been defined and mapped for this floodplain
- development that produces sewerage wastes shall not be developed on medium or high risk flood land unless it is connected to Council's sewerage system and arrangements suitable to Council have been made for the disposal of wastes in a manner that is not likely to cause pollution.

Floor Level

- 1 All floor levels to be no lower than the 20 year flood unless justified by site specific assessment.
- 2 Habitable floor levels to be no lower than the 100 year flood level plus freeboard.
- 3 Habitable floor levels to be no lower than the DCF level. Non-habitable floor levels to be no lower than the DCF level unless justified by a site specific assessment.
- 4 Floor levels to be no lower than the *design floor level*. Where this is not practical due to compatibility with the height of adjacent buildings, or compatibility with the floor level of existing buildings, or the need for access for persons with disabilities, a lower floor level may be considered. In these circumstances, the floor level is to be as high as practical, and, when undertaking alterations or additions no lower than the existing floor level.

- The level of *habitable floor areas* to be equal to or greater than the 100 year *flood* level plus *freeboard*. If this level is impractical for a development in a Business zone, the floor level should be as high as possible.
- 6 Non-habitable floor levels to be no lower than the 20 year flood unless justified by site specific assessment.
- A restriction is to be placed on the title of the land, pursuant to S.88B of the Conveyancing Act, where the lowest habitable floor area is elevated more than 1.5m above finished ground level, confirming that the undercroft area is not to be enclosed.

Building Components and Method

- 1 All structures to have *flood compatible building components* below the 100 year flood level plus *freeboard*.
- 2 All structures to have flood compatible building components below the DCF level.

Structural Soundness

- 1 Engineer's report to certify that the structure can withstand the forces of floodwater, debris and buoyancy up to and including a 100 year flood plus *freeboard*.
- Applicant to demonstrate that any structure can withstand the forces of floodwater, debris and buoyancy up to and including a *DCF* An engineers report may be required.
- 3 Applicant to demonstrate that the structure can withstand the forces of floodwater, debris and buoyancy up to and including a 100 year flood plus *freeboard*. An engineer's report may be required.

Flood Effects

- Engineer's report required to certify that the development will not increase flood effects elsewhere, having regard to: (I) loss of flood storage; (ii) changes in flood levels and velocities caused by alterations to the flood *conveyance*; and (iii) the cumulative impact of multiple potential developments in the floodplain.
- The flood impact of the development to be considered to ensure that the development will not increase flood effects elsewhere, having regard to: (I) loss of flood storage; (ii) changes in flood levels and velocities caused by alterations to the flood *conveyance*; and (iii) the cumulative impact of multiple potential developments in the floodplain. An engineer's report may be required.

Evacuation

- 1 Reliable access for pedestrians or vehicles required to a publicly accessible location above the DCF.
- 2 Adequate flood warning is available to allow safe and orderly evacuation without increased reliance upon the SES or other authorized emergency services personnel.
- 3 The development is to be consistent with the *Floodplain Risk management Plan adopted by Council* or SES Local Flood Plan.
- The evacuation requirements of the development are to be considered. An engineers report will be required if circumstances are possible where the evacuation of persons might not be achieved within the *effective warning time*.
- 5 Reliable access for pedestrians or vehicles required during a 100 year flood.
- Applicant to demonstrate that evacuation in accordance with the requirements of this CDCP is available for the potential development flowing from the subdivision proposal.

Management and Design

- Applicant to demonstrate that potential development as a consequence of a subdivision proposal can be undertaken in accordance with this DCP.
- Site Emergency Response Flood Plan required where floor levels are below the design floor level, (except for single dwelling-houses).
- 3 Applicant to demonstrate that area is available to store goods above the 100 year flood level plus freeboard
- 4 Applicant to demonstrate that area is available to store goods above the PMF level
- No storage of materials below the design floor level which may cause pollution or be potentially hazardous during any flood.

11.7 Flood Compatible Building Components and Materials

For the purposes of this chapter, the following lists building materials which are resistant to damage when inundated, as well as components and measures incorporated in the design and/or construction and alteration of individual buildings or structures subject to flooding, which are considered to assist with the reduction or elimination of flood damage

Table 12.5 – Flood compatible building components and materials

Building Component	Flood Compatible Material	Building Component	Flood Compatible Material
Flooring and Subfloor Structure	concrete slab-on-ground monolith construction suspension reinforced concrete slab.	Wall Structure	solid brickwork, blockwork, reinforced, concrete or mass concrete
Doors	solid panel with water proof adhesives flush door with marine ply filled with closed cell foam painted metal construction on aluminium or galvanised steel frame	Insulation Windows	foam (closed cell types) aluminium frame with stainless steel rollers or similar corrosion and water resistant material.
Floor Covering	clay tiles concrete, precast or in situ " concrete tiles epoxy, formed-in-place mastic flooring, formed-in- place rubber sheets or tiles with chemical-set adhesives silicone floors formed in- place vinyl sheets or tiles with chemical-set adhesive ceramic tiles, fixed with mortar or chemical-set adhesive asphalt tiles, fixed with water resistant adhesive	Roofing Structure (for Situations Where the Relevant Flood Level is Above the Ceiling)	reinforced concrete construction galvanised metal construction
Wall and Ceiling Linings	fibro-cement board brick, face or glazed clay tile glazed in waterproof mortar concrete concrete block steel with waterproof applications stone, natural solid or veneer, waterproof grout glass blocks glass plastic sheeting or wall with waterproof adhesive	Nails, Bolts, Hinges and Fittings	brass, nylon or stainless steel removable pin hinges hot dipped galvanised steel wire nails or similar

Table 12.6 – Flood compatible response for ancillary building components

Component	Flood Compatible Response
Electrical and Mechanical Equipment	For dwellings constructed on land to which this Policy applies, the electrical and mechanical materials, equipment and installation should conform to the following requirements.
Heating and Air Conditioning Systems	Heating and air conditioning systems should, to the maximum extent possible, be installed in areas and spaces of the house above the relevant flood level. When this is not feasible every precaution should be taken to minimise the damage caused by submersion according to the following guidelines.
Main power supply	Subject to the approval of the relevant authority the incoming main commercial power service equipment, including all metering equipment, shall be located above the relevant flood level. Means shall be available to easily disconnect the dwelling from the main power supply.
Fuel	Heating systems using gas or oil as a fuel should have a manually operated valve located in the fuel supply line to enable fuel cut-off.
Wiring	All wiring, power outlets, switches, etc., should, to the maximum extent possible, be located above the relevant flood level. All electrical wiring installed below the relevant flood level should be suitable for continuous submergence in water and should contain no fibrous components. Earth core linkage systems (or safety switches) are to be installed. Only submersible-type splices should be used below the relevant flood level. All conduits located below the relevant designated flood level should be so installed that they will be self-draining if subjected to flooding.
Installation	The heating equipment and fuel storage tanks should be mounted on and securely anchored to a foundation pad of sufficient mass to overcome buoyancy and prevent movement that could damage the fuel supply line. All storage tanks should be vented to an elevation of 600 millimetres above the relevant flood level.
Equipment	All equipment installed below or partially below the relevant flood level should be capable of disconnection by a single plug and socket assembly.
Ducting	All ductwork located below the relevant flood level should be provided with openings for drainage and cleaning. Self draining may be achieved by constructing the ductwork on a suitable grade. Where ductwork must pass through a water-tight wall or floor below the relevant flood level, the ductwork should be protected by a closure assembly operated from above relevant flood level.
Reconnection	Should any electrical device and/or part of the wiring be flooded it should be thoroughly cleaned or replaced and checked by an approved electrical contractor before reconnection.

12.0

Notification Policy

12.0 NOTIFICATION POLICY

This chapter of the CDCP applies to Council's policy for notifying development proposals.

Whilst a Notification Policy does not relate to 'development control' as such Section 74C(1) of the *Environmental Planning and Assessment Act* 1979 (EP&A Act) provides for the preparation of a DCP to:

- identify development as advertised development (so as to make additional but not inconsistent requirements to those imposed by the regulations in relation to development applications), or
- provide for (or exclude) public or particular advertising or notification of any of the following:
 - a development application for specified development (other than State significant development or designated development or advertised development),
 - a request for the review of a determination of a development application where the applicant for review makes amendments to the development described in the original development application,
 - an application for the modification of a development consent for specified development (including advertised development but not State significant development or designated development), or
 - to specify criteria (in addition to but not inconsistent with any criteria prescribed by the regulations) that the council is to take into consideration in determining whether or not to give an order under Division 2A of Part 6 of the EP&A Act.

The purpose therefore of this chapter is ensure that notification procedures are incorporated in a CDCP to allow for proper administration of the EP&A Act.

12.1 Objectives

The objectives of this chapter are to:

- establish an efficient and effective process for public notification and advertising, which will minimise delays in the processing of development applications and improve the quality of decisions:
- maintain the community's right to participate in the development assessment process;
- clarify the circumstances in which a development application does not require public notification or advertising; and
- detail the form of and requirements for public notification and advertising.

12.2 Development applications requiring notification

Notification or advertising will be required for development applications for development of a type listed in Table 13.1.

Notification or advertising will not be required for development proposals that:

- qualify as 'exempt development' (see section 3.1 of the LEP):
- are processed as 'complying development' (see section 3.2 of the CLEP);
- represent minor alterations to an existing building that will not result in changes to the height, elevations or facade;
- applications under section 96(1) of the EP&A Act being a modification to a development consent involving the correction of minor errors, misdescriptions or miscalculations;
- applications under section 96(1A) of the EP&A Act being a modification to a development application involving minimal environmental impact;
- in the opinion of the responsible Council officer, will not detrimentally affect the amenity of persons who own or occupy adjoining or neighbouring land, in terms of the matters, listed in 13.3 of this chapter.

12.3 Notification requirements

Who will be notified?

Notification or advertising will occur where, in the responsible Council officer's opinion, the enjoyment of adjoining or neighbouring land may be detrimentally affected, in terms of the matters listed below, by the proposed development. Where required, a notification letter will be sent to the affected owners of relevant land. In addition, in some instances it maybe pertinent to notify the affected occupiers of the relevant land.

In identifying the owners of land, Council will rely on the information within its property system, as per the day of preparing the notification letter. In certain circumstances, Council will, at its discretion, undertake wider notification of a development application such as a notice in the local newspaper. During the exhibition period, exhibition material can also be viewed at Council's offices in Corowa.

Determining the extent of notification

Council will give notice of a development application to owners or occupiers of adjoining or other land within 40m of the boundary of the development site where, in the responsible Council officer's opinion, the enjoyment of the land may be detrimentally affected by or in relation to:

- a) views to and from the land;
- b) overshadowing;
- c) privacy;
- d) air pollution, in terms of dust, odour, smoke and the like;
- e) noise;
- f) the visual quality of the building in relation to the streetscape;
- g) the scale or bulk of the proposed building;
- h) the siting of the proposed development in relation to the site boundaries;
- i) hours of use;
- j) light spillage or reflection;
- means of access to or provision of parking on the development site;
- proposed changes to any easement that may impact the adjoining or neighbouring land;
- m) the height, materials and position of fences erected on a boundary;
- n) traffic generation; or
- o) suitability of the land for the proposed development.

Public notification and advertising period

If notification is required, the exhibition period for a development application is a minimum of **14 days** unless otherwise specified by the EP&A Act or *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation) or an environmental planning instrument such as the *Corowa Local Environmental Plan 2012* (CLEP) or State Environmental Planning Policy (SEPP). This is further detailed in Table 13.1.

The public notification requirements, as detailed in Table 13.1, may consist of one or a combination of the following:

- notification letter(s),
- local newspaper(s) advertisement(s),
- site sign (at the discretion of the authorised officer), and
- public authority notification.

If land is owned or occupied by more than one person, a written notice to one owner or one occupier is taken to be a written notice to all the owners and occupiers of that land.

If land is a lot within the meaning of the *Strata Schemes* (Freehold Development) Act 1973, a written notice to the owners corporation is taken to be a written notice to the owner or occupier of each lot within the strata scheme. If land is a lot within the meaning of the *Strata Schemes* (Leasehold Development) Act 1986, a written notice to the lessor under the leasehold strata scheme concerned and to the owners corporation is taken to be a written notice to the owner or occupier of each lot within the strata scheme.

Notification letters and plans

The notification letter will be posted or dispatched to affected persons before the exhibition period commences and is to contain the following information:

- a) the property address to which the development application relates;
- b) a description of the proposed development;
- c) an invitation to view the development application;
- d) the time during and the locations at which the development application can be inspected;
- e) the affected person's right to lodge a written submission in relation to the application:
- f) the closing date for making written submissions to Council; and

g) that the contents of written submissions may be included in reports.

Newspaper advertisements

Advertisements will be placed in the most appropriate local newspaper (namely Corowa Free Press and Yarrawonga Chronicle). Contents of the advertisements will be in accordance with the EP&A Act, EP&A Regulation and other statutory instruments.

12.4 Other notification requirements

This chapter covers the main types of Development Applications received by Corowa Shire Council. It does not cover all of the notification requirements for those Development Applications where other environmental planning instruments or other chapters of this CDCP may apply.

Where other notification requirements apply (other than those identified by this chapter), those requirements will be applied to that particular Development Application. Where an application falls into more than one category of notification, the Development Application will be notified in accordance with the more onerous requirements.

COROWA DEVELOPMENT CONTROL PLAN 2013 15.0 NOTIFICATION POLICY

TABLE 12.1 NOTIFICATION & EXHIBITION REQUIREMENTS

Application Category	Definition	Local Paper	Adjoining/Adjacent Owners Notification	Public Authority notification (Integrated)	Public Authority notification (e.g. MREP2)	Exhibition period
Section 82A Review	See s82A EP&A Act, clause 113A	As per original DA	To any authors of submissions and as per original DA (cl 113A)	Not applicable as per s82A(1)(c).	As per original DA	14 days (commencing the day after notice is given)
Section 96(1) or 96AA(1) modification	Modifications involving minor error, mis-description or miscalculation.	Not required.	Not required.	See Act	See Act	
Section 96(1A) or 96AA(1) modification	Modifications involving minimal environmental impact.	Not required.	Not required.	See Act	See Act	
Section 96(2) or 96AA(1) modification	Relating to Designated Development	Yes	To any authors of submissions and as per original DA	See Act	See Act	14 days (commencing the day after notice is given)
Section 96(2) or 96AA(1) modification	All other Development Applications	As per original DA	To any authors of submissions and as per original DA	See Act	See Act	14 days (commencing the day after notice is given)
Section 96AB	Review where modification application refused or conditions imposed (within 28 days after modification determined -refer clause 123I)	As per original DA	To any authors of submissions and as per original DA	Not applicable as per s82A(1)(c).	As per original DA	14 days (commencing the day after notice is given)

COROWA DEVELOPMENT CONTROL PLAN 2013 15.0 NOTIFICATION POLICY

Application Category	Definition	Local Paper	Adjoining/Adjacent Owners Notification	Public Authority notification (Integrated)	Public Authority notification (e.g. MREP2)	Exhibition period
Designated Development (s 79(1))	As defined in Schedule 3 of the EP&A Regulation	Yes (at least on two separate occasions) (cl 80)	Yes	Where required.	Where required.	30 days (commencing the day after notice is first given in the newspaper)
Murray Regional Environmental Plan No.2 – Riverina Land (MREP2)	Development required to be advertised in accordance with clause 13 of MREP2. Consultation may also be required for any development in accordance with clause 12.	Yes – for "Advertised" development only (at least on two separate occasions)	Yes (There is no requirement to notify adjacent privately owned Victorian property).	Where required.	Yes. As specified by clause 12 and/or 13 of MREP2.	30 days (commencing the day after notice is given)
Nominated Integrated Development (clause 5(1)(b))	Requires approval under s91(1) of the Act for: • Heritage Act 1977, • Water Management Act 2000, • Protection of the Environment Operations Act 1997.	Yes	Yes	Where required.	Where required.	30 days (commencing the day after notice is given)
Threatened Species Development	Development referred to in s78A(8)(b) EP& A Act.	Yes	Yes	Where required.	Where required.	30 days (commencing the day after notice is first given in the local newspaper)

COROWA DEVELOPMENT CONTROL PLAN 2013 15.0 NOTIFICATION POLICY

Application Category	Definition	Local Paper	Adjoining/Adjacent Owners Notification	Public Authority notification (Integrated)	Public Authority notification (e.g. MREP2)	Exhibition period
Class 1 aquaculture	Development referred to in SEPP No. 62.	Yes	Yes	Where required	Where required.	14 days (commencing the day after notice is first given in the local newspaper)
Other	Any development that Council staff determine should be exhibited which may, in the opinion of the responsible officer, be detrimentally affected in relation to the matters detailed in clause 12.3 of this chapter.	To be determined by Council staff. Notification/referral may also extend to other bodies such as the NSW Police Force, Local Aboriginal Land Council and other relevant public authorities that maybe affected by the development or able to provide special comment.				14 days

Note: Where an application falls into more than one of the above categories, the notification procedure followed shall be that with the higher requirements. For example, a Development Application for nominated integrated development that requires referrals under MREP2 shall be notified and exhibited as per the requirements listed for MREP2.

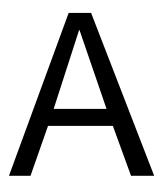
13.0

Site Specific Development

13.0 SITE SPECIFIC DEVELOPMENT

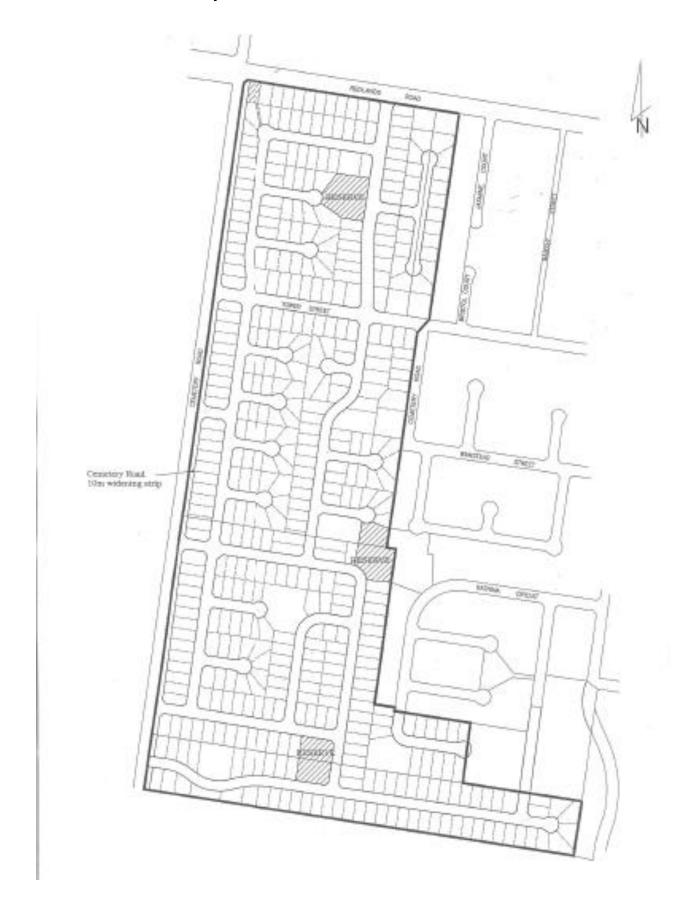
Development within the following specific areas shall be undertaken in accordance with any relevant additional site specific controls listed below and attached at Appendix A to this CDCP. Where there is an inconsistency between this Section and any other Part or Section of this CDCP, the requirements of this Section shall prevail to the extent of the inconsistency.

- Corner of Cemetery and Redlands Road, Corowa
- Corner of Cemetery Road and Whitehead Street, Corowa
- Chivell Street, Corowa
- Corner of Dawe & Gallipoli Streets , Corowa
- Guy Street Aged Care Hostel, Corowa
- Hermitage Drive, Corowa
- Hermitage Drive: West, Corowa
- Honour Avenue, Corowa
- Katrina Circuit, Corowa
- Redlands Road: North, Corowa
- Redlands Road: West, Corowa
- Redlands Road



Site Specific Development Plans

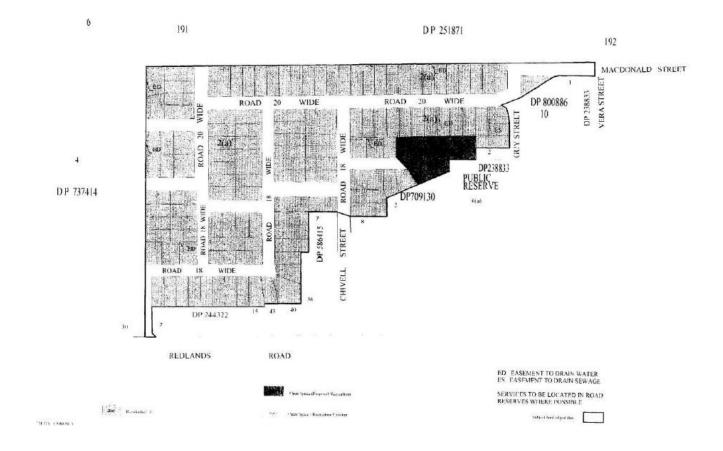
Corner of Cemetery & Redlands Road, Corowa



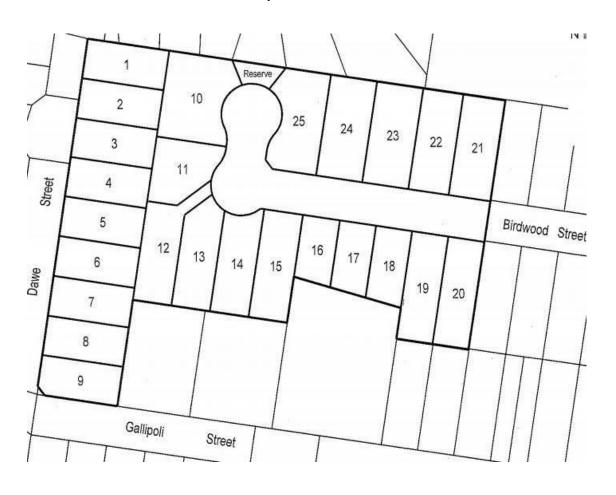
Corner of Cemetery Road & Whitehead Street, Corowa



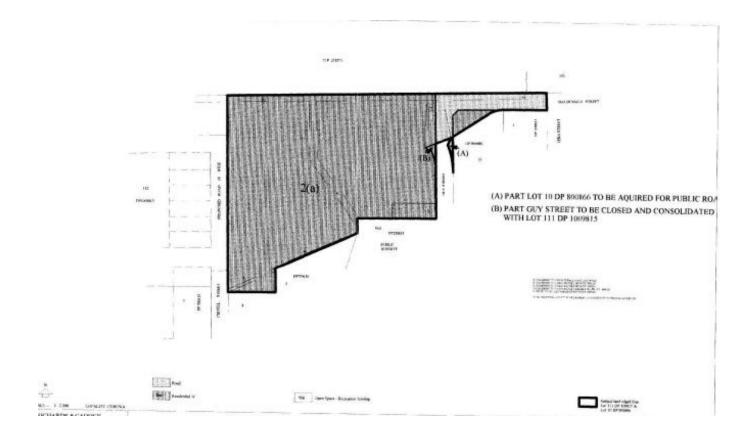
Chivell Street, Corowa



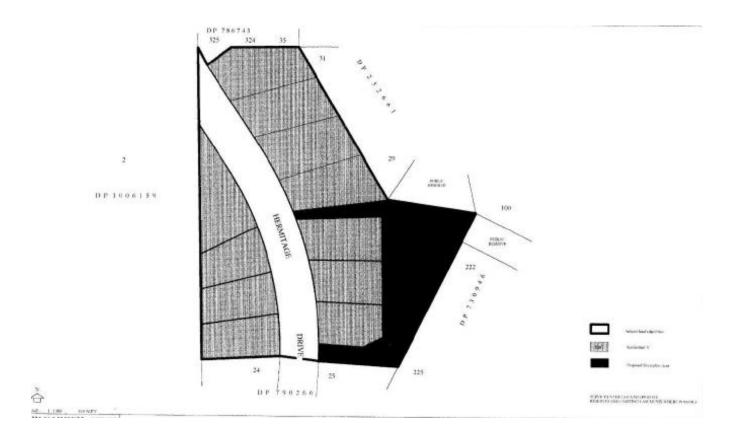
Corner of Dawe and Gallipolli Street, Corowa



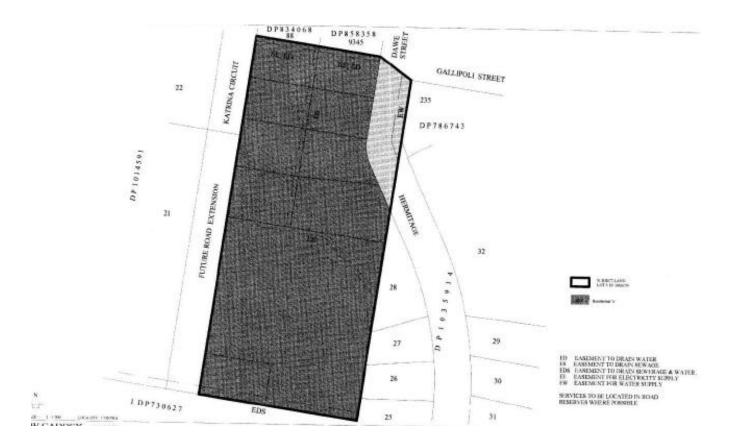
Guy Street, Aged Care Hostel, Corowa



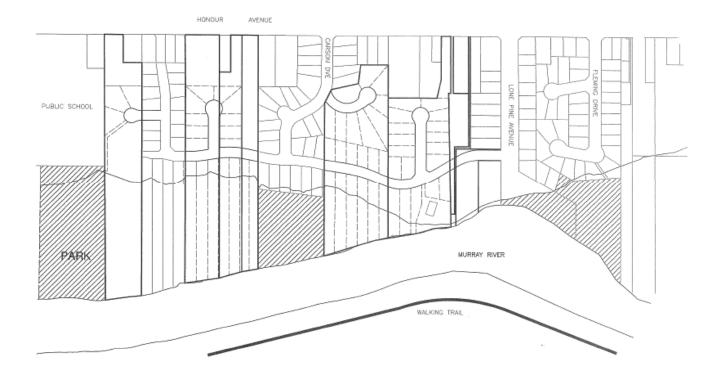
Hermitage Drive, Corowa



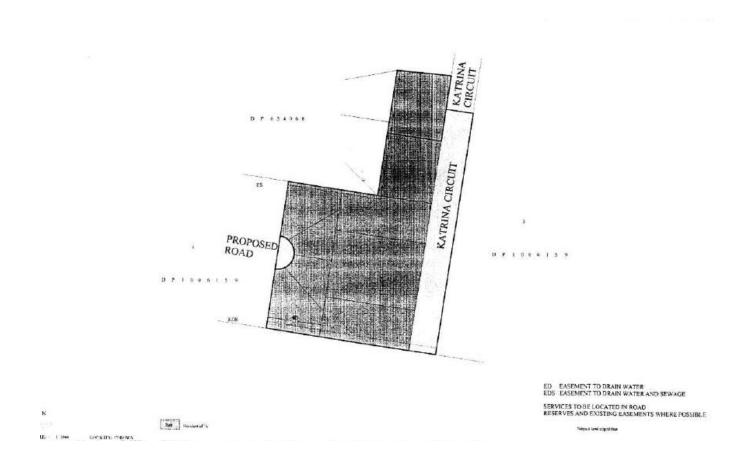
Hermitage Drive: West, Corowa



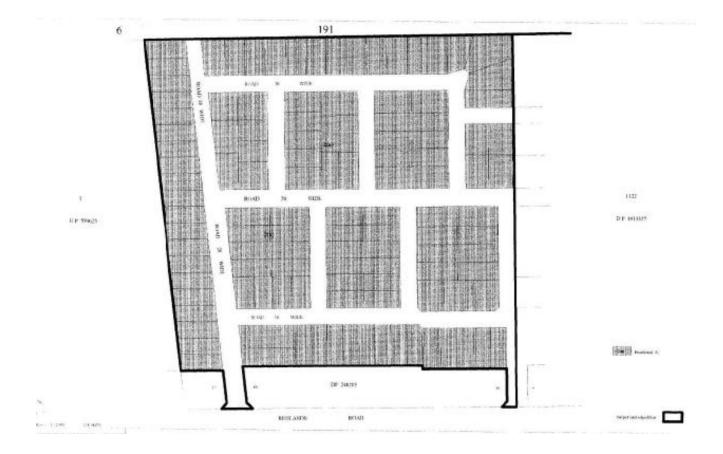
Honour Avenue, Corowa



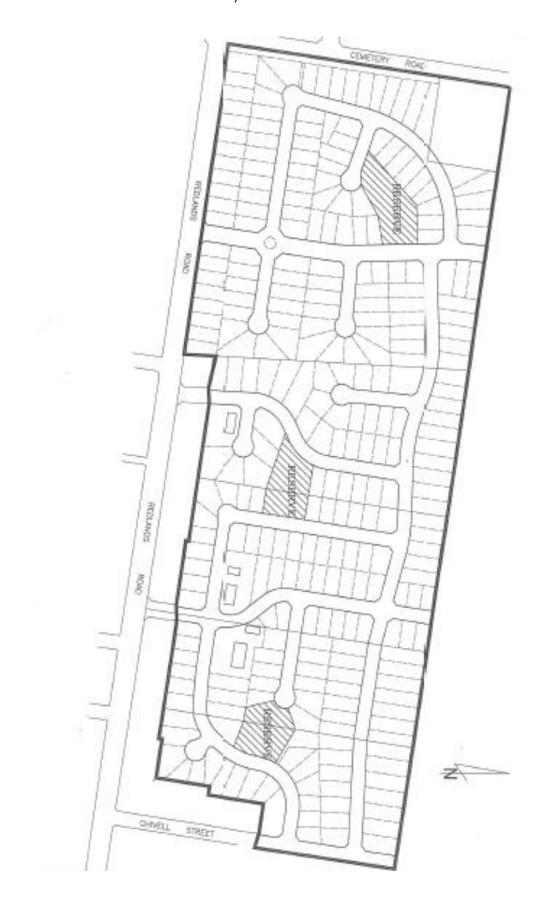
Katrina Circuit, Corowa



Redlands Road: North, Corowa



Redlands Road: West, Corowa



Redlands Road, Corowa

