

PART E

Section 16 – Gobbagombalin Urban Release Area



About the Gobbagombalin Urban Release Area

Gobbagombalin is identified in red outline on the following figure and is a component of the northern suburbs Urban Release Area on maps URA_003A and URA_003B of the Wagga Wagga Local Environmental Plan (LEP 2010). Clause 6.3 of the LEP 2010 requires the preparation of a Development Control Plan (DCP) which addresses criteria listed within that clause, prior to the granting of consent for development in the urban release area.



• Structure of this Section

This Section is divided into 10 sub-sections.

Lodging a Development Application provides information on submitting a Development Application.

Introduction and includes the administrative details, the Gobbagombalin design principles and other background information.

Features of the Area outlines the major features of the site, including the importance of the local topography and landscape character and an overview of the desired distribution of land uses within the urban release area.

Infrastructure Planning contains the controls for infrastructure servicing and staging of development.

Water Sensitive Urban Design contains controls for the quality and quantity of stormwater running from catchments into waterways.

Road Network and Pedestrian Access outlines the road network and pedestrian access requirements for Gobbagombalin.



Explanatory Note(s):

Environmental Conservation, Biodiversity and Natural Resource Management contains the controls for the environmental conservation, biodiversity and natural resource management. This includes controls for salinity.

Heritage Conservation provides controls for Aboriginal Heritage and the Wiradjuri Walking track.

Residential and large lot residential subdivision contains the controls for residential development within Gobbagombalin. This includes controls on topography, views and setting and open space, parks and the public domain. This section also contains controls for large lot residential or rural residential development. This section applies to land zoned R1 General Residential and R5 Large Lot Residential.

Neighbourhood Plan acts as a summary of the key features of the urban release area and the various sections within this Chapter. For further information see page 22.

Lodging a Development Application

Applications are to, and be generally in accordance with, any endorsed development masterplan.

Introduction

Where this Section Applies

This section applies to land located at Gobbagombalin predominantly zoned R1 General Residential and R5 Large Lot Residential, as shown on LEP 2010 maps LZN_003B and LZN_003C, and includes the land zoned C2 Environmental Conservation (Harris Road) on those maps.

The Neighbourhood Plan, to this Chapter, indicates that two properties, in the south-west and south-east of the study area have not been included, at the request of the respective landowners, within the road pattern and open space network at the time of document preparation.

Notwithstanding, all relevant provisions of this Chapter remain applicable to those land parcels, particularly in regard to providing open space proportional to lot yield, and adequate drainage to meet natural incoming and post development flow and discharge.

Unless otherwise stated the general provisions of the Wagga Wagga Development Control Plan 2010 apply to Gobbagombalin.



Explanatory Note(s):

Background Reports and Studies

Relevant studies required to be considered for development within the land to which this section applies:

- Wagga Wagga Local Environmental Plan 2010
- Wagga Wagga Local Environmental Study 2008
- Wagga Wagga Community Strategic Plan 2011-2021
- Wagga Wagga Spatial Plan 2008
- URAP TTW Consulting Services Traffic Report May 2011
- URaP TTW Consulting Services Traffic Report February 2012
- URaP TTW Consulting Services Traffic Report April 2012
- Department of Environment Climate Change and Water Proposed Biodiversity Certification for the Wagga Wagga Local Environmental Plan 2009

• Features of the Site

Land features and land uses within Gobbagombalin are important characteristics that influence future development of this site. This Section provides an overview of natural features and existing land uses within the urban release area.

• Site Topography, Landscape Character, views and setting

Gobbagombalin is defined by the rocky and well vegetated hilltop bordering the central west of the land, and by the mature native vegetation along Pine Gully Road and Harris Road. The landform is undulating, ranging from approximately 184 m AHD in the south eastern corner to the western rocky hill at approximately 236 m AHD.

Another defining feature is the intermittent watercourse running north to south from Harris Road through the mid-point of the land. The watercourse is not incised and forms a broad swale through the landscape. There is another minor drainage line running to the northwest of the land.

The land is used for agricultural purposes, primarily cropping and grazing, and has been cleared of most woody vegetation. The native vegetation situated within the Harris Road reserve is remnant Yellow Box woodland in low condition. Remnant Yellow Box woodland in moderate to good condition is situated within the Pine Gully Road reserve north of Harris Road and 300m south of Harris Road.

The natural landform and setting contribute to a sense of place. Subdivisions should be responsive to the setting and natural site features and established subdivision patterns.

Objectives

- O1 To require new development to respond to site features including topography, ridgelines and vegetation.
- O2 To avoid adverse impact upon all land with development limitations.
- O3 To manage stormwater drainage throughout the release area
- O4 Development Applications shall include management and mitigation information for land identified as being environmentally sensitive or steep.
- O5 Avoid street layouts that result in lots being considerably higher or lower than the street level.



Controls

C1 Retain existing vegetation along Harris Road. Native vegetation along Pine Gully Road should be retained where possible, or otherwise offsets should be provided at the rate indicated in the Biodiversity section of this Chapter on page 15.

- C2 Protect the main north south drainage line below Harris Road and promote its corridor as a feature of the release area.
- C3 Roads and pathways should run predominantly along the contours of the land and should be responsive to the constraints of the steep land in the west of the release area adjacent to Harris Road.
- C4 Provide stormwater retention facilities to ensure post development flows do not exceed pre-development flows, for both quantity and quality, for storm events up to and including the 1 in 100 year storm event. This includes the linear parks north and south of Harris Road and the dedication of the associated drainage basins and facilities.
- C5 Any future development fronting from Old Narrandera Road must comprise lots of at least 1,000m² with a 23m frontage to indicate a transition to the rural land opposite.
- C6 Subdivisions are to be designed such that lots intended for residential development shall have a "street address" to an existing or proposed public road. That is, subdivision is to avoid the creation of allotments, the rear of which "front" or "address" a public road resulting in the erection of rear fences along public road boundaries. This is particularly relevant to Pine Gully Road.
- C7 All native trees within open space areas with a diameter 40cm and above (measured at 140cm from ground level) must be retained.
- C8 All native trees within residential lots must be retained, or offset planting carried out at the rate indicated in the Natural Resource Management section (page 15) of this Chapter.
- C9 Lots adjoining land zoned C2 should be of sufficient size that a dwelling and other buildings can be located where they will not be at risk of damage from falling trees or limbs from within the E2 zone.
- C10 Subdivision designs should be consistent with Council's Cut and Fill controls in Section 9.4.6 of WWDCP 2010

• Distribution of Land Uses

Objectives

O1 To locate new development in the most appropriate location within Gobbagombalin.

Controls

C1 Applications for subdivision should be generally in accordance with the adopted road layout plans, included as part of this Chapter.

Infrastructure Planning

This Section provides detail of servicing requirements (electricity, gas, water, sewer, and communications).

A landscape design may be required to integrate with water sensitive urban design systems for the subdivision.

Controls on changes to the natural landform, including cut and fill are included Section 9.4.6 of WWDCP 2010.



Servicing

Planning for the delivery of services to new development is essential for new urban release areas. Servicing plans must consider topographical constraints to achieve appropriate complementary subdivision design.

Objectives

- O1 Provide essential services to new development in Gobbagombalin water, sewer, electricity, gas and communications.
- O2 Ensure the efficient and cost-effective provision of services.

Controls

- C1 New infrastructure shall be located in road corridors.
- C2 Subdivision can only be considered where there are appropriate arrangements for servicing (electricity, water, sewer and communications).
- C3 The developer shall provide reticulated water supply to all allotments in accordance with the requirements of the service authority. The developer shall be responsible for meeting the cost of internal water reticulation mains and extension of existing mains where necessary.
- C4 The developer shall be responsible for providing electricity to all lots in the subdivision to the satisfaction of the service provider.
- C5 The developer shall be responsible for providing telephone and broadband internet connections for all allotments to the satisfaction of the service provider.
- C6 The developer shall be responsible for providing gas to all lots in the subdivision to the satisfaction of the service provider.

• Sewage and Effluent Disposal

Objectives

O1 To ensure that all new development is connected to reticulated mains sewer supply.

Controls

- C1 The developer shall be responsible for providing reticulated mains sewer supply to all allotments, including associated pump stations where required, to the satisfaction of Council. Concept sewer design plans for each stage of subdivision must be submitted with the development application for that stage of subdivision. A sewer catchment plan is included at Figure 2 of this plan.
- C2 Sewerage and Drainage provision should be installed in accordance with: Appendix A of Part 2 "Service Areas" of the City of Wagga Wagga Development Servicing Plan for Sewerage 2007, where this plan is applicable, and; the map at appendix A included in Part 2 Service Area of the City Of Wagga Wagga Development Servicing Plan (DSP) for Sewerage 2007, covers the Gobbagombalin Urban Release Area.

Explanatory Note(s):

Refer to Council's *Engineering Guidelines for Subdivision and Development* for additional detailed requirements.

For all 'greenfield' sites including urban release areas, shared services trenching (of compatible services or utilities such as power and telecommunications) is preferred where such services are to be provided.

The map at Appendix C included in Part 2 "Areas of land to which this Policy applies", of the City of Wagga Wagga Development Servicing Plan (DSP) for Drainage 2007, covers the Gobbagombalin Urban Release Area.



Water Sensitive Urban Design	
The way we construct our urban environments affects the quality and quantity of stormwater running from catchments into waterways and hence the health of creeks and rivers.	Explanatory Note(s):
Water Sensitive Urban Design (WSUD) covers the whole process for designing for urban development.	
The impervious surface of roads significantly increases the stormwater flows of urban areas. Road surfaces are also a source of water borne pollutants such as sediments, metals and hydrocarbons.	
Water Sensitive Urban Design (WSUD) strategies use vegetation and bio-retention swales, gross pollutant traps and other stormwater treatments to reduce stormwater flows, and to collect and treat runoff prior to discharge.	
Principles	
P1 Grass swales to replace concrete gutters	
P2 Bio-retention basins and gross pollutant traps to remove pollutants and allow for enhanced rainwater infiltration to groundwater	
P3 Artificial wetlands provide stormwater buffering to natural waterways	
P4 Rainwater tanks reduce household demand on reticulated water	
P5 Sub-surface channels can direct water to newly planted tree root systems	
Objectives	
O1 Encourage development based on water sensitive urban design strategies which reduce stormwater flows and improve the quality	

- of runoff from urban areas. O2 Encourage stormwater treatments that maximise the visual and recreational amenity of developments.
- O3 Encourage designs which will minimise future operation and management requirements at the design stage. To ensure that public open space is retained principally for that use, with allowance for complimentary uses. Public open space can be used for a dual open space and water sensitive urban design purpose (for example overland stormwater flow management measures and sub-surface stormwater based irrigation for WSUD and planting purposes), provided that the principal purpose of the space remains public recreation and that the principal use is not compromised.

Controls

- C1 Where overland stormwater management measures and subsurface stormwater based irrigation for WSUD and planting purposes are located within public open space, all such measures will be subject to Council approval.
- C2 Open space land used for approved complimentary and WSUD purposes may have that area of land credited toward the required open space for that part of the release area.

Also refer to WWDCP 2010 Section 7.2.5 for additional objectives and controls.



• Stormwater and Drainage

The development of Gobbagombalin requires an appropriate stormwater management system aimed at removing contaminants onsite before stormwater reaches the highly permeable alluvial system associated with the Murrumbidgee River floodplain. This will ensure that the receiving surface and groundwater systems, which are currently used to supply the city's town water requirements, will not be detrimentally affected by contamination.

Consideration is to be given to existing downstream drainage systems and their capacity to receive the modified runoff volumes and patterns from the site, while maintaining existing flows to support habitats.

The study area consists of three catchments.

Catchment 1 is the largest in area and occupies the eastern half of the study area, flowing south and discharging through a culvert under Old Narrandera Road, at the mid-point of the area to rural land to the south. A small portion of Catchment 1, in the far mid-west of the study area, discharges south to Catchment 3.

The south-eastern part of Catchment 1 is occupied by land which will have delayed release, and for which a lot pattern is not shown on the Neighbourhood Plan. This area drains to the central drainage line within Catchment 1.

Catchment 2 is the second largest area, occupying the northern third of the study area, flowing west and discharging at pre-development rates, via a detention basin (the enlargement of an existing dam) to rural land in the far north-west corner of the site.

Catchment 3 occupies the western part of the study area, below Harris Road, flowing south and discharging through a culvert under Harris Road to rural land. The majority of Catchment 3 is occupied by land which will have delayed release, and for which a lot pattern is not shown on the Neighbourhood Plan. However a small portion of Catchment 1 land will drain into Catchment 3.

The key principle for discharge of stormwater over adjoining separate title land not being subdivided is as follows.

Discharge over adjoining land not owned or under the control of the developer is to be restricted to pre-development flow quantity and quality. This principle can be varied with the written agreement of the adjoining land owner, but will constitute a private agreement outside the control of the Council. This principle is particularly relevant to stormwater discharge through existing culverts under Old Narrandera Road, onto rural land.

The stormwater strategy plan for the release area is provided as Figure 3. The strategy plan provides for the following:

- Indicative location of gross pollutant traps;
- Direction of overland flow along streets;
- Location of the major drainage retention basin at the southern end of the release area;
- Location of secondary basins in the north-west of the release area and the open space adjoining Harris Road.

Soil erosion/sedimentation plan

The Soil Erosion and Sedimentation Plan to be prepared for each stage of development must require that stockpiled soils and plant equipment must not be located in areas of remnant vegetation or outcropping rock.



The detailed stormwater drainage plans for each stage of development should adhere to the principles below: Explanatory Note(s):

- Provide an overall stormwater management plan with the initial development application for subdivision. A stage-based stormwater impact assessment should be provided at development application phase for each residential stage.
- Provide community based quantity and quality management systems to control runoff from roadways and other communal lands.
- Rainwater re-use to provide an alternative water source, particularly for open space plantings, is encouraged. The provision of rainwater re-use systems can have significant positive impacts on the quality of stormwater runoff.
- Water Sensitive Urban Design (WSUD) principles that control the quality of stormwater discharge should be incorporated (as outlined in Northrop report in Appendix B of WWLES 2007).
- Provide drainage corridors to manage concentrated surface trunk drainage flow within catchments. The drainage corridors would be utilised in a similar manner to the "Blue Line" water courses/ riparian corridors.
- Analyse existing culverts/ existing stormwater drainage systems to confirm capacity and determine the impact of backwater effects, if any.
- Manage runoff to maintain existing environmental flows to support habitats.
- Incorporate overland drainage systems into riparian corridors and open space where practicable to promote environmental and recreational outcomes.
- Provide stormwater detention facilities at a local catchment level, best located toward the downstream end of the catchment, outside areas susceptible to flooding.
- Consider specific measures including wetlands, bio-retention swales and maintenance of environmental flows.

Objectives

- O1 To discharge water in a manner that will not impinge on adjoining catchments and that ensures public safety.
- O2 Provide well designed drainage corridors to allow ease of maintenance and to ensure stormwater system will not impinge on other functions of the open space network.
- O3 To maintain the quality of stormwater leaving the site and the quality of all downstream water.
- O4 Integrated water cycle management and water sensitive urban design principles should be adopted for development of Gobbagombalin. Options such as grassed vegetation swales, natural drainage corridors, sand filters, permeable pavements and constructed wetlands should be considered as part of the stormwater strategy for each stage.

Refer to Council's *Engineering Guidelines for Subdivision and Development* for additional detailed requirements.

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O5 Implementing rainwater harvesting and re-use systems, to reduce demand for potable water and decrease the volume of stormwater generated is encouraged.

Controls

- C1 The placement of retention basins is not to occur within land zoned C2. The placement of any water retention basins adjacent to land zoned C2 must not result in any indirect impacts to the vegetation within the C2 zone, such as increases to accession of ground water which may waterlog the root zone of the vegetation and lead to premature senescence. In the case of Harris Road, the survival of Yellow Box should not be jeopardised by such an indirect impact, and the engineering design of such a detention basin must address this issue.
- C2 Provide stormwater retention facilities to ensure post development flows do not exceed pre-development flows, for both quantity and quality, for storm events up to and including the 1 in 100 year storm event. This includes the Gobbagombalin linear parks north and south of Harris Road and the dedication of the associated drainage basins and facilities.
- C3 All new and existing roads will likely be required to have collector pits and an underground pipe system to carry water to the discharge point for each lot. Inter-allotment drainage will also be required to collect drainage from higher lots and avoid uncontrolled discharge onto lower lying properties.
- C4 Stormwater drainage shall be provided throughout the development in accordance with Council's Engineering Guidelines for Subdivisions and Developments. Indicative stormwater drainage plans, to Council satisfaction, shall be submitted with the development application for that stage of subdivision. Detailed drainage design plans for each stage of subdivision must be submitted with the subdivision certificate application for that stage of subdivision. Detailed calculations on stormwater management will be required at the subdivision application stage.
- C5 Drainage lines and stormwater event areas will be managed through piped drainage and drainage easements.
- C6 The overall stormwater plan for the study area is to show approximate locations of gross pollutant traps, with sufficient specification of the GPT to be shown on the relevant staged construction certificate drawings.
- C7 For land zoned R5 'Large Lot Residential' road drainage may be provided via a rural standard swale drain, and not by kerb and gutter.
- C8 The provisions of a Development Servicing Plan prepared by Council, apply to this urban release area. Contributions will be levied at Subdivision stage for each lot.
- C9 The map at Appendix C included in Part 2 "Areas of land to which this Policy applies", of the City of Wagga Wagga Development Servicing Plan (DSP) for Drainage 2007, covers the Gobbagombalin Urban Release Area.

Road Widths and Pedestrian Design

The Gobbagombalin road network is centred on Pine Gully Road as the north/south arterial road, servicing Estella, Gobbagombalin and Charles Sturt University, and a central collector road system. Figure 4.1 shows the Gobbagombalin road network and hierarchy.

Pine Gully Road (apart from the intersection with Old Narrandera Road) is proposed to have three intersection points linking Gobbagombalin. From the junction with Old Narrandera Road northward there will be a T intersection (south of the Avocet Drive extension. It is intended to close Harris Road in a staged manner and to use the reserve as a habitat corridor (see below).

Council's Section 94 Contributions Plan and Draft Section 94 Contributions Plan identify works to widen Pine Gully Road and deviation from Avocet Drive south to Old Narrandera Road. The works contained in the Section 94 can be satisfactorily offset. All road upgrades will be completed by the Council in accordance with Council's Engineering Standards and any loss of Yellow Box Woodland will be offset at a ratio of 10:1. Pine Gully Road from Avocet Drive northward will remain as the two current traffic lanes. Offsets are not acceptable if Pine Gully Road is identified as requiring additional traffic lanes in the future from Avocet Drive to Estella Road. Agreement will need to be reached between Council and the Office of Environment and Heritage to relocate Pine Gully Road.

The existing road reserve along Pine Gully Road contains important remnants of Yellow Box Woodland and connectivity between the River Red Gum forests along the Murrumbidgee River. Land identified as 'retained woodlands moderate – good condition' south of Avocet Road on figure 6 is considered significant Yellow Box Woodland and for this reason the following discussion is included regarding the infrastructure requirements of Pine Gully Road.

A roundabout is proposed at the intersection of Pine Gully Road and Avocet Drive. It is anticipated that the construction of the Avocet Road roundabout will cause some loss of Yellow Box Woodland in the vicinity of the roundabout. However this extent of vegetation loss is considered acceptable provided than any loss is replaced through vegetation offset areas provided by the developer at a location agreed upon by the Office of Environment and Heritage. On this basis an offset at a ratio of 10:1 is required to be fully funded by the developer.

A traffic study by URaP – TTW Consulting Services in April 2012 has identified that the Old Narrandera Road has a good level of service and will continue to operate with a similar level of service once all development within the area are completed and until at least 2020. Thereafter, the possible options are identified in the Final TTW Traffic Report.

• Treatment of Internal road 4 way intersections

The design and treatment for these intersections is to be in accordance with Council's Engineering Guidelines for Subdivisions and Developments.





An important liveability aspect of the urban release area is the intention to create a network of cycle ways, footpaths and shared paths (cycle and footpath), to be provided by the developer. Cycle ways will be provided along Pine Gully Road and the collector roads, and within the linear open space south of Harris Road – refer to the cycleway plan at Figure 4.2.

The shared paths will be provided through the linear open space south of Harris Road, along Harris Road itself (upon closure), along the collector roads in the estate and in a northerly circuit back to Pine Gully Road. Figure 4.2 Shows the location of share paths.

Footpaths, provided on one side of the roadway, are located strategically throughout the estate to aid connectivity between collector roads, open space and the Harris Road habitat corridor – see Figure 4.3

• Cycle lanes, bus routes, footpaths and share paths

Objectives

- O1 To provide a logical and accessible road hierarchy connecting to and within the Gobbagombalin Urban Release Area.
- O2 To optimise the use of existing and proposed road corridors / reserves for the possible location of services and utilities.
- O3 Design streets to respond to their role and function and to ensure good connections to adjoining neighbourhoods.
- O4 Provide public transport access to and within Gobbagombalin.
- O5 Provide for pedestrians and cyclists, with easy and safe links to local facilities, services and open space areas.
- O6 Provide a safe pedestrian point of crossing of Pine Gully Road to link with the greater Estella and Boorooma area.

Controls

- C1 Neighbourhood road networks are to maximise connectivity within the development, and to the existing street network and adjoining neighbourhoods. Avoid long roads with few connecting side streets that reduce the potential to readily access the area.
- C2 Carriageway and intersection widths shall reflect road status and purpose.
- C3 Roads are to be provided generally in accordance with Figure 4.1 Road Hierarchy Plan.
- C4 Bus routes to service the release area are shown on Figure 4.4. These routes have been approved by the service provider but may change to suit future customer and operator needs.
- C5 Footpaths and share paths, constructed by the developer in accordance with Council's standards, are to be provided generally in accordance with Council's standards, are to be provided generally in accordance with Figure 4.2. The footpaths must be provided within 12 months of the construction of 80% of the dwellings within the stage of subdivision that includes the footpath.

Minimum dimensions for footpaths: Generally – at least 1.5m in width. Shared paths – at least 2.5m width.



C6 Cycleways, constructed by the developer in accordance with Council's standards, are to be provided generally in accordance with Figure 4.2 Cycleways/sharepaths. The exception is the shared path along Pine Gully Road, which is a s94 contribution road constructed by the Council. The cycleways must be provided within 12 months of the construction of 80% of the dwellings within the stage of subdivision that includes the cycleway. The cycle way along Pine Gully Road must not be constructed where it will result in the removal of existing native trees or, damage to the critical root zone of existing native trees.

Pine Gully Road carriageway and Old Narrandera Road buffer

Compliance must be achieved with Council's *Engineering Guidelines* for Subdivision and Development.

Objectives

- O1 To provide an adequate planting buffer along Old Narrandera Road to recognise the transition from residential to rural land use.
- O2 To provide adequate lighting at arterial and collector road intersections

Controls

- C1 The carriageways for local roads parallel to Old Narrandera Road should be reduced to reflect their low traffic use and No-Through-Road status, with services only provided within the northern road reserve area. The remaining southern road reserve is to be planted with trees and shrubs suitable to the local Box-Gum woodland. The planting will be at the developer's expense, to be carried out with the construction of the adjoining detention basin, with details shown on the relevant subdivision application plan stage.
- C2 The lighting of Pine Gully Road intersections and pedestrian refuge crossing, and the intersection of collector roads, must be considered by the Council for the relevant subdivision application, with appropriate conditions of consent provided.

Land Release, Subdivision Staging and Harris Road closure

Staging the release of land within the Gobbagombalin release area is crucial to achieving the objectives of ecologically sustainable development and the orderly and economic provision of development.

The anticipated stages are shown on the attached Staging Plan (Figure 5 of this Chapter). Staging allows for the planned efficient provision of new infrastructure and services and seeks to avoid inefficient leapfrogging of development, though no staging plan can account for future occurrences and is therefore a *guide only*.

Staging should generally commence from the two infrastructure node points of Estella Road and Harris Road. Where leapfrog development is absolutely necessary, the developer responsible shall bear the full costs of infrastructure extension.



Harris Road will become a future habitat corridor, to be embellished by the Council. The road will be progressively closed when adjoining allotments have through subdivision local road network access to Pine Gully Road. In certain instances, to enable early development of land north of Harris Road, development may occur out of sequence, with temporary access to the south across Harris Road.

Objectives

- O1 To require subdivision development to occur in logical, efficient stages, generally as shown on the Staging Plan, to achieve the objectives of ecologically sustainable development and the orderly and economic provision of services.
- O2 To enable development out of sequence, where the costs of infrastructure extension and temporary road access is borne by the benefitting party.
- O3 To avoid heavy construction vehicles associated with subdivision works using newly constructed residential streets.
- O4 Staged closure and embellishment of Harris Road at the earliest opportunity, provided adjoining allotments have alternate public road access.

Controls

- C1 Land release in Gobbagombalin shall occur generally in accordance with the Staging Plan at Figure 5.
- C2 Harris Road should be progressively closed in accordance with the Staging Plan, generally as follows.

CP1 – CP2 at Stage G1

CP2 – CP3 at Stage G4, or Stage C1 with public road access to Pine Gully Road.

CP3 – CP4 at Stage D1 with public road access to Pine Gully Road or Stage F with public road access to Pine Gully Road.

If closure removes an active property driveway from Harris Road, a temporary access must be provided by the developer as indicated in C4 below.

- C3 Where development proposals seek to extend infrastructure through undeveloped land, the extension will be at the full cost of the developer.
- C4 Where a development proposal seeks to extend infrastructure through undeveloped land north of Harris Road, in order to facilitate access to Pine Gully Road and enable early closure of Harris Road (part of eastern end), the owners of that land may negotiate at their cost to provide a temporary road access point across Harris Road to the south, across developed land, and thence to Pine Gully Road.

When alternate public road access to Pine Gully Road becomes available to the northern land, the owner benefitting from the temporary access road must remove that road, reinstate the affected land and bear all associated legal and physical costs associated with the placement and removal of the temporary access road. This will be enforced by condition of Development Consent and Construction Certificate.

C5 Heavy earthmoving and construction vehicles may use Harris Road only to the extent shown on Figure 5 until the first (eastern) road closure occurs. Thereafter all heavy vehicles associated with subdivision construction must enter the release area via Harris Road west. This will be enforced by condition of Development Consent and Construction Certificate.

CP refers to Closure Point

Pursuant to the current Section 94 Contributions Plan 2006 -2019, the Council will produce and open space embellishment plan for Harris Road, which will be implemented as sections of road are progressively closed. The embellishment plan will have regard to the low conservation value of the native tree species along the road and aim to enhance Harris Road as a bird flyway, whilst minimising bushfire risk to adjoining premises. The embellishment plan will work around the existing Riverina Water main along the south boundary of Harris Road.



C6 The Council will not allow 'vengeance strips' to be created on plans of subdivision. All equity matters relating to subdivision construction should be resolved at subdivision application stage.

Environmental Conservation, Biodiversity and Natural Resource Management

Natural Resource Management

Biodiversity protection is effected by Clause 7.3 of the LEPbiodiversity. This Clause seeks to protect the biodiversity of remnant vegetation. Where such native vegetation is identified by the corresponding map, the consent authority must consider a report that addresses potential impacts of proposed development on that vegetation.

The report for the Bio-certification Order (now expired) determined that the retention of existing mature trees within the C2 Zone along Harris Road is necessary to achieve an offset ratio of 10:1 across the former Wagga Wagga biodiversity certification area.

The biodiversity study conducted by Eco Logical Australia found 6.2ha of Box Gum woodland in moderate to good condition along Pine Gully Road (generally between Harris Road and Estella Road) and 4.5 ha of Box Gum woodland in low condition along Harris Road. Box Gum woodland is listed as an endangered ecological community under the TSC Act, however the characteristics of this particular Yellow Box woodland at the site were not consistent with the critically endangered Box Gum woodland ecological community under the Commonwealth EPBC Act. The Box Gum woodland community on-site is generally highly modified with respect to species composition, with sparse to absent shrub layer vegetation and a mix of native and exotic groundcover.

The remainder of the site was found to comprise exotic grassland and cropped areas.

In order to develop subdivision areas of non-native vegetation, the loss of paddock trees would have to be offset by the preservation of existing trees or the planting of saplings. Offsetting must be undertaken in accordance with the Office of Environment and Heritage's recommended offset ratio identified in C2 on page 15 for native woody vegetation. Sufficient offset planting areas for the loss of paddock trees is likely to be available within open space at the site, or otherwise within the strip of C2 zoned land to the immediate east of Pine Gully Road.

Figure 6 indicates the Biodiversity attributes of release area including woodland areas, their condition and the location of paddock trees.

References

Wagga Wagga Local Environmental Study 2007 – prepared by Willana Associates.

Ecological Australia Pty. Ltd (2007) *Wagga Wagga Planning Studies, Environmental /biodiversity report for eight sites identified in the Wagga Wagga Spatial Plan 2007.* Project no. 069-052. Report to Willana Associates and Wagga Wagga City Council. Ecological Australia Pty. Ltd., Sydney. Explanatory Note(s):

Tree Protection

Refer to Section 5.2 Preservation of trees within WWDCP 2010 for tree preservation objectives and controls.

All native trees within the C2 zone – Harris Road must be retained.

Land and Water Management Plan

The Land and Water Management Plan to be prepared for each stage of development requires the following:

- Revegetation and landscaping must use locally native species from seed of local provenance where possible.
- For the purpose of regeneration seed must be collected from trees to be removed.
- Revegetated areas will be subject to a 12 month maintenance period to ensure the establishment of planted vegetation. Within this period the developer is responsible for an 80% survival rate of plants.

Objectives	Explanatory Note(s):
O1 To ensure trees and vegetation that contribute to the environmental and amenity value of the locality and region are preserved.	
O2 To maintain and enhance the ecological values of waterways and wetlands, including water quality, stream integrity, biodiversity and habitat, within the Gobbagombalin Urban Release area.	
O3 To maintain and enhance riparian buffers to preserve the environmental values associated with waterways and wetlands, having specific regard to fauna and flora habitats and ecosystems, stream integrity (including erosion management and bank stability), land use impacts and recreational/visual amenity.	
O4 To enhance the landscape, cultural and ecological qualities of Gobbagombalin.	
O5 To conserve existing granite outcrops within the site.	
 Controls C1 White Box, Yellow Box, Blakely's Red Gum Woodland, Swift Parrot, Superb Parrot or Squirrel Glider habitat is retained within areas zoned RE1 Public Recreation or land identified in the Environmentally Sensitive Land Map (attached to clause 7.3 of the Wagga Wagga LEP 2010, and generally not within residential lots A plan is to be submitted with the development application for each stage of subdivision indicating which trees on the subject land are to remain and which trees it is proposed to remove. C2 Compensatory tree plantings must use a minimum 10:1 ratio of trees planted for each native tree to be removed (including paddock trees), and revegetation and landscaping should use locally native species from seed of local provenance. Any offset planting must be approved by the Office of Environment and Heritage. C3 Revegetation of riparian areas must use locally native tree and shrub species. C4 Existing granite outcrops must be retained in areas of open space or environmental protection. 	 The domestic plantings and paddock row plantings are not included in the Biodiversity Certification and attributes of the release area. Weed Control Weeds must be adequately controlled along the access route to limit the seed set prior to excavation. Areas of vegetation must be fenced to protect from construction activities.

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Explanatory Note(s):

• Corridors and Flyways

Objectives

- O1 To protect existing wildlife habitat within the area, particularly the corridors of Harris Road and Pine Gully Road.
- O2 To provide for public use of natural areas where this does not affect the environmental role of the area.

Controls

- C1 The existing vegetation along Harris Road is to be retained and enhanced by Council as a linear park. This work is referred to in the current Section 94 Contributions Plan 2006-2019.
- C2 Pathways and cycle ways within dedicated open space areas shall be located to avoid unnecessary loss of significant contributors to the Box Gum woodland.
- C4 A vegetation reserve 10 (ten) metres in width is to be created along part of the western boundary of Pine Gully Road, as indicated on the Open Space Plan (Figure 8) and dedicated as public open space upon the subdivision plan.

Salinity

The local environmental study underpinning the WWLEP 2010 did not find evidence of a salinity problem in Gobbagombalin, however piezometers will be installed to allow monitoring of groundwater and salinity levels within the development area.

Figure 7 shows the proposed location of piezometers within the release area. These piezometers, to be provided by the developer during the appropriate development stage, will be added to the Council's urban salinity monitoring network as they are established. The monitoring will be the responsibility of the Council.

Objectives

- O1 To provide information on groundwater levels within the site to ensure new development does not adversely impact upon the existing water table.
- O2 To ensure that mitigation of any groundwater management issues, if known, is the responsibility of the developer.
- O3 To improve Council's knowledge of groundwater and salinity information for this area.

Controls

C1 Council will require preliminary information for the release area, by way of installing piezometers to identify if there is a reasonable buffer between any shallow aquifer and the height at which development will occur, or the potential for a perched aquifer to establish beneath the release area

The piezometer installation will be by the developer within the first development stage of that respective land area.



- C2 If a space shallow aquifer is identified, appropriate mitigation measures shall be identified and agreed to by the developer and the Council, and monitoring of the aquifer shall begin, to ensure any impacts from development are identified as early as practical and controlled.
- C3 Any monitoring bore/ piezometer installed on the land will be incorporated into Council's urban salinity monitoring network.

Heritage Conservation

This section contains the controls for heritage conservation. Heritage items are listed in Schedule 5 of the WWLEP 2010.

• Aboriginal Heritage

The investigation by Kelleher Nightingale (refer to the Gobbagombalin Archaeological Study (The Study) at Appendix D of the Wagga Wagga Local Environmental Study 2008 noted that the higher terrain of Gobbagombalin providing a dry, elevated position above a resource rich area (floodplain), along with the gently undulating character of the land, gives the study area a moderate to high archaeological sensitivity potential. This was particularly relevant in the case of the north/south drainage line in the lower portion of the land. Notwithstanding this, no artefacts were found during the site survey.

The Study made the following recommendations for the Gobbagombalin study area:-

- Management of the identified areas of potential Aboriginal archaeological sensitivity should be considered during the strategic planning process of Gobbagombalin;
- Conservation should be the prime consideration when establishing Aboriginal heritage management strategies during the planning process;
- The assessment has identified there is *some* potential for this study area to contain Aboriginal objects that were not visible at the time of current site visit due to extensive ground cover and preliminary nature of the investigation. As a result, this area warrants further survey and assessment for proposed future development, as part of the development assessment process.

The Aboriginal Heritage Plan is included as Figure 10 to this Chapter. At the time of this Chapter preparation in early 2012 (due to above average rainfall), the presence of thick native and exotic grass cover within the release area made it impractical to carry out detailed assessment of the release area for Aboriginal heritage as recommended by Kelleher Nightingale. As no artefacts were found during the initial site survey by Kelleher Nightingale, the provisions of the National Parks and Wildlife Act 1974 will be relied upon to protect Aboriginal heritage and artefacts which may be uncovered during subdivision construction.

Objective

O1 To protect Aboriginal cultural heritage values by responding to the archaeological sensitivity of the site.

Controls

- C1 Proponents are to comply with the provisions of the *NPW Act* 1974 with respect to Aboriginal cultural heritage.
- C2 If artefacts or evidence of Aboriginal heritage are found during subdivision construction, work must cease immediately and the Office of Environment and Heritage must be notified. Satisfactory consultation is to be carried out with the Council and Aboriginal stakeholders to confirm to the proposed method of management for areas containing Aboriginal objects and/or Aboriginal Places.
- C3 Council must be provided with documented justification where continued construction cannot avoid harm to Aboriginal objects and/or Aboriginal Places.
- C4 A member of the Wagga Wagga Local Aboriginal Land Council or other Aboriginal stakeholder group must be invited to supervise works carried out in proximity to an Aboriginal object, Aboriginal place, or other site with Aboriginal cultural heritage values, if identified during subdivision construction.
- C5 All other heritage items must comply with the relevant controls in Section 3 of WWDCP 2010.

Residential and large lot residential subdivision

This Section contains the controls for residential subdivision, including rural residential/ large lot residential developments. The subsection applies to all land in the R1 and R5 Zones.

The neighbourhood plan showing at Figure 9 shows the area of land zoned R5 large lot residential within the study area – generally that land (north of Harris Road) on the northern and western boundaries of the study area, adjoining rural land.

Subdivision

Section 7 of the DCP contains the general controls for subdivision of land.

The LEP sets minimum lot sizes for rural, rural small holdings and large lot residential land, and specifies the residual development potential of certain sites. Where no minimum lot size applies proposals for subdivision will be assessed on their merits against the Guiding Principles of the DCP, the subdivision design principles set out below, and the objectives and controls of this Section.

The core concepts for the merit assessment of subdivision proposals are reflected in the following design principles:

- Achieving site and environmentally responsive subdivision
- Ensuring that the size, shape and environmental characteristics of future lots will support appropriate development and maximise the potential for design for energy and water efficiency.
- Achieving good public domain outcomes.

Also refer to WWDCP 2010 Section 7 for Principles and Controls for Subdivision.

Explanatory Note(s):

Any building that is proposed for strata subdivision is required to comply with relevant fire safety provisions. Council may require associated fire upgrading works as part of an application for strata subdivision.

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Explanatory Note(s):

Solar access, energy efficiency, size and shape of lots

Refer to WWDCP 2010 Section 7.2.3 for objectives and controls for Solar access, energy efficiency, size and shape of lots.

• Open Space, parks and the public domain

Parks and open space areas should be integral to neighbourhood design, providing a range of recreational and environmental settings, corridors and focal points. They should respond to the opportunities and constraints of the physical characteristics of the land, proposed uses and facilities.

Objectives

- O1 To develop an open space network that facilitates the protection of key environmental and cultural qualities contained within the site and to ensure connectivity by way of linkage of the open space network that provides useable and aesthetically pleasing areas for the community's needs.
- O2 To provide open space areas with natural surveillance from surrounding dwellings.
- O3 To provide planting throughout the neighbourhood, especially in the public places and streets, to create a pleasant microclimate and mitigate the effects of extreme temperatures.
- O4 To provide a linear park network along Harris Road that benefits the existing and future residents of Estella and Gobbagombalin.
- O5 To require dedication and embellishment of open space where the land directly adjacent the open space is developed.

Controls

- C1 Open space provided is to be located in accordance with Figure 8 Open Space Network. Footpaths and cycle ways included within the open space will be constructed by the developer, as shown in Figures 4.2 and 4.3.
- C2 Open space is to be dedicated at the rate as specified in the Section 94 Contributions Plan.
- C3 The dedication of open space will be staged to relate to lot development. Dedication and embellishment of open space will occur where the land stage under development directly adjacent the open space is developed.
- C4 Dwellings adjoining an open space (other than those next to Harris Road) must front the open space and shall have the following restrictions enforced by a s88B instrument:
 - (i) Erect a fence along the boundary shared with the open space having:
 - (a) a height of not greater than 1.5m;
 - (b) not less than 50% of open/see through construction

Refer to the Guide (including Appendices 2, 3 & 5) and Checklist for subdivision for further details in relation to required information for the landscaping of communal (public) open space areas.

An open space master plan including detailed information about the treatment and/or embellishment of open space is to be submitted with a development application for a subdivision to create 10 additional allotments.

Documentation that should accompany a construction certificate for a subdivision to create 10 additional allotments should include plans, materials and finishes etc for public open space.

- C5 Lots adjoining Harris Road shall be at least ,1000sqm in size and have the following restrictions enforced by a s88B instrument:
 - (i) Erect a fence along the boundary shared with Harris Road having:
 - (a) a height not greater than 1.5m;
 - (b)not less than 50% of open/see through construction
 - (ii) No dwelling shall be located within 10m of the Harris Road boundary.
 - (iii)All dwellings must have a ground floor verandah, porch, patio, pergola or deck on the side facing Harris Road.
- C6 Dwellings adjoining Harris Road must have a secondary frontage that:
 - (i) Includes a verandah, porch, patio, pergola or deck no closer than 3m of the Harris Road boundary.
 - (ii) Sheds and garages must not be located in the 10m dwelling setback
- C7 Landscaping shall occur with locally native vegetation. The park shall be landscaped with plantings, seating of low visual impact, paths and irrigation.
- C8 Locate open space and recreation areas to maximise connections to adjoining land uses and local roads.
- C9 Open space areas and parks are generally not to be located under major power lines or in detention basins.
- C10 Drainage areas are not to be included in the calculation of area required for local open space.
- C11 To lessen their visual impact electrical boxes and other infrastructure are to be strategically incorporated into areas of open space.
- C12 Active recreation equipment (such as play equipment) should not be located within the Harris Road public open space or within the canopy of any large hollow bearing trees.

• Residential Development

The general provisions of the Wagga Wagga Development Control Plan 2010 apply to Gobbagombalin.

Residential Development on land zoned R1 in Gobbagombalin Urban Release Area must comply with the principles, objectives, and controls for Residential Development detailed in Section 9 of this Development Control Plan.

Section 9 of this Development Control Plan contains controls relating to **site context and layout**; **site area, building form and envelope** including controls on site cover, landscaped area, setbacks and solar access; and **design details** that encourage good building form, quality and private open space and good amenity outcomes.

Complying with this Section

A Development Application must satisfy the Guiding Principles, and the Objectives of the relevant Sections. Equal emphasis must be given to both "numeric" and non-numeric controls relevant to a particular development. Compliance with controls will not necessarily guarantee approval of an application.

Where a variation is sought, the application must document the reasons and extent of the variation, and how the variation meets the Guiding Principles for the consideration of the Council.



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Neighbourhood plan

The Neighbourhood Plan acts as a summary of the key features of the urban release area and the various sections within this Chapter, and provides guidance for future amendments to the plan, to ensure that the original planning intent is observed.

The Neighbourhood Plan provides a strategic design framework on which consistent development assessment can be based.

The key features and planning intent of the Gobbagombalin Neighbourhood Plan, is as follows.

- An R5 large lot residential buffer zone adjoining the rural land to the north and north-west of the release area.
- Promoting Pine Gully Road as an arterial road, with four traffic lanes in its southern configuration, and limiting connecting roads to three intersections.
- A collector and local road network, and a cycleway, share path and footpath network which aids connectivity to the open space, Harris Road and across the release area to Estella ad Boorooma.
- The staged closure and embellishment of Harris Road as a biodiversity/habitat corridor.
- The establishment of a large linear park through the centre of the southern portion of the site. This will be the major passive recreation area for Gobbagombalin residents.
- The establishment of a large drainage detention basin below the linear park to de-energise the localised catchment stormwater flow from the release area, and a further detention basin in the north-west corner of the release area to accept stormwater from the upper localised catchment.
- The aim is a high quality neighbourhood providing a mix of low and medium density residential development, supported by infrastructure and services, landscaping of recreation and natural areas, connectivity for pedestrians, cyclists and vehicles, and achieving a sense of community.



Gobbagombalin Neighbourhood Plan Contents:

MJM Figure 1 Topography & constraints plan

MJM Figure 2 Sewer catchments & pump stations plan

MJM Figure 3 Stormwater drainage plan

MJM Figure 4.1 Road network & pedestrian access plan

MJM Figure 4.2 Cycleway and Share path Plan

MJM Figure 4.3 Footpath plan

MJM Figure 4.4 Bus route plan

MJM Figure 5 Release area staging and Harris Road closure plan

MJM Figure 6 Biodiversity attributes plan

MJM Figure 7 Salinity piezometer plan

MJM Figure 8 Open space & stormwater dedication plan

MJM Figure 9 Gobbagombalin Layout Plan

MJM Figure 10 Aboriginal heritage plan

Salvestro Attachment No. 3 Neighbourhood Layout Plan

Salvestro Attachment No. 4 Road Hierarchy Plan

Salvestro Attachment No. 5 Staging Plan

Esler Sheet 1 of 13 Topography and Constraints Plan

Esler Sheet 2 of 13 Sewer Catchments and Pump Stations Plan

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