Goulburn Mulwaree
Development Control Plan 2009

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Effective 14 November 2019

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Contents

1 PRELIMINARY 11

1.1 Name of this plan 11

1.2 Date of adoption 11

1.3 Purpose of this plan 11

1.4 Land to which this plan applies 11

1.5 Other planning policies and instruments 12

1.6 Structure of this plan 12

1.7 Public participation 12

1.8 Variations to controls 13

1.9 List of amendments 13

1.10 Definitions 14

2 PLAN OBJECTIVES 18

2.1 General development objectives 18

2.2 Locality objectives – Goulburn City 19

2.2.1 History of development 19
2.2.2 Locality characteristics 20
2.2.3 Existing character 22
2.2.4 Desired future character 25
2.2.5 Topography 26
2.2.6 Urban structure 27
2.2.7 Urban form 28
2.2.8 Streetscape 29

2.3 Locality objectives – Marulan 29

2.3.1 History of development 29
2.3.2 Locality characteristics 31
2.3.3 Desired future character 32

2.4 Rural development objectives 32

2.4.1 Agriculture and primary produce 32
2.4.2 Rural landscape 33

2.5 Rural locality objectives 34

2.5.1 Bungonia 34
2.5.2 Lake Bathurst 35

2.5.3 Tallong 36
2.5.4 Tarago 37

3 GENERAL DEVELOPMENT CONTROLS 39

3.1 Indigenous Heritage and Archaeology 41

3.1.1 Introduction 41
3.1.2 Objective 42
3.1.3 Background 42
3.1.4 Responsibilities 44
3.1.5 Relevant Documentation 44
3.1.6 Identifying Potential for Impacts upon Aboriginal Cultural Heritage Values 44
3.1.7 Identifying the need for an Aboriginal Heritage Impact Assessment 45
3.1.8 Identifying what Level of Assessment is Required? 48
3.1.9 Conducting an Aboriginal Heritage Impact Assessment 48

3.2 European (Non-Indigenous) Heritage Conservation 52

3.2.1 Introduction 52
3.2.2 Where does this Section Apply? 52
3.2.3 Objectives 53
3.2.4 Definitions 53
3.2.5 Development Applications 55
3.2.6 Assistance 61

3.3 General Heritage Item and Conservation Area Controls 62

3.3.1 Context 62
3.3.2 Alterations and Additions 63
3.3.3 Adaptation of Heritage Buildings or Sites 64
3.3.4 Change of Use 65
3.3.5 Demolition 65
3.3.6 Subdivision 66
3.3.7 Corner Allotments 67
3.3.8 Development in the Vicinity of a Heritage Item 68
3.3.9 Dual Occupancies / Secondary Dwellings 70
3.3.10 Multi Dwelling Housing Developments 70
3.3.11 Signage and Advertising 71
3.3.12 Building Materials, Colours and Finishes 73
3.3.13 Building Form, Scale and Style 77
3.3.14 Roof Form and Chimneys 79
3.3.15 Verandahs 81
3.3.16 Windows and Doors 82

3.3.17 Facades 83
3.3.18 Parking – Garages and Carports 85
3.3.19 Fences 87
3.3.20 Outbuildings and Pools 90
3.3.21 Non-Indigenous Archaeology 91
3.3.22 Old Marulan Heritage Conservation Area 93
3.3.23 Goulburn Central Business Heritage Conservation Area 95
3.3.24 Goulburn Residential Heritage Conservation Areas 100
3.3.25 South East Goulburn Heritage Conservation Area 106
3.3.26 Kenmore Heritage Conservation Area 110
3.3.27 Goulburn Waterworks Heritage Conservation Area 116
3.4 Bungonia Heritage Conservation Area 119
3.4.2 Rural Villages 124
3.5 Landscaping 125
3.5.1 Landscape plan design requirements 125
3.5.2 Residential development 128
3.5.3 Non-residential development 129
3.5.4 Streetscape (urban) 130
3.5.5 Fences and gates (urban) 131
3.5.6 Set backs 132
3.6 Vehicular access and parking 133
3.6.1 Parking layout, servicing and manoeuvring 133
3.6.2 Specific land use requirements 134
3.7 Crime prevention through environmental design 138
3.7.1 Lighting 138
3.7.2 Fencing 139
3.7.3 Car parking 139
3.7.4 Entrapment spots & blind corners 141
3.7.5 Landscaping 141
3.7.6 Communal/public areas 141
3.7.7 Movement predictors 142
3.7.8 Entrances 142
3.7.9 Introduction to next subsections 3.7 – 3.16 143
3.8 Flood affected lands 144
3.8.1 Definitions 144
3.8.2 Controls for development at or below the flood planning level 144
3.8.3 Mapping 146

3.9 Tree and vegetation preservation 147

3.9.1 Definitions 148

3.9.2 General 148

3.10 Dryland salinity 149

3.11 Waterbody and wetland protection 149

3.12 Groundwater 151

3.13 Basic landholder riparian rights for subdivision 152

3.14 Biodiversity management 152

3.14.1 Wollondilly, Mulwaree, Shoalhaven and Tarlo Rivers 152

3.14.2 Riparian corridors 153

3.14.3 Regional corridors 156

3.15 High Environmental Conservation Value areas 158

3.15.1 Medium conservation valued areas 160

3.15.2 Key fish habitat 161

3.16 Stormwater pollution 165

3.16.1 Long term pollution control 165

3.16.2 Short term pollution control 166

3.17 Bushfire risk management 167

4 PRINCIPAL DEVELOPMENT CONTROLS – URBAN 169

4.1 Residential development 169

4.1.1 Site planning, bulk, scale and density 169

4.1.2 Number of storeys 172

4.1.3 Solar access 172

4.1.4 Privacy 174

4.1.5 Private open space 175

4.1.6 Setbacks 176

4.1.7 Views 178

4.1.8 Traffic safety and management 178

4.1.9 Site facilities 179

4.1.10 Energy efficient siting and layout 180

4.1.11 External window shading and internal and external lighting 181

4.1.12 Insulation 182

4.1.13 Space heating and cooling 183

4.1.14 Working hours – residential and business 184

4.1.15 Subdivision 184

4.2 Non-residential development – retail, commercial and industrial 188

4.2.1 Retail and commercial (general) 188
4.2.2 Design principles – industrial 189
4.2.3 Visual quality – industrial 190
4.2.4 Building setbacks – industrial 190
4.2.5 Height – industrial 191
4.2.6 External materials and finishes - industrial 192
4.2.7 Noise and vibration – general requirements 192
4.2.8 Air pollution - industrial 194
4.2.9 Mixed use development – industrial and residential 194

5 PRINCIPAL DEVELOPMENT CONTROLS – RURAL 196

5.1 Intensive agriculture 196

5.2 Subdivision 197

5.3 Rural dwellings 198

5.4 Rural dual occupancy 202

5.5 Rural sheds 202

5.6 Rural industries 202

5.7 Boarding and/or breeding kennels for dogs and cats in rural areas 203

5.8 Hazardous chemicals 205

5.9 Rural land use conflict 206

5.10 Public entertainment in rural zones 210

6 SPECIAL DEVELOPMENT TYPES 213

6.1 Poultry farms 213

6.2 Service centres 220

6.3 Wind farms 223

6.4 Advertising and signage 225

6.4.1 Amenity 226
6.4.2 Design 226
6.4.3 Highway promotional signs 228

6.5 Sex services premises 230

6.5.1 Development applications 230
6.5.2 Advertising/notification 231
6.5.3 Access and location requirements 231

6.5.4 Car parking 232
6.5.5 Health and building requirements 233
6.5.6 Signage 233
6.5.7 Standard conditions 233
6.6 Outdoor dining 234
6.7 Telecommunications 235
6.7.1 Design controls 236
6.7.2 Visual amenity 236
6.7.3 Co-location 237
6.7.4 Siting 237
6.7.5 Heritage and environment 238
6.7.6 Facility physical design controls 238
6.7.7 Facility health controls 239
6.8 Large lot residential – zone R5 239
6.8.1 Special provisions 239
6.8.2 General 240
6.8.3 Subdivision 240
6.8.4 Residential development 242
6.9 Relocatable homes 244
6.10 Development in the enterprise corridor –zone B6 246
6.11 Extractive industries 249
6.12 Stables in residential and recreation zones 251
6.13 Manfred Park block – Goulburn 253
7 ENGINEERING REQUIREMENTS 256
7.1 Utility services 256
7.2 Roads 256
7.2.1 Urban 256
7.2.2 Rural 258
7.2.3 Heavy vehicle haulage development routes 258
7.3 Drainage and soil and water management 261
7.3.1 Drainage (urban) 261
7.3.2 Water sensitive urban design (urban) 262
7.3.3 Soil and water management 263
7.4 Easements 264
7.5 Staging of development in urban release areas 265

8 SITE SPECIFIC PROVISIONS 267

8.1 Goulburn City Business District 267

8.1.1 Land to which Plan applies 267
8.1.2 Background context material 269
8.1.3 Acknowledgements 326

8.2 Marulan Local Business Centre 327

8.2.1 Land to which Plan applies 327
8.2.2 Performance Criteria 328
8.2.3 Performance objectives for Environmental Heritage, Contributory Heritage and Non-Contributory buildings and places 332
8.2.4 General Development Controls 333
8.2.5 George Street, Marulan Landscape Concept Plan 337

8.3 Marulan Estates Urban Release Area 338

8.3.1 Land to which Plan applies 338
8.3.2 Urban Release Area (Goulburn Mulwaree LEP 2009 – Part 6) 338

8.4 Charles Valley – Long Street Goulburn 353

8.4.1 Land to which Plan applies 353
8.4.2 Development potential 357
8.4.3 Subdivision 360
8.4.4 Residential development 363

8.5 Clyde Street 365

8.5.1 Land to which Plan applies 365
8.5.2 Constraints 366
8.5.3 European heritage 369
8.5.4 Aboriginal heritage sites 369
8.5.5 Potentially contaminated sites 370
8.5.6 Development potential 370
8.5.7 Subdivision 372
8.5.8 Residential development 378
8.5.9 Other development 381

8.6 Common Street 382

8.6.1 Land to which Plan applies 382
8.6.2 Constraints 382
8.6.3 Developable land development potential 386
8.6.4 Subdivision 387
8.6.5 Road requirements 396

8.7 Marys Mount 397

8.7.1 Land to which Plan applies 397
8.7.2 Constraints 398
8.7.3 Development potential 400
8.7.4 Subdivision requirements 401
8.7.5 General road provisions 406
8.7.6 Residential development controls 413
8.7.7 Other development controls 415
8.7.8 Urban release areas 416

8.8 Mistful Park Commercial Precinct 420

8.8.1 Land to which this Plan applies 420
8.8.2 Development Potential 420
8.8.3 Restriction on commercial development 422
8.8.4 Additional and alternative requirements for medium density residential development and tourist and visitor accommodation 422

9 APPENDICES 425

9.1 Appendix A Criteria for the Assessment of Heritage Significance of Aboriginal Sites 425

9.2 Appendix B Preferred planting species 433

9.3 Appendix C Not in use 437

9.4 Appendix D Development application checklist 438

9.5 Appendix F Telecommunications policy 441

Telecommunications policy 441

9.6 Appendix G: Landscape Policy, Site Analysis and Preparing a Landscape Plan 445

Site analysis 445

9.7 Appendix H Heritage Impact Statement Requirements 455

9.8 Appendix I Goulburn Mulwaree Good Design Statement 2005 457

457

Goulburn Mulwaree Good Design Statement 457

1 Preliminary

1.1 Name of this plan

This plan is known as the Goulburn Mulwaree DCP 2009. This plan has been prepared in accordance with section 72 of the *Environmental Planning and Assessment Act 1979* (the EP&A Act).

1.2 Date of adoption

This plan was originally adopted by Goulburn Mulwaree Council (Council) on Tuesday 19 August 2008 and came into operation upon the gazettal of *Goulburn Mulwaree Local Environmental Plan 2009* (LEP) on 20 February 2009.

This plan is subject to amendment from time to time. Plan users should refer to the list of amendments to **clause 1.9** of this plan.

1.3 Purpose of this plan

This plan shall be used together with the LEP.

The LEP provides the legal framework by which Council's development decisions are made. It sets out Council's vision and seeks to implement this by way of objectives, policies, zoning tables, and zoning and heritage conservation maps.

This plan supplements the LEP by providing detailed reasoning, guidelines, controls and general information relating to the decision making process. Together these documents form the land use planning and development controls for the Goulburn Mulwaree local government area.

1.4 Land to which this plan applies

This plan applies to all land within the Goulburn Mulwaree local government area.

1.5 Other planning policies and instruments

This plan supports the provisions of the LEP.

This plan is to be read in conjunction with other planning instruments, Council policies, codes and specifications to specific design aspects of a proposal.

Where there is an inconsistency between this plan and any environmental planning instrument applying to the same land, the provisions of the planning instrument apply.

In addition to the above and the provisions of this Plan, in assessing development proposals, Council must consider all those matters specified in Section 79C of the EP&A Act.

1.6 Structure of this plan

This development plan is structured in the following manner:

1. **Preliminary** – this part of the plan comprises the administrative elements of this plan, including the name of this plan, the date of adoption, the purpose of this plan, the land to which this plan applies, and the relationship of this plan to other relevant planning policies and instruments.
2. **Plan objectives** – identifies the objectives for development control under this plan.
3. **General development controls** – identifies the controls which apply to most forms of development within the Goulburn Mulwaree local government area.
4. **Principal development controls** – urban – identifies the key development controls for development within urban areas.
5. **Principal development controls** – rural – identifies the key development controls for development within rural areas.
6. **Special development types** – identifies specific controls for certain types of development.
7. **Engineering requirements** – identifies special provisions for the consideration of engineering requirements.
8. **Site specific provisions** – identifies particular controls for development within certain areas of the Goulburn Mulwaree local government area.

1.7 Public participation

Notification and advertising requirements for developments are detailed separately in Council's *Community Participation Plan*. This plan is available on Council's website.

1.8 Variations to controls

Council acknowledges that it is not possible for this plan to account for all possible situations and development scenarios. Consequently, the development controls under this plan have been designed to be flexible.

When circumstances warrant, Council may consent to an application which departs, to a minor extent, from the provisions of this plan. In such cases, a written submission must be lodged with the development application, outlining the variation, providing reasons why the variation is necessary or desirable, and setting out how the objectives of the particular provision are satisfied by the proposal.

Some of the relevant factors in determining whether a departure from this plan is warranted include:

(a) whether there will be any detrimental impact on the amenity of the existing and future residents
(b) whether there will be any detrimental impact on the amenity of the area
(c) the nature and size of the departure
(d) the degree of compliance with other relevant requirements
(e) the circumstances of the case, including whether the particular provision is unreasonable and/or necessary
(f) priorities identified in a site analysis of being of more importance than what is being departed from
(g) whether non-compliance will prejudice the objectives of the zone and the aims of this plan

1.9 List of amendments

The following list details the amendments to this plan that have been effected after the original adoption of the plan (Tuesday 19 August 2008).

Amendment No. 1	Adopted 20 October 2009 Effective from 28 October 2009
Amendment No. 2	Adopted 5 June 2012 Effective 27 June 2012
Amendment No. 3	Adopted 6 October 2015

	Effective 23 October 2015
Amendment No. 4	Adopted 7 June 2015 Effective 23 June 2015
Amendment No. 5	Adopted 7 August 2018 Effective 23 August 2018
Amendment No. 6	Adopted 18 December 2018 Effective 25 January 2019
Amendment No. 7	Adopted 20 August 2019 Effective 5 September 2019
Amendment No. 8	Adopted 5 November 2019 Effective 14 November 2019

1.10 Definitions

Council means the Goulburn Mulwaree Council.

equivalent standard axles (ESAs) is a reference axle load. The standard axle is a single axle with dual tyres transmitting a load of 80kN to the pavement. The number of equivalent standard axle loads is termed the number of equivalent standard axles (ESAs). The design life of a road can also be expressed in terms of the number of ESAs it will carry.

heavy vehicle haulage development includes extractive industries, mines, forestry, saw or log processing works, waste or resource management facilities and the like. Such developments are characterised by regular movement of laden heavy vehicles (class 3 or above) associated with the dominant use of the land.

large-scale sporting or recreation activities means any sporting or recreation activity where:

(a) provision is made for 1,000 or more spectators; or

(b) substantial provisions are made for spectating facilities , such as a grandstand, and the presence of spectators forms part of the dominant use of the land

public entertainment has the same meaning as in the Act.

Note. The term is defined as follows:

public entertainment means entertainment to which admission may ordinarily be gained by members of the public on payment of money or other consideration:

(a) whether or not some (but not all) persons are admitted free of charge, and

(b) whether or not the money or other consideration is demanded:

(i) as a charge for a meal or other refreshment before admission is granted, or

(ii) as a charge for the entertainment after admission is granted.

relic means any deposit, object or other material evidence of human habitation:

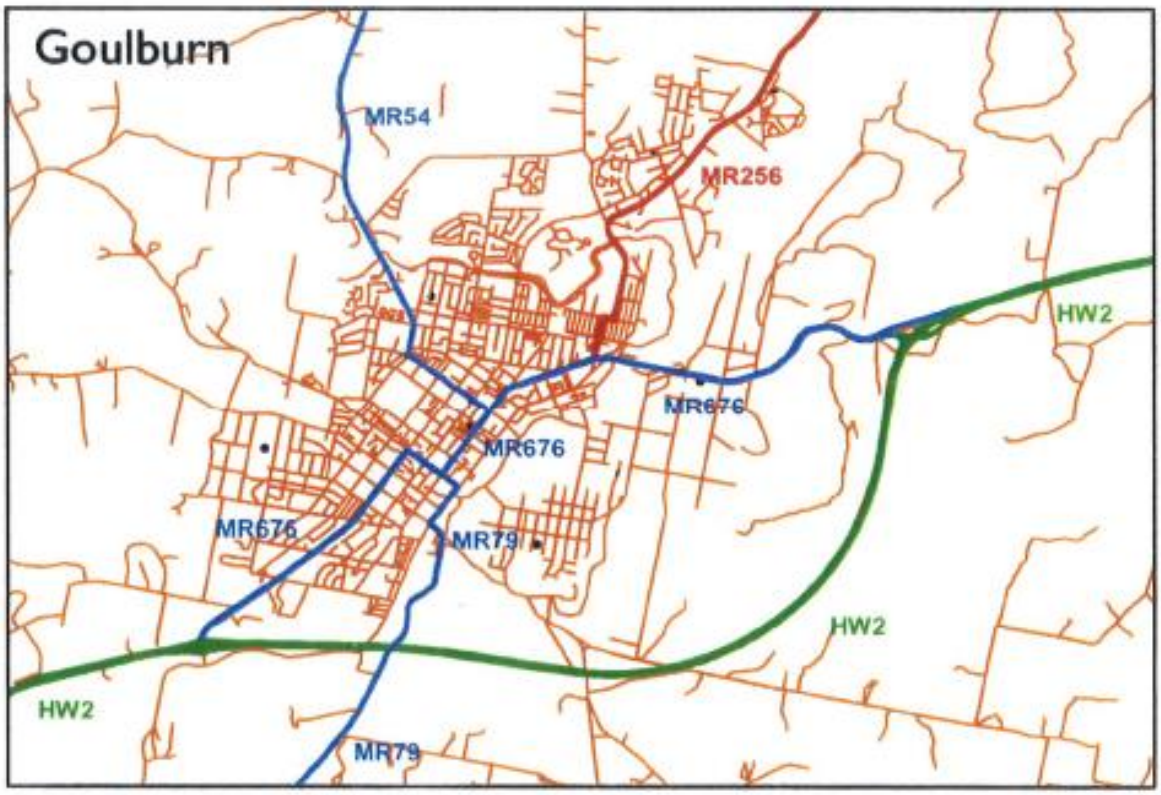
(a) that relates to the settlement of the area of Goulburn Mulwaree not being Aboriginal settlement, and

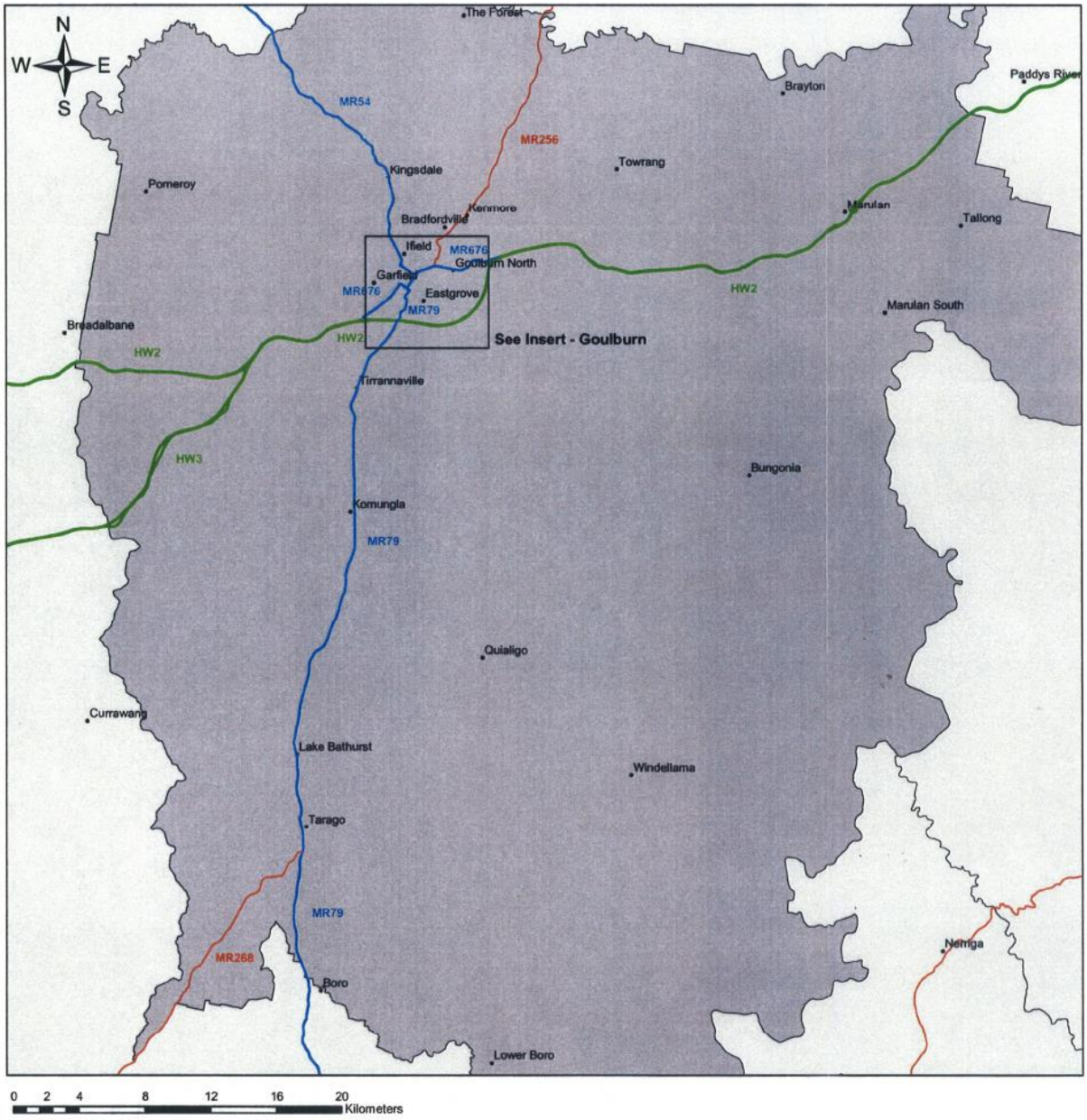
(b) that is more than 50 years old, and

(c) that is a fixture or is wholly or partly within the ground.

the Act means the *Environmental Planning and Assessment Act 1979*.

Classified Roads – Goulburn Mulwaree Council





Legend

Classified Roads

Regional

State

National

2 Plan objectives

2.1 General development objectives

The following plan objectives set the policy framework that will guide future development within the Goulburn Mulwaree local government area.

- Residential land is to be developed with the creation of neighbourhoods comprising a range of densities.
- Residential areas should promote opportunities for walking and cycling as alternative modes for local transport.
- Employment uses should be sensitively designed and located to minimise conflict.
- Buffers are to be used to safeguard the integrity and quality of waterways and creeks.
- Development along waterways requires flood investigations to determine the minimum flood level and to ensure flood levels and velocity would not cause harm to life or property.
- Development buffers are to be used to safeguard prime agricultural land. New sensitive land uses should be located an acceptable distance from hazardous or offensive agricultural operations unless an appropriate buffer has been established.
- Integrated open space and drainage networks should provide the framework for an off-road pedestrian and cyclist network.
- Non-residential land uses shall not impact upon the amenity of the area or surrounding sensitive land uses. This would include, for example, local shops and commercial premises, schools, child care centres, places of worship, open space and recreation.
- Commercial land uses shall be clustered to minimise car trips and promote focus on pedestrian and cycle ways.
- Land uses that maintain a rural landscape should be encouraged on the edges of residential areas to provide a defined transition to rural areas and minimise potential for land use conflicts. This is particularly important where large lot residential development is near areas identified for agricultural purposes.
- Prime agricultural areas and areas identifying potential to yield groundwater should be safeguarded from incompatible land uses and protected given their environmental sensitivities.
- Investigations will be required to determine the optimum water supply and sewage servicing approach for existing and future residential and large lot residential areas.

- Best practice water quality controls (including water quality monitoring) should be implemented. Pre-development water quality should be maintained or enhanced in post-development run-off. The management of water should address cumulative environmental impacts and be carried out in accordance with the objectives of integrated water cycle management and water sensitive urban design.

The Goulburn Mulwaree Strategy has identified two urban localities which will be the key focus for development over the life of the plan: Goulburn and Marulan. Council's objectives for development in these two urban localities are outlined below.

2.2 Locality objectives – Goulburn City

Area character is given by a unique combination of the natural and physical elements of a place. This includes both public and private domain elements: slope, block pattern, lot size and dimension, setbacks, building form and scale, street tree planting, the treatment of front gardens and the adjacency of open space areas.

2.2.1 History of development

Goulburn was named by James Meehan and ratified by Governor Lachlan Macquarie, after Henry Goulburn, Secretary of State for War and the Colonies. The Aboriginal name for Goulburn is Burbong which is a Murring/Wiradjuri word that indicates a special indigenous cultural area.

The first recorded settler in Goulburn established 'Strathallan' in 1825 (on the site of the present Police Academy) and a town was originally surveyed in 1828, although moved to the present site of the city in 1833 when Surveyor Hoddle laid it out. George Johnson purchased the first land in the area between 1839 and 1842 and became a central figure in Goulburn's development. He established a branch store with a liquor license in 1848. By 1841 Goulburn had a population of some 1,200 people, with a courthouse, police barracks, churches, hospital and a post office, and was the centre of a great sheep and farming area.

A telegraph station opened in 1862, by which time there were about 1500 residents, a blacksmith's shop, two hotels, two stores, the telegraph office and a few cottages. The town was a change station (where coach horses were changed) for Cobb & Co by 1855. A police station opened the following year and a school in 1858. Goulburn was proclaimed a town with municipal government in 1859. Royal Letters Patent issued by Queen Victoria on 14 March 1863 established the Diocese of Goulburn giving Goulburn

city status and making it the first inland city. The existing St Saviour's Church became the Cathedral.

The arrival of the railway in 1869, which was opened on May 27th by the Governor Lord Belmore, along with the completion of the line from Sydney to Albury in 1893, was a boon to the city. Later branch lines were constructed to Cooma (opened in 1889) and later extended further to Nimmitabel and then to Bombala, and to Crookwell and Taralga. Goulburn became a major railway centre with a roundhouse and engine servicing facilities and a factory which made pre-fabricated concrete components for signal boxes and station buildings.

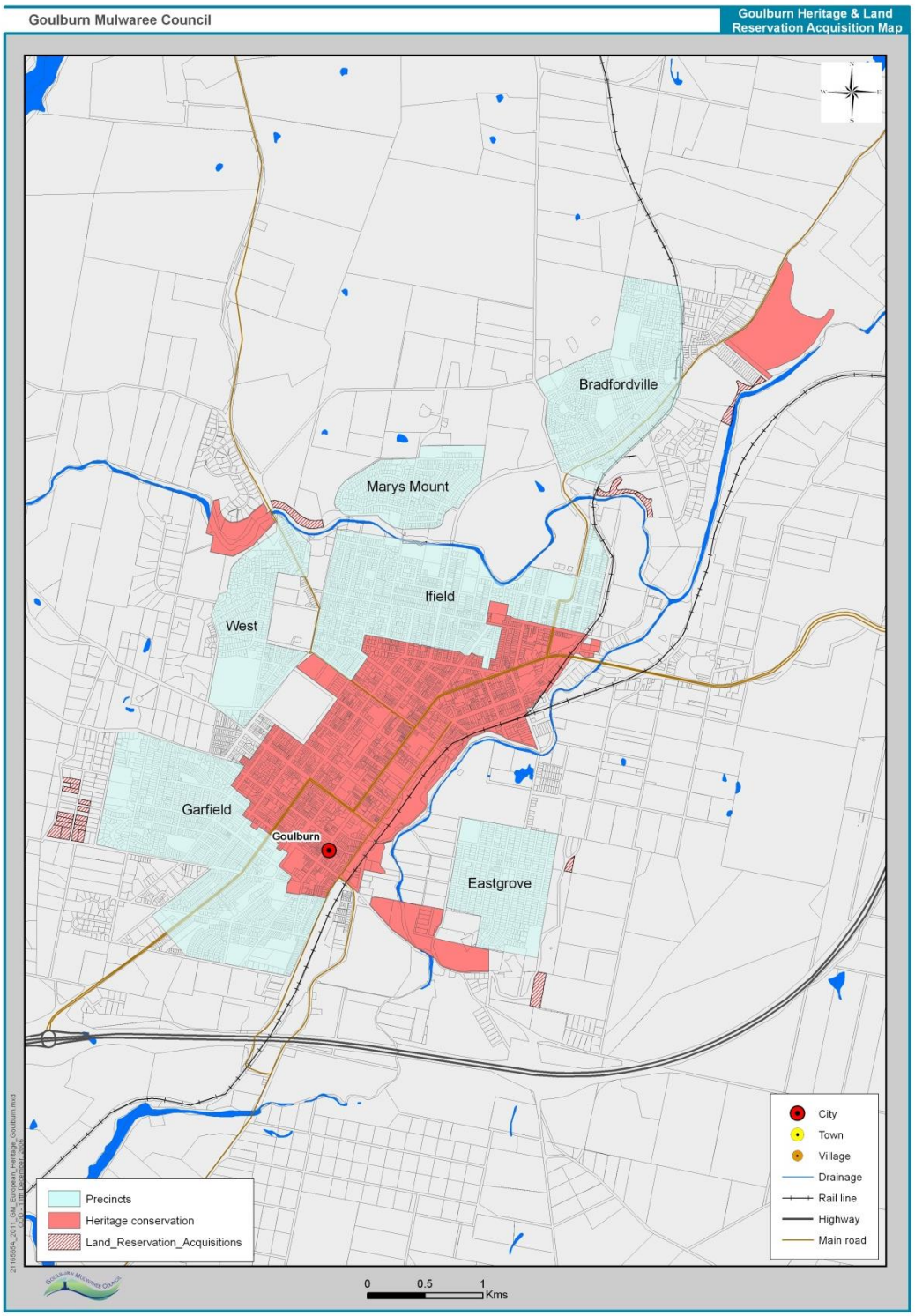
Goulburn is a cathedral city. St Saviour's Cathedral, designed by Edmund Thomas Blacket replacing the original cathedral, was completed in 1884 with the tower being added in 1988 to commemorate the Bicentenary of Australia. Though completed in 1884, some earlier burials are in the graveyard adjacent to the Cathedral. St Saviour's is the seat of the Anglican Bishop of Canberra and Goulburn. The Church of Saints Peter and Paul is the former cathedral for the Roman Catholic Archdiocese of Canberra and Goulburn.

2.2.2 Locality characteristics

Goulburn is the primary living and employment centre for the Goulburn Mulwaree local government area. The urban structure of Goulburn reflects its historical development. The town is dominated by a commercial grid, which is surrounded by a variety of land uses, including commercial, retail, administration, tourist and accommodation. Low density residential subdivisions surround the commercial centre to the north and west.

Goulburn has natural and built boundaries, including the Main Southern Railway and the Mulwaree River to the south and east, topographical constraints to the west, and the Wollondilly River to the north. These boundaries have directed the growth of Goulburn

Figure 2-1: Goulburn locality precincts



toward the north near the Wollondilly River. Several significant land uses occupy areas adjacent to the Wollondilly River, including the Goulburn Gaol, the NSW Police Academy and sewage treatment facilities.

There are 6 distinctive locality character areas beyond the conservation area in central Goulburn (refer to **Figure 2-1**):

1. **Bradfordville**: the area between Kenmore and the NSW Police College, on the Taralga Road approach
2. **Eastgrove**: the area on the slopes below Memorial Road, east of the Railway line
3. **Garfield**: below Combermere Street
4. **Western**: broadly west of Victoria Park and Fitzroy Street
5. **Ifield**: older streets abutting the existing conservation area whose block pattern springs off the line of Citizen Street, bounded by the Wollondilly River
6. **Marys Mount**: the area north of the Wollondilly River below Mary's Mount Road.

The south-west and central north precincts are closely related to the town centre and share much of the established character of the heritage conservation precincts they abut, including block pattern, setbacks, building type and style, and materials.

2.2.3 Existing character

2.2.3.1 Bradfordville precinct

The north east precinct has a mixture of loose/distorted grid with some curvilinear streets and cul-de-sac. The topography of the Bradfordville precinct is generally flat. The precinct has a predominantly suburban character, consistently modest in bulk and scale though mixed in age, materials and colours.

The northern portion of the precinct has a suburban fringe character, with houses backing on to fields, with wide vistas and scattered detached dwellings beyond. Typically, dwelling lots in the precinct comprise large front setbacks with low or no front fences.

Houses in this precinct are built in a mix of materials, including brick (red and blonde) with tiled roofs, and timber typically with iron roofs; generally inter-war period with some 1960s fibro, and recently constructed houses.

Dwellings comprise simple forms, either forward bay or 'box' cottages – generally single storey. New dwellings are interspersed across the precinct, but are generally built closer to side boundaries, some with attached garages.

There are some street trees in the precinct, ranging from small to medium in size. There are however some streets with no trees. Many streets do not include footpaths, creating a sense of the front garden flowing out to the street. Newer areas have roll kerbs.

2.2.3.2 Eastgrove

Set apart from the town on the eastern side of the Mulwaree River, the Eastgrove precinct lies above the flood plain and against the backdrop of the War Memorial hills. Eastgrove has a distinct physical and visual separation from the central Goulburn retail centre.

The Eastgrove precinct is characterised by a regular grid with terminating North-South streets connected by two main East-West streets (Park Road and Glenelg St). Terminating streets have a 'cul de sac' character that give a sense of privacy and seclusion and contribute to the 'separate' character of the precinct. The Eastgrove grid is laid over west-facing slope with panoramic views back towards Goulburn along East-West streets, from higher level homes, and between buildings.

On the lower slopes there are a number of significant older buildings (some in poor condition and apparently deserted), often on large lots and/or with undeveloped land around them, which add a strong historical and semi-rural character to the Eastgrove precinct.

On the higher slopes are newer dwellings, conventional in design, whose brick veneer, low-pitched tiled roofs and landscaping treatment contrast with the nature of the older parts of the neighbourhood.

2.2.3.3 Garfield

Set on the 'other side' of the ridge, and at some distance from the town centre, the Garfield precinct has a strongly suburban character that is very different from the other areas –smaller houses typically of simple 'box' or forward bay type in a range of colours (mostly lighter colours) predominate, with front gardens set to lawn with smaller scale edge planting and no or low front fences.

The topography of the Garfield precinct is sloping, with a mix of street widths and generally narrow lots. The character of the neighbourhood reflects historically lower average household incomes (i.e. workers' housing) in terms of building size, simplicity (little detailing) and modesty of materials. This has resulted in a large open space to built area ratio and gives a feeling of openness to the streets. Some large vacant/undeveloped parcels enable views through blocks; where this occurs it further enhances the openness

of the streetscape. There are many timber and some fibro cement dwellings with metal roofs in the Garfield precinct, with comparatively few in brick.

Although modest in scale and architectural detailing, there is a variety of architectural and period styles across the precinct, indicating a collection of individual dwellings built up over time. Infill development is introducing different size, form and materials in dwelling design to the Garfield precinct. Small to medium street trees add amenity and appeal to streetscapes within the precinct.

2.2.3.4 Western

This precinct lies astride the hills overlooking Goulburn, with some panoramic views contributing to a strong sense of place. This precinct is generally characterised by curvilinear streets along the land contours, giving streetscapes where one side of the street is higher than the other.

1960s period development within the northern precinct is typically blond brick, 'ranch style', more 2 than 1 storey, with some split level resulting from the sloping terrain. Building forms are simple and rectangular, pitch of roofs are low.

Garages tend to be integral to the dwelling structure in the western precinct, set underneath habitable space at the ground floor, and are a typical feature of the front façade. Houses are typically wider than earlier forms, across the width of the lot frontage. Front gardens have low or no fences, often feature exotic and 'manicured' plantings. Setbacks vary but are typically more generous than in the rectilinear streets of the older subdivisions.

2.2.3.5 Ifield

This precinct is characterised by a regular grid pattern with rectangular blocks and narrower streets than the town centre. East of Kinghorne Street the grid is further broken down with the introduction of rear lanes. The architecture of detached houses within the precinct span Federation to post-war periods.

Recent townhouse development in the precinct have tended to adopt a 'gunbarrel' lot layout and which has tended to be visually intrusive, tending to have vast expanses of hard surfaces, with minimal landscaping and high solid front fences.

Within the precinct, Kinghorne Street acts as a distinctive character boundary. South of Kinghorne Street, buildings tend to be older and larger; there is a consistent streetscape with smaller front setbacks and side setbacks; rows of houses are built to a similar

'pattern' (reflecting subdivision/development by the same builder); slightly more complex building and (gable end) roof forms, particularly to Federation houses; and materials are predominantly brick and tile.

North of Kinghorne Street, towards the river, building forms are more simple and modest, somewhat more varied, and roofs tend to be hipped. The portion of the precinct between Chatsbury and Wilmot Streets is almost a sub-precinct. This portion of the precinct continues the grid and very wide streets of the town centre, which in combination with the modest housing stock creates an impression of great spaciousness. The lack of street trees in this area to break down the large scale of the streets exaggerates this effect.

Dwellings in this precinct tend to have low or no front fences, which are often brick with brick houses. The use of street trees varies. There are some mature street trees, with well landscaped and tended front gardens.

2.2.3.6 Marys Mount

This precinct typically comprises curvilinear streets with cul de sac. Recent development within the precinct is also distinctive because of its relative isolation from the central Goulburn urban area.

Dwellings are generally 1 to 2 storeys in height with rendered/face brick facades and tiled roofs within the precinct. The precinct is characterised by having little mature vegetation within private open space areas.

2.2.4 Desired future character

The Marys Mount precinct, located at the north of Goulburn, will provide the primary source of residential land to accommodate the future growth of Goulburn to 2020, along with extensive opportunities for infill development within the existing city as required by the NSW Department of Planning and Environment. Areas west and south west of Goulburn also present the potential to accommodate large lot residential development and provide an alternative residential choice to Marys Mount and inner city areas. Residential subdivision and infill development will be well planned and coordinated.

Heritage conservation areas shall be appropriately protected against insensitive development that adversely affects the integrity and importance of each heritage item and/or area. This plan will provide more detailed development controls to maintain the heritage character of defined areas.

Key issues for consideration for the desired future character of Goulburn are as follows:

2.2.5 Topography

Topography constrained the physical boundaries of the original settlement, to the extent that the town was laid out between two rivers, the Wollondilly and the Mulwaree, over the gentle slopes west of Mulwaree Ponds (the slope down to the south west, from the high point of Verner/Cowper Streets, is much steeper, resulting in greater commercial intensity developing north east from the civic core). The introduction of the railway line formalised the south west boundary of the town, with the result that Eastgrove 'reads' as a distinct settlement. On the higher slopes of Goulburn are found the larger, grander houses, while behind the ridge and further away from the centre the character is generally of workers' cottages.

2.2.5.1 Views



Long views down straight, undulating streets serve to locate the viewer, enhancing the legibility of Goulburn. The main town grid, the skewed grid north of Citizen Street, and the Eastgrove grid, are all laid out over the contours with little regard for landform. This results in long views along undulating streets, allowing a 'reading' of the landscape that is specific to Goulburn. The resulting street vistas are important character-giving elements and should be protected and enhanced where possible (for example by

completing/extending street tree planting). The grid is broken down in the heart of town, to provide a dramatic elevated site for St Saviours Cathedral, and to create an axial relationship along Montague Street towards the river (now terminating at the Visitor Information Centre).

View terminations to landmark buildings should be protected in order to enable continuing visual appreciation of those buildings and their place in the townscape (these include St Saviours church and tower (along Montague Street and Bourke Street), the Uniting Church spire (SW along Lagoon Street) and the Nursing Home atop Mary Street (along Auburn Street). Also important as landmarks within the streetscape are the Post Office, the Catholic Cathedral, the School of Arts, War Memorial and Rocky Hill.

2.2.6 Urban structure

As identified above, Goulburn has a clear and legible urban structure. At the heart of the town is the civic spine, anchored by St Saviours Church and Belmore Park. The 100 feet wide streets and very large blocks have resulted in a diverse lot pattern within the town centre, with rear lanes 'burrowing' into the centre of some blocks and enabling a range of building types. Very deep lots in other blocks have resulted in large open areas behind buildings, some now used for car parking, which contrast with the fine grain of the continuous retail strip frontages.



The traditional strip retail buildings, the low scale of residential buildings and the fine grain given by the diverse lot pattern create a pedestrian scale – but a scale that is offset by the very wide streets. Along these streets, landmark buildings are highly visible.

Larger buildings – both civic and residential – 'claim' the higher ground to take advantage of elevated views. These buildings are typically of good design quality as well as greater size.

2.2.7 Urban form

The main street of Goulburn is characterised by a mix of 2-3 storey retail buildings (a mix of heritage and infill), traditional corner commercial buildings, and some fine civic buildings that punctuate the streetscape. There is a sense of 'diversity within unity'; that is, there is a coherent character given by the intensity of the town centre uses, and their active relationship to the street, but also variety in building height, of materials, façade and parapet treatment, and in building type. The streetscape retains a certain 'gravitas' or grandeur, particularly around the main intersection with Montague Street.



Beyond the main street is a greater mix of building types and scales, including larger heritage buildings with a civic or community function, commercial buildings, industrial uses and individual houses. Insertion into the town centre of the internalised mall and integrated car parking has created large areas of blank wall to side streets and the rear but has been designed to maintain the main street character. On wide streets with little or no street tree planting and with detached houses, the grassed kerbs (with no footpaths), generous setbacks and lack of vegetation create an impression of openness in contrast to the spatial containment of the commercial centre.

A more domestic scale of building is found in the narrower streets of the residential areas outside the regular grid. The form of buildings in these areas, and their relationship to the street and each other, is typical of suburbs of other cities: a regular streetscape rhythm of houses of similar size and form, generally with garages set to the rear and/or side, and with a direct relationship between front entry/windows to primary living rooms and the footpath. This plan aims to maintain consistent front and side setbacks, encouraging simple housing and roof forms comparable to the established building stock, and controlling the design of houses to minimise the visual impact of garages (while allowing innovation) and to keep the interface between the private and public domain, will all be important.

Height controls and the definition of height will be important in areas on slopes, especially where slopes are steep, both to protect view sharing and to minimise both apparent bulk on the street and at the rear, and also to protect the rear yards and rooms of adjacent houses from overshadowing.

2.2.8 Streetscape

On the streets that have retained complete rows of street trees, the trees unify the streetscape. This plan aims to maintain the modest bulk and scale of dwellings, and support landscaping of front setbacks, so that new development does not overwhelm the existing character – this is even more important on streets without street trees.

2.3 Locality objectives – Marulan

2.3.1 History of development

Marulan was first discovered by Wilson, Price and Collins when they journeyed as far as Mt Towrang in 1798. However, the first mention of Marulan was by Charles Throsby in 1818 who was accompanied by Meehan, Wild and Hume when exploring the area around the Goulburn Plains and Lake Bathurst. Governor Macquarie came through Marulan in 1820 on a tour of inspection of the new road, which was later named Macquarie's Track.

In 1833 Surveyor General Major Thomas Mitchell decided that the best location for a village was at the corner of Bungonia Road and the Great South Road. In 1834 Surveyor Hoddle drew up the plans and Marulan was gazetted as a village on 11 March 1835. The Woolpack Inn was one of the first establishments in Marulan, along with three church reserves, several other inns, a post office, court house as well as several houses.

In the 1860s, when the site for the Marulan Railway Station was decided upon, it was located 5km north of the existing village. A settlement emerged around the railway camp.

The Marulan Railway Station was opened on 6 August 1868 by Sir Henry Parkes. This settlement became known as Mooroowoollen. This caused much confusion with Marulan village 5km away and Mooroowoollen Post Office in the ladies' waiting room of the Marulan Railway Station. 'Old' Marulan subsequently declined and the town became one in 1878.

Due to the impossibility of making a road over the deep ravines of the Shoalhaven River from Bungonia to Braidwood, the more viable option was the road to Goulburn Plains. This was the main road for mail coaches from Campbelltown, and Cobb & Co coach services, which went through to Cooma, but with the introduction of rail, these services declined.

The Hume Highway, named after the early explorer Hamilton Hume, was officially proclaimed a State Highway in 1928. The Marulan section of the highway from Mt Otway to Marulan South corner, was concreted in the 1930s. Marulan performed the role as a highway service town until the construction of the bypass in 1985.

The *State Transport (Co-Ordination) Act 1931* was passed to control the weights, and other relevant details, of heavy vehicles. This was undertaken by mobile inspectors and Marulan was chosen as a suitable site. In 1958 a permanent checking station was built on the eastern side of the highway just south of the Tallong turn-off. Larger facilities were erected in 1970 on both sides of the road. With the opening of the new bypass in November 1986, new modern checking stations were built on either side of the highway. The new 'weigh in motion' facilities for heavy vehicles were opened in September 1996.

2.3.2 Locality characteristics



Marulan is located on the Hume Highway, approximately 160 kilometres from Sydney and 31 kilometres east of Goulburn. Although primarily residential in character, Marulan has provided the function of a highway service centre.

Marulan is also located adjacent to the Main Southern Railway, with passenger and freight services operating through between Sydney, Canberra and Melbourne. Marulan provides local community services and utilities, including a primary school, shops, a number of churches, a hotel, a police station, and bushfire and medical services. Key employment activities include several existing and proposed industrial activities, such as the Lynwood Quarry, Marulan South Quarry and the Marulan Waste Management Facility, and a number of industries located within the industrial zone. A substantial residential and industrial development proposal has been identified along Wilson Drive, east of the town.

2.3.3 Desired future character



Marulan is a key town servicing surrounding rural areas and villages in the northern portion of the Goulburn Mulwaree local government area. Marulan provides an important employment base for the local government area and will be important for the future growth of Goulburn Mulwaree. This plan seeks to reinforce the status of Marulan and support the future growth of the locality. This plan also seeks to consolidate existing and future heavy industrial uses west and south of Marulan.

This plan seeks to enable a variety of residential densities to be accommodated in Marulan. Some extension of the existing town to the north is proposed to facilitate continued growth and diversity of housing types. This plan aims to reinforce the existing character of the main street of Marulan (George Street) and the importance of the commercial precinct.

2.4 Rural development objectives

2.4.1 Agriculture and primary produce

This plan seeks to ensure that rural living and agricultural operations will continue as key land uses across the Goulburn Mulwaree local government area. This plan aims to

promote areas suitable for agricultural operations and ensure these operations minimise potential for land use conflict, unnecessary fragmentation or the alienation of existing land uses.

Production needs differ for varying forms of agriculture - intensive operations require a reduced area in which to cultivate and maintain a viable operation. Although a market garden may be sustainable on a small allotment, much larger areas are required where a farm is primarily for grazing or other forms of dry land agriculture. Based on environmental conditions, it is likely that grazing will form the primary agricultural land use within Goulburn Mulwaree. Differing farming operations may result in a range of land use impacts and may sometimes conflict with one another where not managed appropriately.

This plan aims to restrict dwelling construction in areas where environmental sensitivities occur. This was based on an assessment of land suitability to determine the most appropriate location for rural and agricultural activities, and a detailed consideration of land capability and suitability. This plan addresses rural needs and emphasises improved access to basic services, agricultural diversification, natural resource management and the generation of employment in non-agriculture rural activities.

2.4.2 Rural landscape



This plan aims to protect the scenic values of the rural landscape and environment, and encouraging development to be unobtrusive and sympathetic to the surrounding rural setting. Where practicable, existing vegetation is to be maintained and enhanced, so as to provide buffers and landscaped visual relief within rural areas.

The Goulburn Mulwarree Strategy has identified rural villages that require development controls and guidelines that will retain and enhance their existing character.

2.5 Rural locality objectives

2.5.1 Bungonia

2.5.1.1 History of development

Bungonia was first settled in the early 1820s and was the most important town in the early period of settlement in the region due to its location on the road south from Sydney. As the area developed and other settlers arrived, Bungonia progressed and various small businesses were established to serve the district. However, when the route of the 'south road' was resurveyed in the 1830s, it bypassed Bungonia and lead to the slowing of growth in the town.

Bungonia's historical built form includes St Michael's Catholic Church, which was built over a period of nearly eight years officially opening in 1847, making it one of the oldest operating Catholic Churches in Australia.

2.5.1.2 Locality characteristics

Bungonia retains its village characteristics and remains a small town, with a historical built form. The Village has a wide ranging contextual heritage and is significant for its place in pastoral expansion and development in south-eastern New South Wales from 1820.

2.5.1.3 Plan objectives

This plan seeks to retain the unique heritage characteristics and rural lifestyle of Bungonia, while still allowing room for economic growth. Bungonia will be able to support further growth to support some increase in land use activity without adversely affecting the rural atmosphere of the village. The plan does not seek to change the boundaries of the village or adjoining land uses.

2.5.2 Lake Bathurst

2.5.2.1 History of development

In 1818, Lake Bathurst was mapped by the Surveyor General, James Meehan. Meehan had been commissioned by Governor Macquarie to find a new route from inland NSW to Jervis Bay. Lake Bathurst was named after the British Colonial Secretary at the time. In 1820, Governor Macquarie inspected Lake Bathurst and within a few years, the first land grants were made for pastoral settlement.

A village reserve was set aside at Lake Bathurst, but was not successful, as many of the large pastoral leases had their own facilities and were self sufficient. Lake Bathurst was formerly known as Tarago. At its peak, the village had two registered inns and the St. John's Church, which was built in 1860.



The Goulburn to Queanbeyan Railway reached Lake Bathurst in 1884, with the picturesque lake attracting many people. Large rowing and sailing regattas were held. The influx of tourists declined in 1897, when the lake began to recede.

Lake Bathurst was named in 1884 when Sherwin's Flat became Tarago. Lake Bathurst remained the rural centre of the surrounding region, with a school established in 1869. During World War II, Lake Bathurst played an important role, with an area south of the village used to store 658,000 gallons of fuel. This area was guarded by troops in a series of bunkers. Selected remnants are still evident today.

During the 1950s, water skiers and motor boat enthusiasts were attracted to Lake Bathurst, with thousands of people enjoying the area. However, in the late 1960s, Lake Bathurst's population declined, with many farmers moving away. At this time, the school and village store closed. The goods shed and water tank located near the railway line were removed.

2.5.2.2 Locality characteristics

The tree-lined road, which was the original border of the village, remains today. Today, Lake Bathurst is a small village but important local history destination for tourists.



2.5.2.3 Plan objectives

This plan seeks to focus future development activity within Lake Bathurst east of the railway line, which offers established land uses and direct road access. Areas east of the railway line also present capacity for infill development. Limiting the growth potential of Lake Bathurst to the west of the railway line will reinforce the village centre and will restrict at grade movement across the railway line.

2.5.3 Tallong

2.5.3.1 History of development

In the 19th Century Tallong was known as Barber's Creek. Hamilton Hume was granted land in Tallong in the early 1820s. Tallong was once a thriving agricultural community, known particularly for its fruit orchards, especially apples and pears. At the turn of the 20th Century, Tallong had shops, pubs, hotels and a post office. It was an important refuelling stop along the Main Southern railway line.

Tallong was largely destroyed however in the Chatsbury bushfires of 1965 resulting in many residents leaving the locality and the closure of the post office and many other small businesses.

2.5.3.2 Locality characteristics

Tallong today is a hamlet of agrarian and trade workers, cottage industries, including stud farms, and commuters who work in the neighbouring towns of Goulburn, Moss Vale and Mittagong, or who make the commute to Sydney or Canberra. There is a railway station in the town which can take commuters to Sydney. It has significant populations of older residents and weekend residents who use the Southern Highlands as a retreat from the fast pace of city life. Tallong has a unique natural environment and proximity to Bungonia Gorge. The discovery of the Tallong Midge Orchid (*Genoplesium plumosum*), a small flower that grows nowhere else has brought the village to the attention of botanists and conservationists. This orchid is now a protected species.

2.5.3.3 Plan objectives

This plan seeks to retain Tallong's rural lifestyle with a strong emphasis on agricultural production. The current low density will be maintained, with new development restricted to areas within the existing town boundaries, and where there is a capacity to meet infrastructure requirements.

Tallong's natural and cultural heritage items contribute character to the village and will be preserved. Any new development therefore needs to be sympathetic to the existing character.

Industrial development in Tallong will be restricted to small scale industrial enterprises such as home industries, tourism or services relating to residents such as chemists and rural supplies.

2.5.4 Tarago

2.5.4.1 History of development

The village of Tarago was for many years a staging post and railhead for the Main Southern railway line, and was originally know as Sherwin's Flats.

2.5.4.2 Locality characteristics

Tarago is located south of Lake Bathurst, approximately 40 kilometres south of Goulburn and 67 kilometres north-east of Canberra. The former Woodlawn Mine, located west of

Tarago, is now owned by Collex Waste Management for use as a landfill and bioreactor for Sydney's waste.



Land use in and around the historic township of Tarago is mainly residential in character, with a few community and commercial facilities to service the community. These include a school, convenience store, service station, hotel, rural fire shed, community hall, two churches, police station and railway station. Much of the surrounding land is rural in nature, except the former Woodlawn Mine site positioned on the railway line to the west of the village.

Tarago is experiencing some growth pressure as an alternative to Bungendore and to a lesser extent Queanbeyan. Tarago presents an opportunity for residential development with strong employment links to Canberra.

2.5.4.3 Plan objectives

This plan seeks to reinforce Tarago's character as a rural town servicing surrounding rural areas and villages. This plan also seeks to enable a variety of land uses including commercial, employment, recreational and mixed uses. This plan aims to augment the transition of existing industrial uses in Tarago to large lot residential uses.

3 General development controls

Introduction

This chapter and subsequent chapters sets out the environmental analysis principles that need to be examined and responded to and accompany all development applications as part of the project's statement of environmental effects or environmental impact statement (in the case of "designated development").

The overarching objectives, adopted by this plan for any development proposal are:

- To respect and respond to the natural environment of the locality;
- To ensure a balance between economic, social and environmental outcomes; and
- To ensure that new developments are sustainable and integrate with the character of the existing environment as described in chapter 2.

In any development proposal, the proponent should be aiming:

- To maintain the natural environment and visual character;
- To improve environmental benefits;
- To respect cultural heritage; and
- To maintain open space, privacy and safety.

To achieve the above objectives and aims, proponents will need to undertake assessments and appropriate management responses on the following:

- Landscape and visual character;
- Tree preservation;
- Biodiversity;
- Bushfire;
- Aboriginal cultural heritage;
- Non-Indigenous cultural heritage;
- Water cycle management;
- Noise;
- Odour;
- Disability standards;

- Crime prevention design standards;
- Social infrastructure;
- Utility services; and
- Roads, traffic and access.

The degree (extent, amount and intensity) of assessment required is dependent on the magnitude and impacts of the proposal.

Additional uses of Crown Land – NSW Department of Primary Industries - Lands advise as follows:

"Any proposal to rezone land to permit new subdivision area/s or land release areas where crown public road/s (formed or unformed) will be the required to provide access, Council must accept transfer of control of such roads before approving any such proposal, regardless of the number of lots to be serviced."

Proponents affected by the above must obtain Council's consent to the transfer of control of such roads before lodging their development application or rezoning proposal.

"Any proposal to rezone land that presently relies on Crown Public road/s for access into the zone that permit a more intensive land use, Council must accept transfer of control of such roads before approving any such proposal to further develop the land."

Proponents affected by the above must obtain Council's consent to the transfer of control of such road/s before lodging their development application or rezoning proposal.

"Asset Protection Zones (APZ's) and perimeter access roads that are required as part of any Bushfire protection scheme in any new subdivisions, must be located within the property of the private subdivision land and not on any adjoining Crown land."

"Any proposed new subdivision area/s where essential public infrastructure (eg. stormwater drainage channels, pipes or other utilities) is required to service that new subdivision should not propose to utilise any Crown public reserve/s for that purpose where such facilities do not accord with the declared public purpose."

Any proposed rezoning should not utilise Crown land as buffer areas for example bush fire reduction zones, visual impact relief and or open space to serve additional demands."

"Urban zones (residential, commercial or industrial) should not be given to freehold lands at the expense of Crown land with potential urban use. eg. Crown land with potential urban use should not be used as a public recreation or green space offset to intensified development on nearby freehold lands."

Proponents to note above four points when developing their development and or rezoning proposals.

This chapter applies to all proposed development whereas the following chapters 4, 5, 6, 7 and 8 are more specific and also must be considered where appropriate.

3.1 Indigenous Heritage and Archaeology

3.1.1 Introduction

The Goulburn Mulwaree Local Government Area (LGA) is rich in Indigenous heritage and archaeology. It is recognised as an important meeting place that was inhabited by numerous language groups.

- MULWAREE,
- WOLLONDILLY,
- WIRADJURI,
- GUNDUNGURRA,
- DHARROOK
- THARAWAL,
- TARLO,
- LACHLAN,
- PAJONG,
- PARRAMARRAGOO,
- COOKMAL,
- BURRA BURRA,
- NGUNAWAL.

It is recognised that these peoples are the traditional owners of Goulburn Mulwaree area and play a significant and ongoing role in the history of the region. The earliest occupation site near Goulburn Mulwaree LGA in the Australian Alps has deposits that have been radiocarbon dated to 21,000 years ago. Most sites in the region date to 3-5,000 years ago.

This section of the DCP includes details and controls for the protection and management of the Indigenous heritage and archaeology of the Goulburn Mulwaree LGA which have been prepared in conjunction with and following consultation with the Pejar Local Aboriginal Land Council.

3.1.2 Objective

To provide for the consideration of impacts on indigenous heritage and archaeology from proposed developments within the Goulburn Mulwaree Local Government Area.

3.1.3 Background

Historical archaeology is the study of the past using physical evidence in conjunction with historical sources. It focuses on the objects used by people in the past and the places where they lived and worked. It can tell us about the way things were made and used and how people lived their daily lives.

Archaeological resources are irreplaceable. They have enormous potential to contribute to our knowledge of our history, providing information that is unavailable from other sources. It is important that archaeological resources are adequately investigated and recorded before they are likely to be disturbed. Some sites are important for the knowledge we can gain from them. That is why we excavate and learn from them. Some sites that are very significant to the community are kept in the ground and interpreted because they can supply evidence that we can see and touch.

Following consultation with the Pejar Local Aboriginal Land Council a generalised map of places of Aboriginal significance (Figure 3.1) was produced. This map does not preclude the need for Aboriginal heritage impact assessment for any new development in the local government area but can guide the location and landscape context of existing and future archaeological sites.

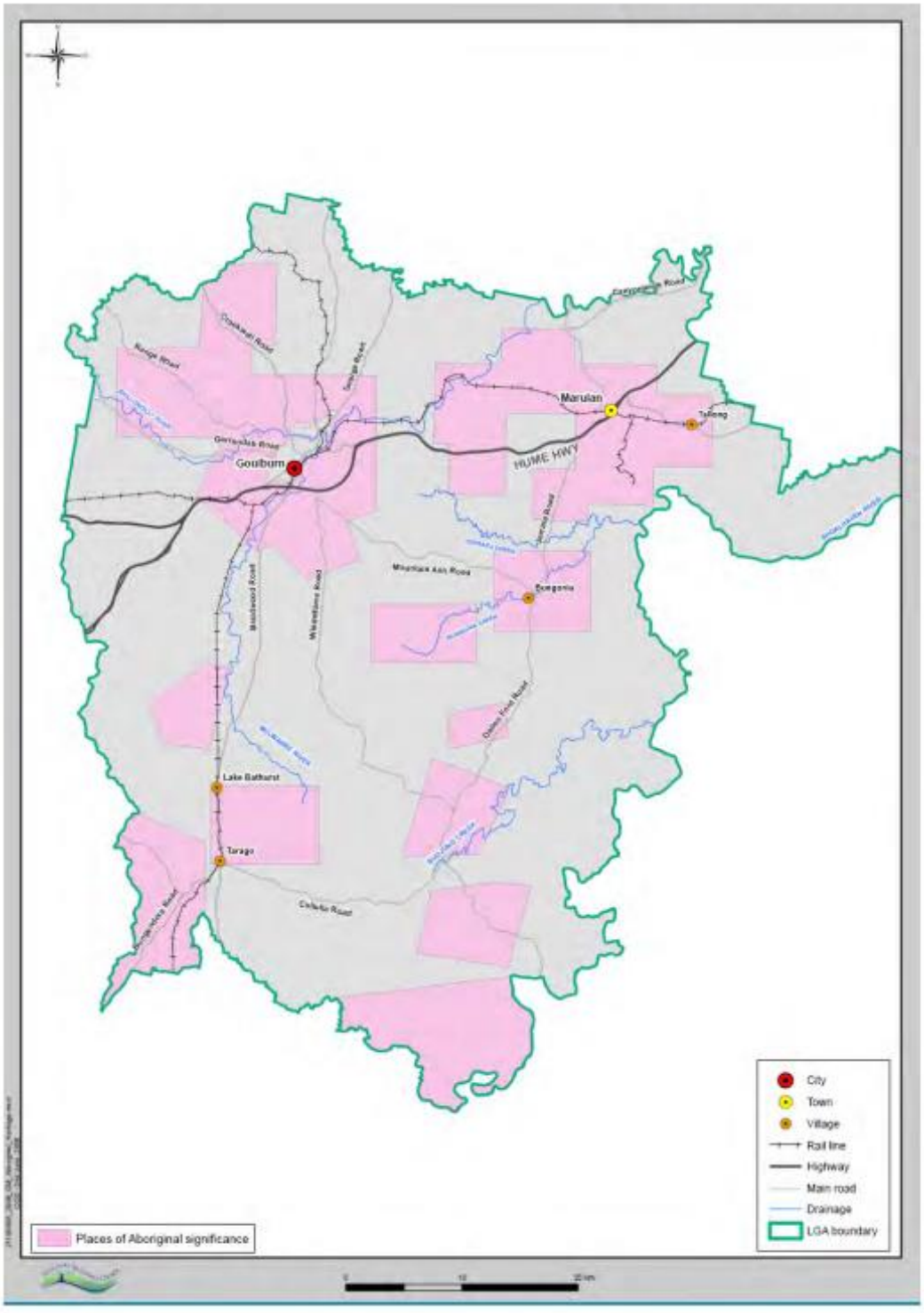


Figure 3.1: Places of Aboriginal Significance

Note: This map is to be read together with the Aboriginal Archaeology matrix found in Appendix A of this Development Control Plan. The matrix contains additional areas that may have Aboriginal Cultural significance.

3.1.4 Responsibilities

Division 9 of the NSW *Heritage Act 1977* contains measures to protect archaeological resources. Proposals to excavate land in the Goulburn Mulwaree LGA require an excavation permit issued by the Heritage Council of NSW for development where it is reasonably expected that disturbance to a relic will occur.

An excavation permit is required in order to ensure that archaeological sites are excavated under proper supervision and that significant evidence of our past is not unnecessarily lost. Archaeology requires the careful excavation of evidence in the ground in order to fully understand the history and significance of the site.

The NSW *Heritage Act 1977* also requires that a person who has discovered a relic must notify the Heritage Council of the discovery within a reasonable time. There are also legislative responsibilities and the need for Aboriginal Heritage Impact Permits under the *National Parks and Wildlife Act 1974*.

3.1.5 Relevant Documentation

The NSW Department of Environment and Heritage prepared the following documents in 2010 that are relevant to Aboriginal heritage and the assessment processes:

- Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW 2010b);
- Aboriginal cultural heritage consultation requirements for proponents (DECCW 2010a); and
- Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales (DECCW 2010c).

3.1.6 Identifying Potential for Impacts upon Aboriginal Cultural Heritage Values

A development or project has the potential to impact upon Aboriginal cultural heritage values if it involves one or more of the following:

- disturbance to the ground surface or to sediments below the ground surface, except where disturbance will be strictly limited to:
    - existing man-made manufactured surfaces (such as bitumen and concrete).
    - existing deposits of imported land-fill or waste material.

- extremely disturbed contexts such as quarries or quarried areas (where there is no trace of the original soil and subsoil deposits or of buried former soils and subsoil deposits).

- disturbance to the roots, trunk or branches of old growth trees up to and more than 130 years old, which are native to the Goulburn Mulwaree local government area;
- impact or disturbance to the content, or immediate surrounds (up to 100 metres away) of a known or previously recorded Aboriginal site; and
- occurs within, or in close proximity to, a place of special or high Aboriginal cultural significance (such as an identified cultural landscape, an existing or former ceremonial ground, a burial ground or cemetery, a story place or mythological site, a former Aboriginal reserve or historic encampment, or an archaeological site of high significance).

If one or more of these factors apply, or are likely to apply, to a proposed development or project, then the next step is to determine if an Aboriginal due diligence and/or heritage impact assessment is required.

Note: Where reports include sensitive cultural information, they will be withheld from public exhibition. Heritage development controls

3.1.7 Identifying the need for an Aboriginal Heritage Impact Assessment

If one or more of the factors listed in chapter 3.1.2 apply, or are likely to apply, to a proposed development or project, then the questions below should be asked to determine if an Aboriginal due diligence and/or heritage impact assessment is required in accordance with clause 5.10 of the LEP 2009. Council may determine that a development does not require and Aboriginal heritage impact assessment if the site of the development is unlikely to be of Aboriginal heritage significance despite the questions below.

A. Has the development or works area been subject to a comprehensive level of Aboriginal heritage assessment within the last 5 years?

The creation of a new Aboriginal due diligence and/or heritage impact assessment would not normally be required where the area of the proposed development works occurs within the boundaries of a previously conducted Aboriginal due diligence and/or heritage impact assessment, and that assessment was comprehensive in scope, and was conducted less than five years ago.

In this circumstance, the development or works proposal would be required to address the heritage management issues identified in the existing Aboriginal due diligence and/or heritage impact assessment.

A comprehensive assessment can be identified by the following criteria:

- The Aboriginal due diligence and/or heritage impact assessment complies with the current Department of Environment and Heritage standards and guidelines for the conduct and reporting of Aboriginal assessment reports; and
- The scope of the field survey coverage and predictive analysis is acknowledged to have effectively assessed the entire study area in a comprehensive manner.

Generally, this will include investigations with 40-100% field survey coverage, and exclude investigations relying upon sample survey areas totalling less than 40% of the study area.

Any proposed development area which falls outside of a former Aboriginal due diligence and/or heritage impact assessment study area will require a new Aboriginal due diligence and/or heritage impact assessment.

A new Aboriginal due diligence and/or heritage impact assessment will need to be conducted, despite the existence of a previous Aboriginal due diligence and/or heritage impact assessment, less than 5 years old, for the same area, in the following circumstances:

- The previous Aboriginal due diligence and/or heritage impact assessment did not involve a comprehensive assessment of the study area;
- The Department of Environment and Heritage standards and guidelines under which the previous Aboriginal due diligence and/or heritage impact assessment was conducted have changed significantly and require a revision of the assessment report, and/or the re-conduct of all or a component of the fieldwork assessment;
- Aboriginal cultural heritage values which were not identified or predicted in the previous Aboriginal due diligence and/or heritage impact assessment have been identified within the development area. These may be the result of a new site discovery, or arise from new oral history or documentary research; and
- The area has been identified by an Aboriginal advisory committee, Council heritage staff, or the Department of Environment and Climate Change as requiring an Aboriginal due diligence and/or heritage impact assessment.

B. Does the development area include archaeologically sensitive landforms?

Where a development or works area has not been subject to comprehensive Aboriginal due diligence and/or heritage assessment within the last 5 years, the presence of archaeologically sensitive landforms will necessitate the conduct of an Aboriginal due diligence and/or heritage impact assessment.

C. Does the development area include previously identified Aboriginal sites or places of Aboriginal cultural heritage value?

Where a development or works area has not been subject to comprehensive Aboriginal due diligence and/or heritage assessment within the last 5 years, the presence of previously identified Aboriginal sites or places of Aboriginal cultural heritage value will necessitate the conduct of an Aboriginal due diligence and/or heritage impact assessment.

The presence of previously identified Aboriginal sites or places can be determined by:

- Conducting a search of the Department of Environment and Heritage Aboriginal Sites Register (Aboriginal Heritage Information Management System) or similar; and
- Checking site locations identified and mapped by any previously undertaken Aboriginal heritage study.

D. Does the development or works area include all or part of an identified Aboriginal cultural landscape?

Where a development or works area has not been subject to comprehensive Aboriginal due diligence and/or heritage assessment within the last 5 years, the presence of all or part of an identified Aboriginal cultural landscape will necessitate the conduct of an Aboriginal due diligence and/or heritage impact assessment.

E. Is the development area likely to include old-growth native trees up to and more than 130 years old?

Where a development or works area has not been subject to comprehensive Aboriginal due diligence and/or heritage assessment within the last 5 years, the presence of old-growth native trees will necessitate the conduct of an Aboriginal due diligence and/or heritage impact assessment.

Old growth native trees that may be older than 140 years old have the potential to preserve Aboriginal scars. These scars may be the result of bark or wood removal, the search for food, or other activities. Such scars are Aboriginal sites and are protected by law.

The age criterion of 140 years allows for tree germination at or before 1870, and cessation of Aboriginal tree scarring by 1900 (by which time the 1870s tree would have sufficient girth to support the harvesting of bark). The 140 years criterion is considered to be conservative, given that the removal of bark by Aborigines in the Goulburn Mulwaree LGA is likely to have ceased by the 1870s and 1880s.

The potential for suitable old growth native trees to occur (either dead or alive) within a proposed development or works area can be gauged by the following:

- a report from a suitably qualified botanist;
- an inspection or other record indicating that no tree cover, or no old-growth tree cover remains in the area; and
- a review of aerial photography.

Old growth trees typically survive within the Goulburn Mulwaree LGA as isolated or scattered shade trees in agricultural grassland, in remnant woodland, or in forest, especially in creek gullies and steep sided valleys.

3.1.8 Identifying what Level of Assessment is Required?

Initially any development identified as requiring and assessment of Aboriginal heritage significance will require an Aboriginal Due Diligence Assessment prepared under the Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales (DECCW 2010c) and should include the minimum consultation under the Aboriginal cultural heritage consultation requirements for proponents (DECCW 2010a).

Should the due diligence assessment reveal that the site has a high potential of having Aboriginal significance or sites then a more detailed Aboriginal heritage assessment will be required. This assessment will require more extensive consultation under the Aboriginal cultural heritage consultation requirements for proponents (DECCW 2010a).

Should any excavation or impact on heritage sites or objects be needed an Aboriginal Heritage Impact Permit (AHIP) may be required from the Department of Environment and Heritage. Reference should be made in these cases to the Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW 2010b).

3.1.9 Conducting an Aboriginal Heritage Impact Assessment

An Aboriginal heritage impact assessment must be prepared by a suitably qualified heritage practitioner or consultant. The minimum qualification generally recognised as a prerequisite for an Aboriginal heritage assessment practitioner is a tertiary level degree (or equivalent) in an Australian archaeology or cultural heritage degree. The range of specialist practitioners is considerable and can include anthropologists, stone artefact specialists, rock art specialists, materials conservators, palaeobotanists, and physical anthropologists. In general, heritage

assessment based on field survey and/or excavation will require a qualified archaeologist. Assessments which involve the analysis of contemporary Aboriginal communities may also require input from an anthropologist.

Several professional organisations exist which recognise and accredit heritage consultants and other related practitioners. These are:

Australian Association of Consulting Archaeologists Inc – PO Box 214, Holme Building, University of Sydney, NSW 2006 (www.archaeology.usyd.edu.au/aacai).

Australian Institute of Professional Archaeologists Incorporated – GPO Box 5336BB, Melbourne Victoria 3001 (www.users.bigpond.com/raluebbers/AIPA).

Some consultant heritage practitioners are listed in the Yellow Pages under the categories of 'Archaeology' and 'Heritage Consultants'.

The following are key components of an Aboriginal heritage impact assessment:

A. Identify and then consult with appropriate local Aboriginal stakeholder groups – Consultation with local and custodial Aboriginal community groups is an integral component of any Aboriginal heritage impact assessment.
B. The status and number of stakeholder groups can change over time. The Department of Environment and Climate Change can provide advice regarding appropriate groups which should be consulted.
C. Consult with relevant Council Heritage staff – Council heritage staff are potential sources of information, advice and direction, regarding community consultation, site locations and the management of heritage values.
D. Conduct a review of previous heritage assessment work and background information (including a search of the Department of Environment and Climate Change Aboriginal site register) – All relevant previous heritage assessments should be reviewed with regard to the potential issues and heritage values present within the assessment area. Sufficient background information should also be presented so that the environmental and historical context of the area can be characterised, and any heritage places, sites and features can be effectively placed within an assessment context.
E. Conduct an appropriate level of field inspection of the proposed development area – This usually involves comprehensive or sample survey of the development area. All field survey involves levels of sampling, however a comprehensive level of inspection would normally achieve a coverage of greater than 40% of the area subject to development impacts. The

proportion of survey coverage achieved will depend on the degree of ground surface visibility available to the surveyors at the time of the investigation.

F. The first stage of field inspection and assessment generally involves visual inspection of the ground surface and does not include subsurface testing. In the event that an assessment concludes that an area has subsurface archaeological potential, then various forms of archaeological subsurface testing may be conducted to assess this potential. Excavation is generally conducted as a second stage of assessment, following the submission and consideration of a surface survey report. Excavation with the aim of recovering or detecting Aboriginal artefacts can only occur following the receipt of a permit or consent from the Department of Environment and Climate Change.

G. Any assessment of a study area must include consideration of any oral histories or traditions of the local Aboriginal or wider community regarding heritage place, events and values.

H. Identify known and potential archaeological sites and places of Aboriginal cultural heritage value – Both the known and potential cultural heritage resource of a proposed development area should be adequately described. Where ground surface conditions do not allow for an effective assessment of the subsurface potential of a deposit or landform, then predictions must be made based on oral or historical report, and regionally based predictive statements about probable site locations and content.

I. Submit cards to NSW Department of Environment and Climate Change for all previously unrecorded Aboriginal sites detected during survey – All new site recordings must be reported to the Department of Environment and Climate Change using standard site recording forms (provided by the Department of Environment and Climate Change).

J. Assess cultural heritage significance of identified sites and places – An assessment of the heritage significance of all identified sites and places should be presented and documented. The assessment of significance is based on an established set of criteria including Aboriginal cultural and social value, scientific value, and educational value. The assessment of Aboriginal cultural significance must be contributed by appropriate members or representatives of the Aboriginal stakeholder groups.

K. The assessed level of heritage significance of any single or group of sites, artefacts or places will determine to a large degree, the nature and necessity of any management strategies drafted.

L. Provide impact mitigation and management recommendations for known and potential cultural heritage values – Strategies and recommended actions should be drafted for the appropriate management of the known and potential heritage values identified in the proposed development area. Strategies should seek to avoid or minimise impact to heritage values. Strategies should be developed in consultation with appropriate members or representatives of the Aboriginal stakeholder groups.

3.1.9.1 Criteria for the Assessment of Heritage Significance of Aboriginal Sites

The Burra Charter of Australia defines cultural significance as 'aesthetic, historic, scientific or social value for past, present and future generations'. The assessment of the cultural significance of a place is based on this definition but often varies in the precise criteria used according to the analytical discipline and the nature of the site, object or place.

In general, Aboriginal archaeological sites are assessed using five potential categories of significance:

- significance to contemporary Aboriginal people
- scientific or archaeological significance
- aesthetic value
- representativeness
- value as an educational and/or recreational resource

Many sites will be significant according to several categories and the exact criteria used will vary according to the nature and purpose of the evaluation. Cultural significance is a relative value based on variable references within social and scientific practice. The cultural significance of a place is therefore not a fixed assessment and may vary with changes in knowledge and social perceptions.

Aboriginal significance can be defined as the cultural values of a place held by and manifest within the local and wider contemporary Aboriginal community. Places of significance may be landscape features as well as archaeologically definable traces of past human activity. Aboriginal cultural significance may or may not parallel the archaeological significance of a site.

Scientific significance can be defined as the present and future research potential of the artefactual material occurring within a place or site. This is also known as archaeological significance.

There are two major criteria used in assessing scientific significance:

A. Potential of a place to provide information which is of value in scientific analysis and the resolution of potential research questions

Sites may fall into this category because they: contain undisturbed artefactual material, occur within a context which enables the testing of certain propositions, are very old or contain significant time depth, contain large artefactual assemblages or material diversity, have unusual

characteristics, are of good preservation, or are a constituent of a larger significant structure such as a site complex.

B. Representativeness of a place

Representativeness is a measure of the degree to which a place is characteristic of other places of its type, content, context or location. Under these criteria a place may be significant because it is very rare or because it provides a characteristic example or reference.

The principle aim of cultural resource management is the conservation of a representative sample of site types and variation from differing social and environmental contexts. Sites with inherently unique features, or which are poorly represented elsewhere in similar environment types, are considered to have relatively high cultural significance.

The cultural significance of a place can be usefully classified according to a comparative scale which combines a relative value with a geographic context. In this way a site can be of low, moderate or high significance within a local, regional or national context. This system provides a means of comparison, between and across places. However, it does not necessarily imply that a place with a limited sphere of significance is of lesser value than one of greater reference.

3.2 European (Non-Indigenous) Heritage Conservation

3.2.1 Introduction

Goulburn Mulwaree Local Government Area (LGA) is rich in built, natural and archaeological heritage. Goulburn City along with towns and villages spread out through the LGA have historic associations going back to first European settlement and the convict construction of the Great South Road. In addition, Goulburn was the colony's first inland city and has significant railway history which is reflected in the settlement patterns.

Council has an extensive schedule of statutory heritage items which are a result of detailed heritage studies dating from 1983. Careful management is needed to ensure that the heritage significance and character of the Goulburn Mulwaree LGA is maintained for future generations.

This section of the DCP sets out policies to ensure decisions made about heritage items, streetscapes and conservation areas are well informed and properly assessed.

3.2.2 Where does this Section Apply?

This section of the DCP applies to the following land within the Goulburn Mulwaree LGA:

(i) Land upon which a heritage item or draft heritage item as listed under Schedule 5 of Goulburn Mulwaree LEP 2009 is located;
(ii) Land that is located within one of the heritage conservation areas or a draft heritage conservation area as contained within Schedule 5 and on the heritage map of Goulburn Mulwaree LEP 2009;
(iii) Land that is located adjacent to or within the vicinity of a heritage item or heritage conservation area (or within the visual catchment of a heritage site); or
(iv) Land where archaeological remains or relics have been identified

Note: A draft heritage item or draft conservation area is one that has been included in a proposed instrument (local environmental plan or environmental planning instrument amendment) that is or has been the subject of public consultation under the Environmental Planning and Assessment Act 1979, unless the Secretary of the Department of Environment and Planning has notified Council that the making of the proposed instrument has been deferred indefinitely or has not been approved.

3.2.3 Objectives

The general objectives of this section the DCP are:

1. To conserve and enhance the heritage significance and qualities of heritage items conservation areas and archaeological remains and relics.
2. To ensure that alterations, additions and new infill development are sympathetic, well designed and appropriate to the values of the heritage item or streetscape context in which it is located.
3. To preserve and maintain trees and other vegetation that contributes to the significance of heritage items and heritage conservation areas.
4. To ensure a thorough assessment process is applied for any proposed demolition or removal of a heritage item or building located within a heritage conservation area including the archival recording of these buildings where required.
5. To promote public awareness and education on heritage conservation.

3.2.4 Definitions

There are a number of relevant definitions included within Goulburn Mulwaree LEP 2009. Please refer to this document for reference for the following definitions as well as a number of others that may be applicable:

- Curtilage;
- Demolish;

- Heritage conservation area;
- Heritage conservation management plan;
- Heritage impact statement;
- Heritage item;
- Heritage management document;
- Heritage map;
- Heritage significance;
- Maintenance;
- Nominated State heritage item; and
- Relic.

Other relevant definitions to assist with understanding this DCP chapter:

Contributory items generally display use of characteristic compatible forms, materials and other characteristic features that contribute to the conservation area as a whole, but to a lesser extent than highly contributory items. For a new item to be contributory it must have most of the features (materials, colours, characteristics) of contributory facades.

Heritage consists of those things we want to keep that give us a sense of the past and of our cultural identity. It is the things we want to protect and pass on to future generations so that they too will understand what came before them (NSW Heritage Office 1999).

Highly contributory items display most of the important characteristics of the area and have a collaborative significance and their retention is essential if the character of the area is to be kept.

Uncharacteristic items display qualities that detract from the character of the area and are not be considered as a precedent for new work when assessing the merit of an application.

Non-contributory items are items that do not contribute or detract from a conservation area or streetscape.

Within the vicinity is generally the streetscape surrounding the item including the opposite side of the road, including vistas to and from the site. In rural areas, the impact of a development could include a wider area.

3.2.5 Development Applications

The heritage information required for a development application will depend on the significance of the heritage building or site, the contribution of the existing building or site to the heritage conservation area or heritage streetscape, and the extent of changes proposed.

In addition to the general requirements for development applications, heritage items, buildings and sites within heritage conservation areas and heritage streetscapes, Council will require:

- Measured and scaled drawings of the existing building prior to modifications including elevations, clearly indicating existing walls and building elements to be retained and those proposed for demolition or alteration;
- Elevations and plans detailing architectural features such as dormer windows, balustrade style, colour, and
- Copies of these elevations and plans showing the modifications proposed; and
- A heritage impact statement and/or conservation management plan / strategy, and, as necessary, an archaeological assessment. Either should assess the impact of the proposed modifications and detail how these impacts can be either be mitigated or contributory in the context of the archaeological or conservation areas' significance and the objectives of the DCP and clause 5:20(1) of the GMC LEP 2009.

The heritage impact statement should include appropriate assessments of significance and that more important or significant items will require more detail / assessment. Details are included in Section 3.1.3 about what the documents should include and advice that can be provided by Council and their Heritage Advisor services.

3.2.5.1 Is a Development Application Required?

Clause 5.10(2) of Goulburn Mulwaree LEP 2009 specifies that other than for certain exceptions, development consent is required for:

> *(a) demolishing or moving any of the following or altering the exterior of any of the following (including, in the case of a building, making changes to its detail, fabric, finish or appearance):*
> *(i) a heritage item,*
> *(ii) an Aboriginal object,*
> *(iii) a building, work, relic or tree within a heritage conservation area,*

(b) altering a heritage item that is a building by making structural changes to its interior or by making changes to anything inside the item that is specified in Schedule 5 in relation to the item,

(c) disturbing or excavating an archaeological site while knowing, or having reasonable cause to suspect, that the disturbance or excavation will or is likely to result in a relic being discovered, exposed, moved, damaged or destroyed,

(d) disturbing or excavating an Aboriginal place of heritage significance,

(e) erecting a building on land:

(i) on which a heritage item is located or that is within a heritage conservation area, or

(ii) on which an Aboriginal object is located or that is within an Aboriginal place of heritage significance,

(f) subdividing land:

(i) on which a heritage item is located or that is within a heritage conservation area, or

(ii) on which an Aboriginal object is located or that is within an Aboriginal place of heritage significance.

3.2.5.2 Exceptions

Clause 5.10(3) of Goulburn Mulwaree LEP 2009 includes circumstances of where development consent is not required. Generally, this is for works:

- That are of a minor nature or for maintenance,
- That are proposed within a cemetery or burial ground,
- That involve a tree or vegetation that Council is satisfied is a risk to human life or property, or
- That are exempt development.

3.2.5.3 Maintenance

Maintenance is defined in the Goulburn Mulwaree LEP 2009. To further clarify, maintenance helps to prevent damage to a property and protect it from the effects of aging and corrosion. Maintenance includes works such as:

- Clearing and repairs to gutters and roofing to prevent deterioration;
- Ensuring fixtures are securely held in place;
- Replacing broken windows, fly screens etc.;
- General repairs to doors, gates, fences;
- Sealing gaps in walls;

- Painting previously approved painted surfaces with the same colours;
- Pest control measures.

It may include works required because of structural inadequacy or concerns about public safety but does not extend to major changes to the appearance of the building.

Maintenance does not include other works that result in changes to the external appearance of the building or the introduction of new materials, for example the replacement of corrugated steel roofing with polymer coated or uncoated zincalume roofing or painting of external surfaces in some situations.

Regular and sensible maintenance usually does not require development consent from Council. Council consent is not required for re-painting surfaces which are already painted using the same colours or using colours specified in Section 3.1.6.

Repainting in colours other than those in Section 3.1.6 or from colours established by scraping the building or structure is not regarded as maintenance and requires development consent unless otherwise exempted by Council in writing.

Colour choice is often based on fashion and can change over time. Original colour schemes usually reflect the period of the property. Use of traditional colours can enhance the contribution of a property to the conservation area.

Many paint suppliers have traditional colour charts that indicate suitable colours for properties from various periods. Publications are also available that demonstrate the use of these colours.

The Council Heritage Advisor is able to provide advice on whether a colour scheme is appropriate to the historic period of the property.

3.2.5.4 Information Requirements

Each development proposal, whether affecting a heritage item or a contributory item within a heritage conservation area, will have its own unique considerations and issues depending on whether the proposal is for renovations and extensions to an existing building, or a new building within a conservation area or adjacent to a heritage item. Proposals for infill development should have regard to the Royal Australian Institute of Architects and NSW Heritage Office Guidelines for infill development in the historic environment (2005) and Heritage Office and Department of Urban Affairs and Planning (1996) Heritage Curtilages.

3.2.5.5 Demolition

The demolition of heritage items and contributory buildings or building elements within heritage conservation areas or heritage streetscapes, will not be supported in most cases, unless adequately justified to the satisfaction of Council and in accordance with the requirements below. This includes the removal of trees and vegetation.

Requirements for the retention of existing heritage items and their significant elements is based on an understanding and conservation of the heritage significance of the item. The purpose is to:

- Achieve a reasonable balance between improving amenity and meeting contemporary needs, and the protection of the heritage significance of the item.
- Maintain the setting of the heritage item including the relationship between the item and its surroundings.
- Encourage the removal of inappropriate alterations and additions, and the reinstatement of significant missing details and building features.

If demolition applications for total or partial demolition are to be considered, it must be supported by a justification for the proposed demolition which will consist of:

(a) A report from a structural engineer specialising in work on heritage buildings or structures detailing the structural condition and including recommendations on the future viability of the structure or building; and / or

(b) A heritage impact statement and/or conservation management plan or heritage conservation strategy where applicable detailing the heritage significance of the building or structure. If located in a heritage conservation area its contribution to the heritage conservation area; and

(c) Other professional reports where relevant, such as archaeologist or historian.

Council may engage an independent expert to review these reports.

If an application for demolition of a heritage item or a building in a heritage conservation area is made, the preparation of an archival record of the existing building and grounds (in accordance with the NSW Heritage Branch Guidelines – *How to Prepare Archival Records of Heritage Items*) may be required to be submitted if consent is granted.

Any infill or replacement development would need to respect the heritage value and significance of the area and comply with the other relevant requirements of Goulburn Mulwaree LEP and DCP 2009.

If demolition is required primarily on economic grounds, a statement from a quantity surveyor comparing the cost of demolition against the cost of retention should be submitted. Submitting the necessary reports or justifications does not imply that Council will agree to the proposed demolition. These requirements may be waived in the event of an emergency or for reasons of public safety.

3.2.5.6 Heritage Impact Statement

Heritage impact statements (or sometimes called Statements of Heritage Impact) are documents which assess the impact of any proposed development on the heritage significance of the building, site or area. The statement should include options that have been considered for the proposal and document reasons for choosing the preferred option. These should include proposals to minimise the impact of the development.

Goulburn Mulwaree LEP 2009 requires the submission of a satisfactory heritage impact statement for heritage items, land within the vicinity of a heritage item or for works within a heritage conservation area before Council grants development consent.

The heritage impact statement identifies the heritage significance of an item, place or area, the impacts of any changes being proposed and how any impacts from the changes will be mitigated.

Determining whether a property is within, or impacts upon, the setting of a heritage item is a necessary component of the site analysis of a proposal. The determination of the setting of a heritage item should consider the historical property boundaries, significant vegetation and landscaping, archaeological features, and significant views, the ‘vista’, to and from the property.

The length of a heritage impact statement will vary depending on the scale and complexity of the proposal. A brief account included in the Statement of Environmental Effects may be sufficient for minor work that will have little impact on the significance of a heritage item or heritage conservation area. A more extensive report would be required for more complex proposals or those that will have a major impact on the item. Applicants should demonstrate that consideration has been given to the conservation and heritage significance of the item or component of a heritage conservation area in accordance with Sections 3.1.8 – 3.1.15 inclusive, of the Goulburn Mulwaree DCP 2009.

When preparing a Statement of Heritage Impact, applicants should refer to the Office of Environment & Heritage, Guidelines for Statements of Heritage Impact.

3.2.5.7 Conservation management plan

Council may require the submission of a Heritage Conservation Management Plan (Goulburn Mulwaree LEP 2009 clause 5.10(6)) in accordance with the guidelines prepared by the Office of Environment & Heritage, for proposals for change to individually listed Heritage Items. A Heritage Conservation Management Plan can be an important tool in caring for a heritage item. As this document will provide a guide to future care and use of the item, including any new development as it 'sets out what is significant in a place and, consequently, what policies are appropriate to enable that significance to be retained in its future use and development' (J S Kerr, The Conservation Plan, National Trust NSW, 2000).

Conservation management plans are comprehensive documents identifying the heritage significance of a place and should be prepared in accordance with the NSW Heritage Manual published by the NSW Heritage Office. A Conservation Management Plan must be prepared by a qualified heritage practitioner.

A Heritage Conservation Management Plan must be prepared by suitably qualified and experienced heritage practitioner:

(a) To accompany an application for approval under the Heritage Act 1977 (refer to the Office of Environment & Heritage, Local Government Heritage Guidelines Chapter 7: Determining Applications for work to Heritage Items, available on www.environment.nsw.gov.au).
(b) To support an application for site specific exemptions from Heritage Act 1977 approvals (refer to the Heritage Council of NSW Heritage Information Series: Standard Exemptions for works requiring Heritage Council Approval, available on www.heritage.nsw.gov.au).
(c) As a framework for an agreed upon management approach to a heritage item.

3.2.5.8 Conservation management strategy

A Heritage Conservation Management Strategy must be prepared by suitably qualified and experienced heritage practitioner:

(a) For use with items of local significance;

(b) For use with items of State significance for which no major changes or interventions are planned in the short to medium term that have the potential to materially affect the item;

(c) As an interim planning document for State Heritage Register items pending the preparation of a standard heritage conservation management plan.

3.2.6 Assistance

3.2.6.1 Heritage Advisor

Council offers a free heritage advisor service and can assist with preliminary advice on proposals affecting heritage items and sites within the Conservation Area. The advisor will be able to identify if a development application is required and if one is required, which documents are required to be submitted with a development application for assessment purposes. Contact the Council customer service centre to arrange an appointment.

All development applications received by the Council to carry out development within the Conservation Area or in relation to a heritage item will be referred to the Heritage Advisor or the Council's heritage officer for review and advice prior to the consideration of the application.

3.2.6.2 Publications

- Evans, Ian, Lucas, Clive and Ian Stapleton, Colour Schemes for Old Australian Houses, Flannel Flower Press
- Evans, Ian, Lucas, Clive and Ian Stapleton, More Colour Schemes for Old Australian Houses, Flannel Flower Press
- Evans, Ian, Caring for Old Houses
- Stapleton, Ian, How to restore the old Aussie House
- Department of Planning, Getting the details right
- Department of Planning, New uses for heritage places
- Department of Planning, Design in context
- Heritage Council of NSW, New Uses for Heritage Places – Guidelines for the Adaptation of Historic Buildings and Sites
- NSW Heritage Office, A Conservation Management Plan
- Office of Environment & Heritage, Guidelines for Statements of Heritage Impact
- NSW Heritage Branch, How to Prepare Archival Records of Heritage Items

3.2.6.3 Local Heritage Grants

The Council Local Heritage Assistance Fund provides support for works that will help to conserve the LGAs heritage. The fund is available to support works that will conserve existing character, restore buildings or enhance the streetscape.

3.3 General Heritage Item and Conservation Area Controls

3.3.1 Context

Objectives

1. To provide an appropriate visual setting for heritage items and buildings within heritage conservation areas.
2. To maintain and enhance the existing heritage significance of the streetscape and the vicinity.
3. To ensure that new development respects the established patterns in the streetscape and is sympathetic to the context.

Controls

A. The side and front setbacks are to be typical of the spacing of buildings both from each other and from the street, such that the rhythm of buildings in the streetscape is retained (Figure 3.1). Current front and side setbacks should be maintained where there is no established set back with nearby buildings.
B. Except as allowed by “car parking” and “fences” in Sections 3.3.1.2 and 3.3.1.3 below, no new structures should be built forward of the established street building line.
C. An adequate curtilage including landscaping, fencing and any significant trees, are to be retained.
D. The established landscape character of the locality including height of canopy and density of boundary landscape plantings should be retained in any new development.
E. Development in the vicinity of a Heritage Item should respect the visual curtilage of that Item and protection of views to and from the item.
F. New developments must respect the existing significance of the streetscape and the vicinity.
G. Use design elements that exist in the streetscape to guide the design of new structures.
H. Ensure scale and size of development is compatible with neighbouring development and the streetscape generally.

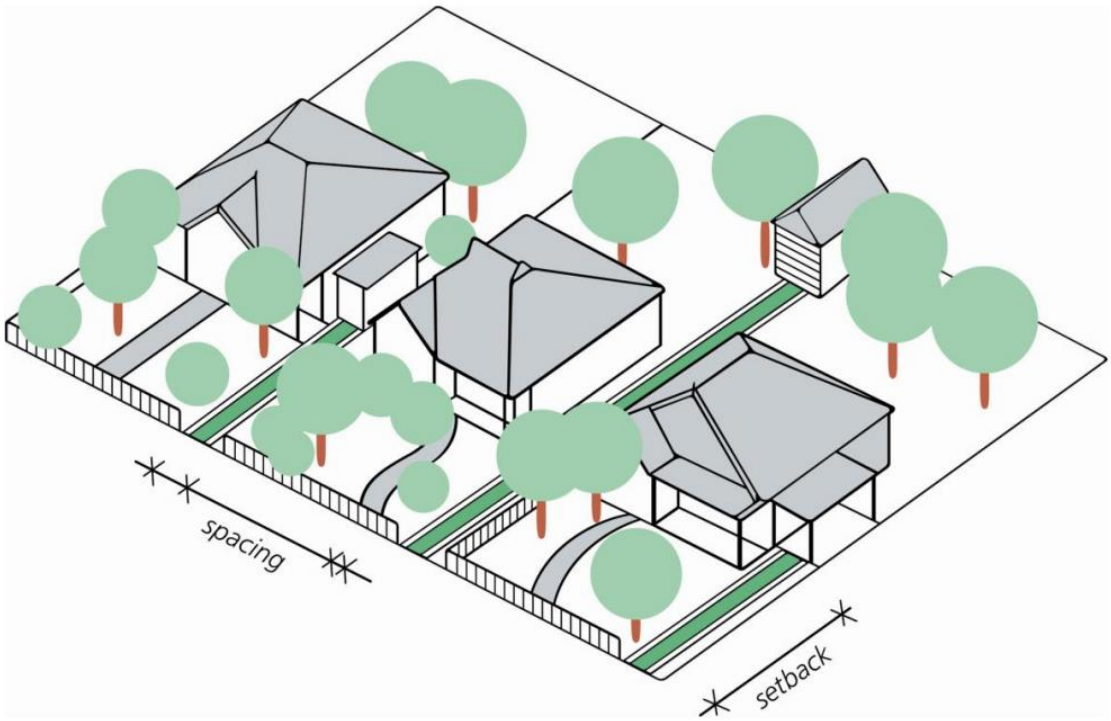


Figure 3.2: Respect context – established patterns of setbacks, dwelling spacing, landscape character, parking and fencing

3.3.2 Alterations and Additions

Objectives

1. Protect heritage significance by minimising impacts on the significant elements of heritage items.
2. Encourage alterations and additions which are sympathetic to the building's significant features and which will not compromise heritage significance.
3. Ensure that materials, alterations and additions respect the scale, form and massing of the existing building.

Controls

A. Avoid changes to the front elevation - locate new work to the rear of, or behind the original building section.
B. Design new work to respect the scale, form, massing and style of the existing building, and not visually dominate the original building.
C. The original roof line or characteristic roof elements are to remain identifiable and not be dwarfed by the new works.
D. Retain chimneys and significant roof elements such as gables and finials where present.

E. Ensure that the new work is recognisable as new, "blending in" with the original building without unnecessarily mimicking or copying
F. Complement the details and materials of the original roof including ridge height and slopes without compromising the ability to interpret the original form.
G. New materials are to be compatible with the existing finishes. Materials can differentiate new work from original building sections where appropriate, for example by the use of weatherboards where the original building is brick or by the use of "transitional" materials between old and new.
H. Retain front verandahs. Reinstating verandahs, and removing intrusive changes is encouraged, particularly where there is physical and/ or historic evidence.

3.3.3 Adaptation of Heritage Buildings or Sites

Adaptation of heritage buildings or sites (or also known as adaptive reuse) can provide the necessary viability for the continued use and maintenance of heritage buildings or sites.

Accommodating a new use should involve minimal change to significant fabric in order to protect heritage significance. Elements or artefacts from the original use (where present) may be required to be retained to assist interpretation. The Heritage Council of NSW has a publication *New Uses for Heritage Places – Guidelines for the Adaptation of Historic Buildings and Sites* that will be of assistance when considering adaptive reuse of heritage buildings.

Objectives

1. To encourage heritage items to be used for new purposes that will retain their heritage significance.
2. To encourage alternative uses where the heritage significance of the item is not compromised.
3. To avoid only retaining the façade.

Controls

A. The adaptive reuse of a heritage item should minimise alterations or interference with significant fabric. The changes are to enable the continued interpretation of the original use.
B. Ensure that new services are sympathetically installed especially where upgrading is required to satisfy fire or BCA requirements.
C. Adaptive reuse for public/commercial purposes should consider opening up the interior of the building to promote multiple viewpoints for interpretation.

3.3.4 Change of Use

Objectives

1. To recognize that the form and character of Heritage Conservation Areas are influenced and affected by the use of individual sites within the Heritage Conservation Area.
2. To preserve the form, character and function of Heritage Conservation Areas.
3. To ensure that changes of use in Heritage Conservation Areas do not create incompatibility or conflicts with their heritage character or values.

Controls

A. Proposals seeking consent for change of use within a Heritage Conservation Area must demonstrate that the proposed change is not likely to create incompatibility or discordance over time with the heritage character or heritage values of the Heritage Conservation Area, or with individual heritage items.
B. The applicant's assessment of compatibility of the proposed development with the Heritage Conservation Area must include details of all proposed physical changes to the site and to existing development resulting from the proposed change of use, including but not limited to changes in vegetation, signage, colours, materials and the like.

3.3.5 Demolition

Demolition is considered a last resort for heritage items and contributory items within heritage conservation areas. Also refer to Section 3.1.3 above for details of application and information requirements.

Objectives

1. To conserve both individually listed Heritage Items and the general building stock which contributes to the significance of the Heritage Conservation Area and to ensure that replacement development enhances the significance of the Heritage Conservation Area.

Controls

A. Significant properties, including heritage items and contributory items must be retained
B. Proposals for demolition will not be considered if there is a reasonable possibility for adaptive reuse of the site.
C. Consent will not be granted to demolition or partial demolition unless Council has considered the future development of the site.

3.3.6 Subdivision

Objectives

1. To retain the development and historic subdivision pattern of the Heritage Conservation Areas including their characteristic rhythm and spacing of built form.
2. To retain significant curtilages, views and vistas and landscape elements associated with individual heritage items that may be lost through subdivision.

Controls

Subdivision of land must comply with the minimum allotment size requirements of the LEP and with this heritage design chapter. Subdivision applications for land either in the vicinity of, or on which heritage items are situated, or in conservation areas are required to be accompanied by adequate plans, showing the building envelopes, siting and setbacks of the proposed buildings, that must demonstrate to Council's satisfaction that:

A. The allotment and building spacing, including frontage widths, side and front boundary setbacks must not impact adversely on vistas and views to and of heritage items and Heritage Conservation Areas. In particular, the principal elevations of buildings must not be interrupted or obscured.
B. The setting of a heritage item and a satisfactory curtilage, including important landscape and garden elements, must be retained.
C. The subdivision must not require rearranged vehicular access and car parking (on or off the site of the proposal) that would adversely affect the principal elevation of the heritage item or components of a Heritage Conservation Area.
D. Landscape quality of the streetscape in Heritage Conservation Areas must be retained.
E. The contours and any natural features of the site have been retained and respected.
F. Subdivision must comply with the minimum allotment size requirements for Goulburn Mulwaree LEP 2009.
G. The essential qualities of the streetscape and building style(s) on which the locality's heritage depends, are preserved in the new development.
H. Subdivision applications for land either in the vicinity of or on which Heritage Items are situated or in Heritage Conservation Areas are required to be accompanied by adequate plans, showing the building envelopes, curtilage siting and setbacks of the proposed buildings.
I. The subdivision plan must be prepared by a registered surveyor and must show the exact dimensions of the proposed subdivision lots and the location of the heritage item.

3.3.7 Corner Allotments

Objectives

1. To ensure that the characteristics of the conservation area or heritage item are considered from both streets.

Controls

A. Both street frontage elevations must be considered on corner allotments as shown in Figure 3.2 below.
B. Significant parts of the original building must be retained, including main frontage and side frontage;
C. The scale of additions and alterations must respect the existing ridge or eaves heights;
D. Where additions are attached, detailing including finishes and materials must be appropriate to the original;
E. Where additions are detached or commercial development is proposed, contemporary solutions must respect the scale, bulk and detailing of the original without poor mimicry;
F. Car parking must be located to the rear of the secondary street frontage. Double garages forward of the building line are not acceptable;
G. Fencing to the secondary street frontage must not exceed 1800mm in height;
H. Landscaping is required to both street boundaries, and a landscaping concept plan is required with the submission of a development application; and
I. New development must be located to minimise impact on existing prominent trees.

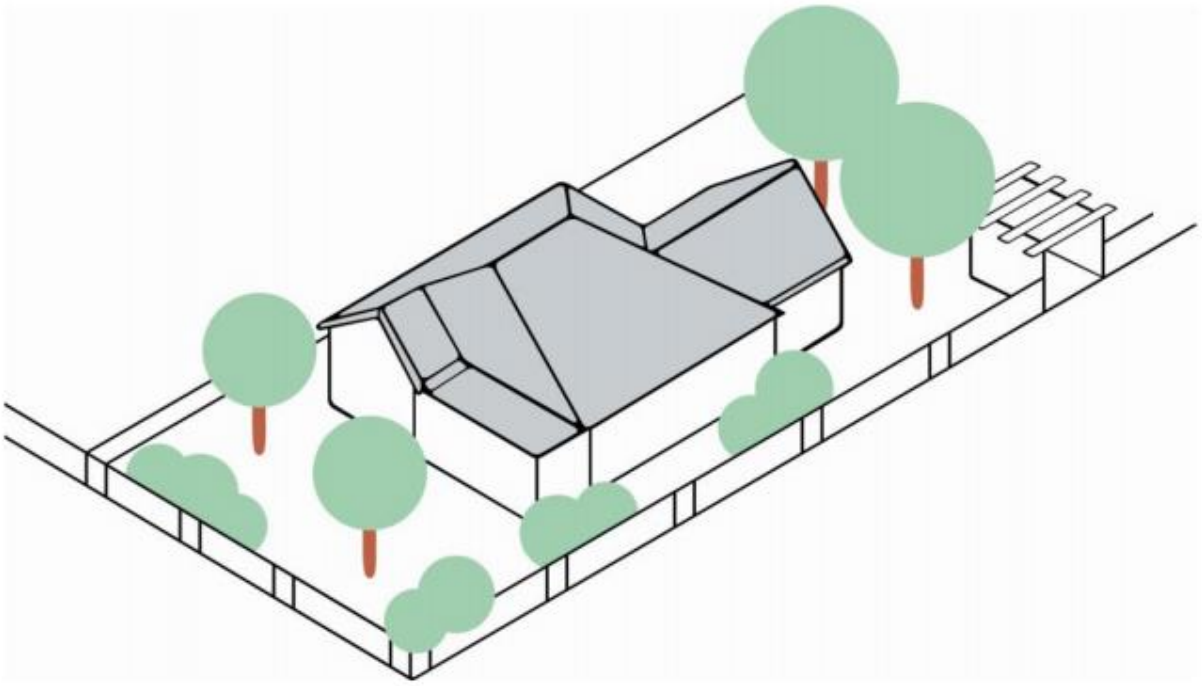


Figure 3.3: Both Street frontage elevations muse be considered on corner blocks

3.3.8 Development in the Vicinity of a Heritage Item

Development in the vicinity of a heritage item can have an impact upon the heritage significance of the item, in particular through impacts on an items context or setting. Determining whether a property is within the context or setting of a heritage item is a necessary component of the site analysis for any proposal. Advice from Council's heritage advisor may be required to determine this. The analysis should consider historical property boundaries, significant vegetation and landscaping, archaeological features and significant views.

Objectives

1. To ensure that new development achieves a sympathetic relationship with nearby heritage items in terms of scale, massing, character, setback, orientation, materials and detailing.
2. To ensure that any new development respects the established streetscape, and the patterns of development in the vicinity of the heritage item.
3. To ensure the careful siting of new development retains the significance, integrity and setting of the heritage item.
4. To retain views and vistas from and to heritage items.

Controls

A. Development on land adjacent to, or within the vicinity of a heritage item should not detract from the identified significance or setting of the heritage building or the heritage conservation area.
B. Where development is proposed adjacent to or within the vicinity of a heritage item, the following matters must be taken into consideration:

    1) The character, siting, bulk, scale, height and external appearance of the development;
    2) The visual relationship between the proposed development and the heritage item;
    3) The potential for overshadowing of the adjoining heritage item;
    4) The colours and textures of materials proposed to be used in the development;
    5) Maintenance of original or significant landscaping;
    6) The landscaping and fencing of the proposed development;
    7) The location of car parking spaces and access ways into the development;
    8) The impact of any proposed advertising signs or structures;
    9) the interpretation of any archaeological features associated with the heritage item;
    10) The maintenance of the existing streetscape, where the streetscape has significance to the heritage site including impact on grassed verges in the road reserve;
    11) The significance or integrity of any archaeological remains;
    12) The impact the proposed use would have on the amenity of the heritage site; and
    13) The effect the construction phase will have on the well-being of a heritage building.

C. Development in the vicinity of a heritage item should give strong regard to any significant views to and from the heritage item and any public domain area.
D. Where subdivision is proposed in the vicinity of a heritage item, the impact of future development of the lots should be considered.
E. Any new development should:
    1) Complement not compete with the elements that contribute to the uniqueness and heritage significance;
    2) Not overshadow or impede existing views;
    3) Not visually dominate, compete or be incompatible with the form of the heritage item;
    4) Be contemporary in design, however the scale, form, bulk and detail of the proposal must not detract from the scale, form, unity, cohesion and predominant character of the heritage item;
    5) Avoid making a replica copy of a heritage item; and
    6) Be kept simple and must not use a mixture of features from different eras or add heritage features to new buildings.

3.3.9 Dual Occupancies / Secondary Dwellings

Objectives

1. To retain the traditional relationship between heritage items or Heritage Conservation Areas and the original subdivision lot pattern and character.
2. To ensure that heritage items are not dwarfed by new additions or new development.

Controls

A. Dual occupancy development on lots that were originally intended to contain a single dwelling house must not create adverse impacts on the traditional relationship between a heritage item and the original lot boundaries, setbacks and characteristics.
B. Dual occupancy development on lots that were originally intended to contain a single dwelling house must not dwarf a heritage item, nor compromise its heritage values.
C. Applications seeking consent for subdivision of lots on which there is a heritage item or in a Heritage Conservation Area must include full details of proposed future development on the land, together with an assessment of potential impacts on heritage values.

Note: Council is unable to approve a subdivision of a lot on which development for the purposes of a Secondary dwelling has been carried out.

3.3.10 Multi Dwelling Housing Developments

Objectives

1. To ensure that multi-dwelling residential development will be consistent with the existing density, form, scale, architectural and streetscape character of the conservation area and/or heritage item.

Controls

A. Building bulk is to be minimised through separating out garages under a different roof form, following natural ground levels to avoid abrupt changes of level, and separating large floor areas into separately roofed areas.
B. The first (or leading) unit in a group is to face the primary street frontage and its design should be compatible with the adjoining streetscape.
C. Adequate visual and sound privacy between units achieved by brick party walls between semi-detached units and by having windows that do not face each other.
D. Proposals for multi dwelling housing near heritage items or within heritage conservation areas should include:

1) A detailed landscape plan showing fencing, plant species, paving and plot sizes;
2) A schedule of materials and finishes;
3) Scale and form of adjoining development should be reflected in housing design;
4) Show consistency with ground contours;
5) Reflect vertically proportioned traditional window types;
6) Steep pitched roofs;
7) Address the street;
8) Separate garage roofing;
9) Simple verandah forms; and
10) Not imitate heritage elements.

3.3.11 Signage and Advertising

Objectives

1. To ensure that new signage is visually sympathetic or contributory to the heritage character of the streetscape.
2. To ensure that inappropriate signage or advertising does not detract from the significance of the heritage item or Heritage Conservation Area through inappropriate design, location, colour or scale.

Controls

A. Commercial advertising banners and placards are prohibited.
B. Business signs must be designed to complement the visual quality of the building or conservation area streetscape.
C. Signs must not have an adverse impact on the heritage character of buildings or conservation area.
D. Business signs on fascia, verandah beams or awnings must be no larger than the fascia.
E. Signs should be of colour and lettering appropriate to the period style of the building (Figure 3.4).
F. Subdued colours should be used and signs should be spot lit instead of self-illuminating.
G. Also refer to Section 6.4 Advertising and Signage which provides details in relation to signage.

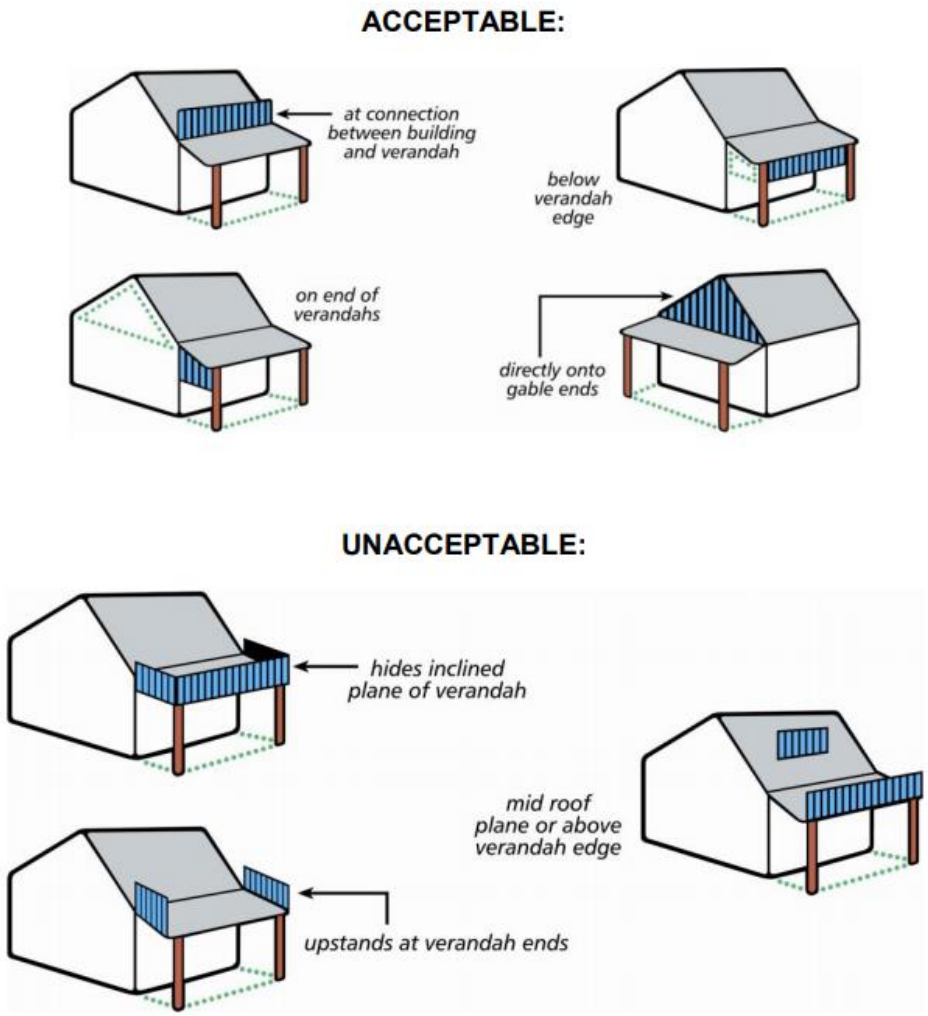


Figure 3.4: Acceptable and unacceptable placement of signage and advertising





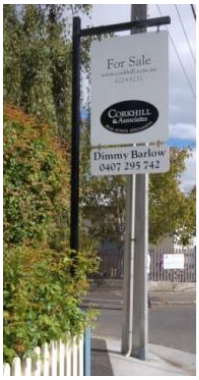






Figure 3.5: Good Examples of signage on heritage buildings and in heritage areas

3.3.12 Building Materials, Colours and Finishes

It is important to use the right materials, colours and finishes to maintain the integrity and character of heritage buildings and streetscapes.

Objectives

1. To ensure that the selection of building materials, colours and finishes are based on an understanding of the original building finishes and maintains heritage integrity and character.
2. To avoid the use of colours that are inappropriate or incompatible with the heritage character.
3. Ensure colours are consistent and harmonious in the streetscape.
4. To ensure that new development has a level of detail which is appropriate to its context.
5. To ensure that new development has regard to the architectural character and style of the Heritage Item and setting but does not incorporate elaborate new detailing in a period style that would prevent interpretation of what is original and what is new.
6. Finishes employed in new development should be selected with regard to the significance and character of the Heritage Item and the likely impact of that proposed work.

Controls

A. Restoration or reinstatement works should:
   1) Use matching materials when repairing fabric or external surfaces;
   2) Use traditional construction methods where the quality of restoration or reinstatement is more desirable;
   3) Colour schemes are to reflect the period and detail of the property (Figure 3.5);
   4) Not paint or render face brick, stone, tiles or shingles;
   5) Ensure the form and materials of principal elevations must not be altered, unless it is associated with acceptable reconstruction or restoration works;
   6) Not include new decorative detailing unless documentary or physical detail indicates it once existed;
   7) Use matching bricks, where they cannot be matched, contemporary materials may be appropriate, particularly on rear elevations; and
   8) Not use textured paint finishes.

B. New work should:
   1) Adopt a simple character which uses external finishes, colours and textures which complement the heritage fabric, rather than mimic inappropriate heritage decoration and/ or detailing;
   2) Select materials to be compatible, but not necessarily matching the materials of the building;
   3) Use materials that complement the period and style of the heritage item;

4) Employ finishes that are compatible with the heritage significance and character of the heritage item they adjoin or of development in the street or Heritage Conservation Area; and
5) Use traditional colour schemes and contrasting tones for alterations and additions.



Figure 3.6: Examples of Heritage Colours 1820-1940

Note: Equivalent colours from other manufacturers may be used. Art Deco requires a different colour palette. Colours should be specified by manufacturer. This figure is not an endorsement of any paint manufacturer.

3.3.13 Building Form, Scale and Style

Objectives

1. To ensure that the scale of new development is sympathetic to the streetscape and does not dominate or compete with existing heritage items, nor reduce their contribution and importance to their context.
2. To ensure that the style and form of new development does not destroy the historical pattern of development and respects the architectural character and style of the heritage item or conservation area.
3. To ensure that new development acknowledges any dominant massing and form of the Heritage Item or Heritage Conservation Area, and is in sympathetic with existing significant fabric and form, and with the surrounding streetscape; and
4. To ensure that the form of new development is compatible with or complements the heritage significance of its context.
5. To ensure that new development respects the proportions of elements of existing heritage fabric.

Controls

A. The scale (including height, bulk, density and number of storeys) of the new work must relate visually to the scale of adjacent buildings which are Heritage Items or are located in a Heritage Conservation Area. In this regard, unless it can be clearly demonstrated that greater scale would be appropriate in the individual circumstances, new buildings and additions are to be of the same scale as the surrounding development.
B. New developments should avoid overshadowing of existing heritage items or contributory architecture.
C. Extensions must not visually dominate or compete with the original scale of the existing buildings to which they are added or altered.
D. New buildings must not visually dominate, compete with or be incompatible with the scale of existing buildings of heritage significance or contributory value either on the site or in the vicinity of the proposal. (Figure 3.6)
E. New buildings and extensions should have a similar massing, form and arrangement of parts to existing buildings of heritage significance in any Heritage Conservation Area. See Figure 3.7 for development that does not respect the massing and form.

F. New work and extensions should respect the proportions of major elements of significant existing fabric including doors, windows, openings and verandahs. (Figure 3.8)

G. More specifically:

1) Where buildings or dwellings are single storey, second storey additions are not encouraged;
2) Creation of attic space within the existing roofline is preferred;
3) Existing rooflines may be extended to the rear and dormers may be added to the extension, provided development does not impact negatively on the streetscape and the character of the house. In particular, the roof silhouette should remain; and
4) Additions at the side of the house may be acceptable providing it is setback a minimum of 5 metres from the front building line and softened by planting and vegetation.

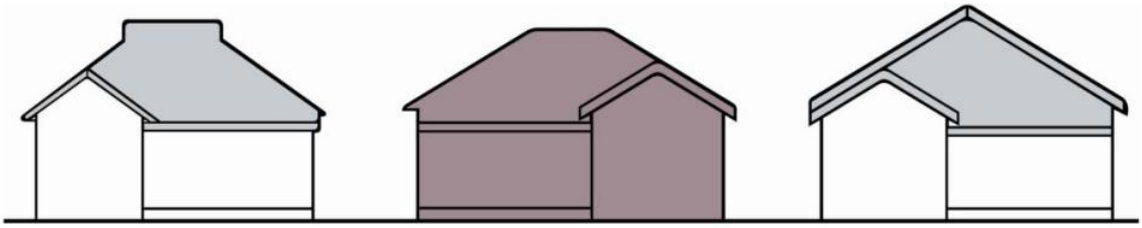


Figure 3.7: Pattern of harmonious scale consistent with surrounding development

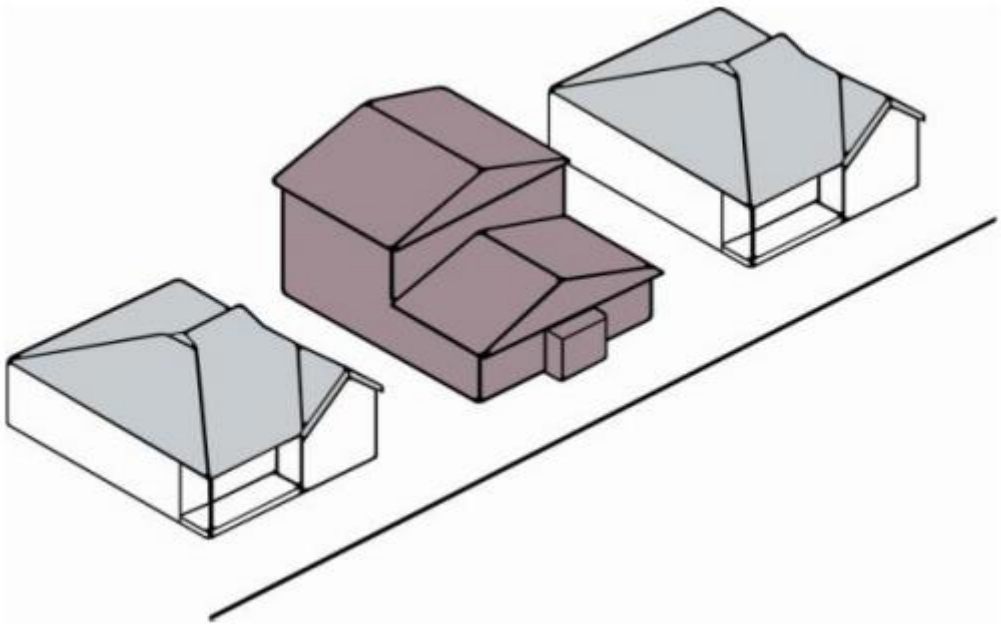


Figure 3.8: This example does NOT respect the massing and form of surrounding buildings





Figure 3.9: Existing pattern of simple cottages versus new development that does not respect the existing pattern by selecting windows that are out of proportion and adding an over-scaled finial to the gable.

3.3.14 Roof Form and Chimneys

The pitch and form of a roof has a major effect on the overall appearance of a building and has a strong relationship to its proportions. The style of the roof will have an important bearing on whether or not a new building fits comfortably within an existing streetscape in a conservation area or near a heritage item.

Objectives

1. To retain the characteristic scale and massing of roof forms of heritage Items and within Heritage Conservation Areas.
2. To ensure that the original chimney elements are retained and any new roof elements relate to the existing heritage fabric of the heritage item or component of a Heritage Conservation Area.

Controls

A. Maintain traditional roof forms and materials.
B. Use appropriate profile gutters in the maintenance of older buildings. Quad, half round and ogee gutters are the most appropriate profiles, depending on original details. Perforated box gutters are not appropriate in a historical context.
C. Roofs of extensions should be carefully related to the existing roof in materials, shape and pitch. Replacement materials must match the existing in colour, materials, finish and details. (Figure 3.9)
D. all chimneys must be retained internally and externally and where necessary repaired, even if the fireplace is no longer used. Demolition of chimneys is not favoured unless necessary for structural reasons.
E. Minimise large, blank areas of roofing in new developments to reduce the impact on the existing building and adjoining properties.
F. New buildings must have roofs that reflect the orientation, size, shape, pitch, eaves, ridge heights and bulk of existing roofs in the locality, and must be in proportion with the proposed building.
G. Attic rooms must use compatible roof forms that retain the streetscape appearance of the existing building and must not adversely affect significant views or vistas.
H. Skylights or other structures attached to the exterior of the roof should avoid being located where visible from the street or on the principle elevation of buildings.

Note: Despite the above, Council may consider a development application for replacement of an existing iron roof where the application demonstrates that the replacement will be consistent in colour, design and character with the existing roof.

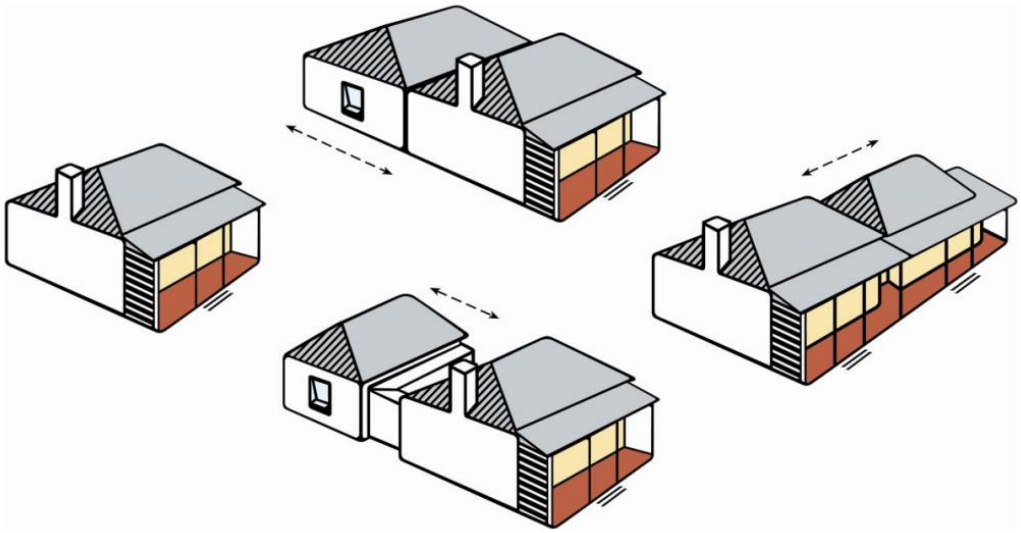


Figure 3.10: Suitable options for extending an original building

3.3.15 Verandahs

Verandahs have a functional purpose as well as an aesthetic one, being useful in climate control as well as providing sheltered outdoor space. The incorporation of verandahs into the design of new buildings helps integrate the building with the existing built character of historic precincts.

Objectives

1. To ensure that original verandahs or verandah elements are retained and that any new verandah elements relate to the proportions and scale of the existing heritage fabric of the heritage item or component of a Heritage Conservation Area.

Controls

A. Removal of verandahs is not favoured and maintenance or reconstruction of original detail is encouraged.
B. In altering existing buildings, original verandahs must be kept, repaired and respected. Additional verandahs must not compete with the importance of the original and should be simple in design.
C. Enclosed verandahs should be opened up where feasible, and missing details reinstated. However in some cases the verandah infill may itself have heritage or aesthetic value and the removal of the infill may not be appropriate. These cases must be justified in any application.
D. The reconstruction of verandahs which once existed and whose detail is known is also encouraged. Where the form of the verandah survives but the details are missing, these can be reinstated if known from documentary evidence such as photographs or original drawings.
E. New development should include verandahs where consistent with the character of surrounding development. Simple skillion verandahs may be appropriate as this style integrates well with new buildings.
F. Features such as bullnose style, lace ironwork, decorative fretwork or Federation brackets on posts must not be introduced on modern buildings, as these features lack historical context.
G. The infilling of front and side verandahs is generally not encouraged, although infilling verandahs at the rear of houses may be appropriate.

3.3.16 Windows and Doors

Window and door proportions have a major impact on the individual character of a building and its relationship with neighbouring buildings, and are also very important in the design of a new extension or infill development. Many heritage buildings have double-hung timber framed windows which provides a strong vertical element to the window proportions.

Objectives

1. To ensure that original windows and doors or window and door elements are retained and where new elements occur that the character and patterns of door and window openings and their construction are clearly related to the proportions, placement, character and scale of the existing heritage fabric.

Controls

A. original doors and windows must be retained and repaired/restored. Authentic reconstruction of similar material to the original is encouraged where repair of the original doors and windows is not possible.
B. Original leadlight and coloured glass panes must be kept.
C. New doors and window openings must reflect the existing style, size, proportion, position and where possible must match sill and head heights of existing doors and windows.
D. in new buildings they must be compatible with the proportions, position and size of those typical of the locality. Vertical proportions should be featured in window design. (Figure 3.11)
E. Timber windows should be used for restoration of traditional buildings. Modern aluminium-framed windows are not acceptable.



Figure 3.11: Traditional window and door examples with vertical proportions



Figure 3.12: Existing pattern of simple cottages with vertically proportioned doors and windows versus new development that does not respect the existing pattern, with uncharacteristic arched window and double leaf door.

3.3.17 Facades

Objectives

1. To retain the existing façade, fabric, scale and massing and character of original development, in terms of the proportions of façades;
2. To ensure that new development does not disturb or reduce the importance of original verandahs or façades; and
3. To ensure new verandahs and façades do not conflict with the heritage significance or significance of the place or building.
4. To break up visually long facades using vertical elements.
5. To avoid tilt slab construction with blank, flat or minimal moulding.
6. To respect traditional town development with individual shopfront separation.
7. To avoid blank window panels that are used as advertising panels to ensure streetscape is not overwhelmed.

Controls

A. Two storey façades must only be used where surrounding development is of a predominantly two storey scale.
B. Limit bay widths to match those of surrounding significant development.
C. Alteration of the form and materials of principal elevations is not appropriate. Removal of the external skin or rendering of exterior walls is not appropriate unless associated with acceptable reconstruction works.
D. In altering existing houses, original sunhoods, blinds, awnings and skirts to principal elevations should be retained and repaired. Authentic construction or reconstruction is supported.
E. In altering existing buildings, original verandahs / façades are to be retained and restored.

F. New buildings must take into account the significance and design of verandahs / façades in the locality, the methods of their incorporation in building designs and their harmonising role in streetscapes. (Figure 3.12)
G. Alteration to original façades which are of heritage significance is not supported.
H. The proposed works are to be sympathetic to and/or not detract from the style, character and significance of the building and place. Designs, whose massing, details, materials and colours reflect the type of façade historically used in each locality, without insistence upon replication, are encouraged.
I. Avoid blank exteriors by avoiding tilt slab construction and encouraging staggering of the façade through vertical elements =.
J. Retain and repair/restore original shopfronts. Authentic reconstruction is encouraged. Original timber and metal shopfront framing must be retained (Figure 3.13).
K. Use active shopfronts to the street to activate the footpath and create interest.
L. Provide details of materials, finishes, profiles and colours for façades including any proposed signage.



Figure 3.13: Shopfront examples - Style elements include retention of original details such as ceramic tiles, symmetrical layout, ornamental timber joinery, decorative signage on glazing, retention of original shopfront framing.



Figure 3.14: Example of new development not respecting pattern of existing façades

3.3.18 Parking – Garages and Carports

Objectives

1. To allow for reasonable on-site car parking while retaining the character and significance of the heritage item or Heritage Conservation Area.
2. To ensure that car parking facilities (such as garages, carports and driveways) are designed to be compatible with the heritage environment, do not have an adverse visual impact on heritage streetscapes and are visually discreet.

Controls

A. The introduction of car parking must not impact on the setting or character of the heritage item or Heritage Conservation Area.

B. Early garages, carports and sheds must be retained wherever possible as they contribute to the character of heritage items and Heritage Conservation Areas.

C. Garages and carports should generally be kept separate from the house. Attachment of garages and carports to the buildings they service is generally not favoured unless the structure is located at the rear of the building and is not visible from the surrounding streets, or it is set well back from the front façade and unobtrusively attached. In those cases a simple carport under a continuation of the roofline may be appropriate.

D. Garages and carports must be of a simple design, must use traditional pitched roof forms and must match the roof pitch, form and materials of the main building as closely as possible. The design must respect vertical proportions. Double width horizontal doors are unacceptable. Garages and carports must not dominate existing buildings on site (Figure 3.15).

E. Prefabricated metal sheds with low-pitched roofs are not appropriate, as they are incompatible with traditional streetscapes.

F. The location of car parking must respect the existing vegetation and original garden layouts on the site.

G. In relation to access:
   1) Existing rear lane access is to be utilised in preference to front access;
   2) Existing side vehicular access is to be utilised;
   3) Driveways are to be to side boundaries and not central; and
   4) Development which removes existing access must not preclude future carports or garages behind the building line.

H. In relation to location:
   1) Open stand car spaces may be provided forward of the building line;
   2) Garages and carports are to be located behind the building alignment wherever physically possible; and

I. In relation to scale:
   1) Maximum width of a driveway at street frontage is to be 3.5m;
   2) Garages and carports are to occupy no more than 20% of street frontages (Figure 3.15) ;
   3) Carparking structures should be diminutive in scale in relation to the residence; and
   4) Structures forward of the building line must be designed to minimise their bulk with a maximum eaves heights of 2400mm. Flat roof structures of sympathetic materials and detail are acceptable.

J. In relation to appearance:
   1) Materials, form, and details of car parking structures are to harmonise with and be subservient to the residence;
   2) A similarity in colour of garage doors and wall surfaces may reduce impact to street and therefore is favoured;
   3) Structures forward of the building line must be screened with vegetation; and
   4) Garage doors and structures are to be recessed behind the primary façade to create a shadow line.



Figure 3.15: Dominance of garages (especially double) can destroy and dominate a heritage streetscape

3.3.19 Fences

Objectives

1. To provide or retain fencing which contributes to the heritage significance of the heritage item or Heritage Conservation Area, defines public and private spaces and complements the overall character of the streetscape.
2. To provide fencing that reinstates the original form of fencing, that is consistent with and does not detract from the established patterns of the street.

Controls

A. Original fencing and gates must be retained. If fences and gates are in good condition they can be maintained; if not they can be reconstructed with new, matching elements. Any good sections of the old fence should be integrated.

B. New fencing on heritage properties must be of a traditional design, with modest height and not solid in order to allow views of the garden and front of the building. The design may be based on photographic evidence, or if this is not available, the design must be appropriate to the age and style of the house. (Figure 3.16)

C. New fencing must be consistent with traditional fences in the streetscape.

D. On new developments simple fencing styles that harmonise with the heritage streetscape may be appropriate.

E. New fencing must respect the traditional hierarchy of fences for the front, side and rear boundaries.

F. Fence heights must be consistent with the heights of the predominant fences in the street. Generally height should be 1.2m forward of the front building setback, and 1.8m elsewhere.

G. Metal panel fences, spear tops, and aluminium lace panels are generally inappropriate in the heritage environment. Refer to Figure 3.17 for examples of suitable fencing.



Figure 3.16: High and solid fencing destroys the harmony of the streetscape and precents views of the dwelling and front garden





Timber Picket

Ornate Timber - Federation





Woven Wire & Post and Rail

Brick and Iron – Californian Bungalow

Figure 3.17: Examples of suitable fencing options

3.3.20 Outbuildings and Pools

Objectives

1. To ensure that outbuildings and swimming pools do not detract from the heritage significance of the heritage item or Heritage Conservation Area through inappropriate siting, excessive scale, bulk or visibility.

Controls

A. Swimming pools and additional shed space must be positioned to respect the setting and spaces around buildings and the original garden layouts of the heritage item or the components of a Heritage Conservation Area. Generally they should be located at the rear of properties.
B. Swimming pool safety fencing must be located where it will be screened from public view. Landscaping must be provided where it is important to soften the impact on a heritage item.
C. The proposed structure must be well integrated with its site and surrounds, and where appropriate the design must include landscaping such as screening or planting of species appropriate to the heritage character of the locality.
D. Significant outbuildings that may form part of a historical curtilage must be retained where feasible.

3.3.20.1 Gardens

Objectives

1. To encourage the retention and enhancement of the garden setting.
2. To ensure new gardens reflect the character of existing gardens.
3. To conserve original garden elements and layouts

Controls

A. Keep hard surfaces to a minimum. As a guide, 70% of the area forward of the building line should be soft landscaped.
B. Screening of hard surfaced areas with vegetation is encouraged.
C. Garden structures are to be appropriate to primary buildings in terms of scale, style, and materials.
D. Retain all mature or semi-mature plantings in the front and side gardens.
E. Hedges along front and side boundaries (forward of building line) should be maintained at not more than 1200mm in height. (Figure 3.18)
F. Ensure historic trees and vegetation are retained, where not a danger.
G. New development should:

1) Include a front garden with lawn, shrub and tree elements;
2) Limit hard paving to only paths and driveways; and
3) Use simple fencing that complements the streetscape and architectural features of the area.

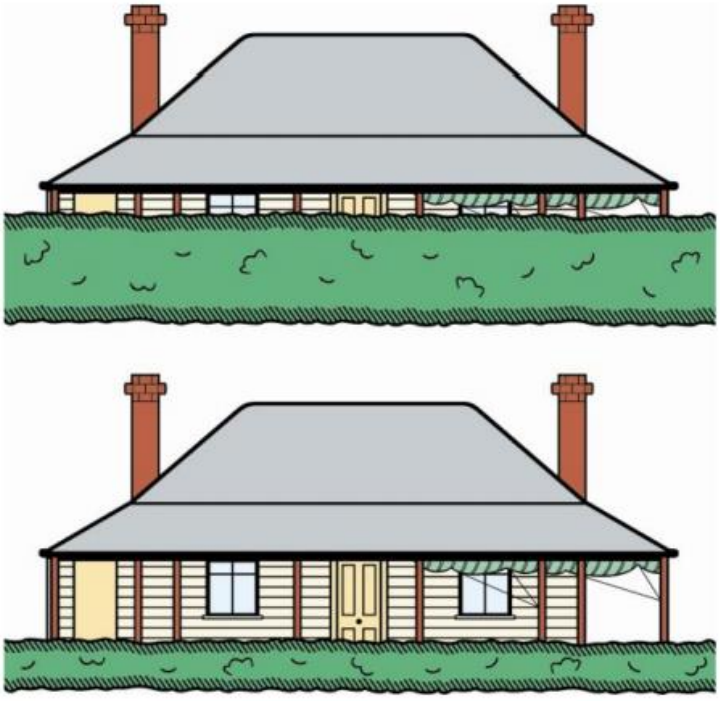


Figure 3.18: Soft landscaping should not hide contribution to streetscape. Hedges should be limited to 1200 maximum height on main frontages.

3.3.21 Non-Indigenous Archaeology

Due to the extensive history of Goulburn Mulwaree LGA and the changes that have occurred over time, it is important to consider the potential for archaeological deposits and relics that may be on a site, not only for Aboriginal / Indigenous heritage but also for non-Indigenous / European heritage. This section includes objectives and controls relating to archaeological assessment requirements.

Objective

1. To provide for the consideration of impacts on non-indigenous archaeology from proposed development within the Goulburn Mulwaree LGA.

When is an Archaeological Assessment Required?

Any development application which proposes the disturbance or development of a heritage item listed as an archaeological site is to be accompanied by an Archaeological Assessment prepared by a suitably qualified and experienced archaeologist and submitted as part of the heritage impact statement or conservation management plan.

Council may also request an archaeological assessment to accompany a development application, if they believe a site is likely to contain archaeological relics or deposits.

3.3.21.1 What is an Archaeological Assessment?

An archaeological assessment is an evaluation of the probable extent, nature and integrity of the site, determination of the significance of the site, and which defines the appropriate management measures for the site having regard to its significance.

The archaeological assessment is to be prepared in accordance with applicable guidelines and information sources published by the NSW Office of Environment and Heritage..

Where the development or disturbance of an archaeological site is proposed, the applicant will be required to liaise with the NSW Office of Environment and Heritage, to ensure any related statutory requirements of the Heritage Act 1977 and subsequent amendments, are complied with prior to the submission of the development application.

Any proposal to disturb or excavate land which will or is likely to result in a relic, deposit or other archaeological remains being discovered, exposed, moved, damaged or destroyed, requires an excavation permit to be obtained from the NSW Office of Environment and Heritage. This applies whether or not the site is listed as an archaeological site under the LEP.

3.3.21.2 Publications

- Historical Archaeology Code of Practice, NSW Heritage Office, 2006
- Revealing the Past: An Introduction to Historical Archaeology, NSW Heritage Office, 2004
- Guidelines for the preparation of Archaeological Management Plans, Heritage Branch, NSW Department of Planning, 2009
- Assessing Significance for Historical Archaeological Sites and ‘Relics’, Heritage Branch, NSW Department of Planning, 2009
- Skeletal Remains – Guidelines for the Management of Human Skeletal Remains under the Heritage Act, NSW Heritage Office, 1998

- Stabilising Stuff – A Guide for Conserving Archaeological Finds in the Field, NSW Office of Environment and Heritage and International Conservation Services, 2012
- Archaeological Assessments, Heritage Council of NSW, 1996
- Excavation of Director Criteria, Heritage Council of NSW, 2011

3.3.22 Old Marulan Heritage Conservation Area

3.3.22.1 Definition and Location

Old Marulan is located 31kms east of Goulburn and is located 5km south of the current Marulan Township. No buildings remain in the locality and it is now mainly an area of archaeological importance, including two cemeteries. The extent of the HCA is shown in Goulburn Mulwaree LEP 2009 and in Figure 3.19 below.

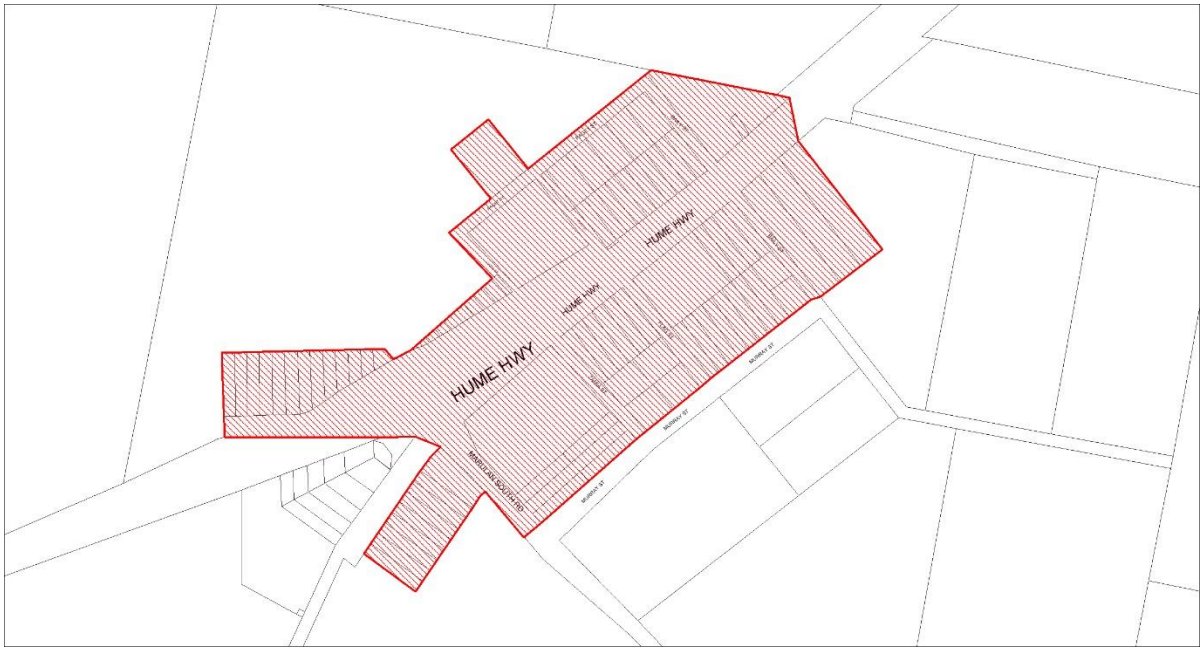


Figure 3.20: Old Marulan Heritage Conservation Area

3.3.22.2 Character

Old Marulan was a busy village on the Great South Road, not far from the Wingello Stockade which housed the convicts building the road. The area is now rural in character which include a series of historic allotments split by the Hume Highway / Motorway. The area was given a simple design with no side streets and all allotments with frontage to a major road. It was

unusual as it did not conform to the layout of towns and villages of the time. The layout was altered when expansion occurred in the 1830-40s.

3.3.22.3 History

Marulan, originally known as Mooroowoolen, was developed as a stop along the Great South Road and later the Hume Highway. It was this road development that determined the location of the settlement and influenced its growth. Marulan was officially gazetted as a town in March 1835 at the intersection of the road to Bungonia and the Coast and the road to Goulburn Plains. It developed rapidly as a town and by 1836 has a daily mail service to the post office, inn, church stores, school, police station, wheelwright and blacksmiths.

When the railway came through in 1868, the old part of Marulan began to decline in favour of the township near the railway which soon overtook the road as the main transport through the region and the services once provided in the old town relocated to the new area.

3.3.22.4 Statement of Significance

The site of Old Marulan Town is considered to be an outstanding archaeological resource which is able to vividly illustrate unrecorded details of Australian history relating to the form and functions of an early colonial service town, and the way of life of its inhabitants. Examination of the ground surface indicates that the total area of the site contains relics relating to the early occupation of the town. Future archaeological research of the site should result in a wealth of information which is only suggested from surface findings. The significance of the relics and deposits within the land is heightened by the limited period of the towns existence and the subsequent lack of further development of the land. The site therefore is a rare "time capsule" relating to colonial town life from 1835-67 which has suffered minimal contamination from latter phases of use. (From SHI)

3.3.22.5 Positive Characteristics

There are a number of positive characteristics for Old Marulan which reflects its importance as an archaeological area. These include the following:

- Limited pressure for development;
- Location of two historic cemeteries; and
- Rural nature of the locality.

There are only two items within the HCA that are listed, including the two cemeteries. Only remnants of other buildings remain.

3.3.22.6 Objectives

The objectives of the HCA for Old Marulan are:

- To protection of the vegetation in the area;
- To ensure any archaeological evidence is protected from development; and
- To maintain and restore the cemetery areas to ensure they are not damaged or destroyed.

3.3.22.7 Controls for Future Development

There are no specific development controls for this area. Refer to those controls and guidelines within the Goulburn Mulwaree LEP 2009 and Sections 3.1.5 and 3.1.6 of this DCP.

3.3.23 Goulburn Central Business Heritage Conservation Area

3.3.23.1 Definition and Location

Goulburn is located 192kms south west of Sydney and includes a large commercial area with associated institutional buildings and residential areas. The Goulburn Central Business Heritage Conservation Area includes the central business district of Goulburn and is generally bounded by Mulwaree River / Blackshaw Road, Clinton Street, Bradley Street and Cowper Street. The Heritage Conservation Area (HCA) includes extensive heritage buildings and streetscapes that are significant to the development of Goulburn. The extent of the HCA is shown in Goulburn Mulwaree LEP 2009 and in Figure 3.20 below.

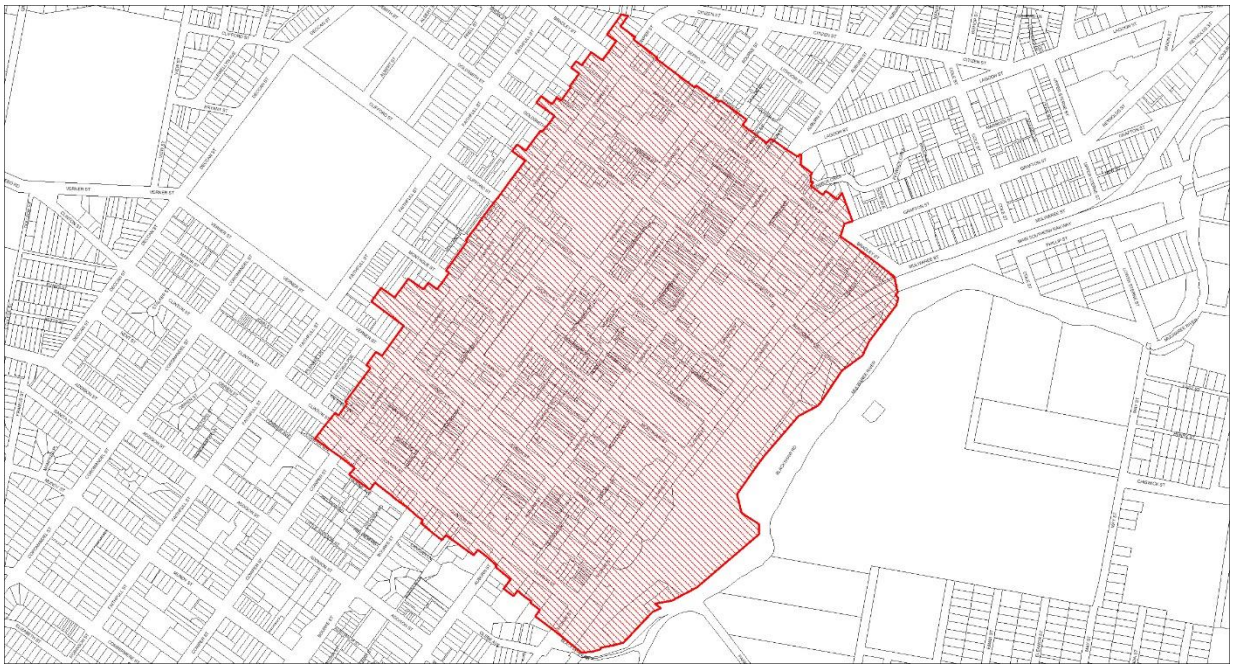


Figure 3.21: Goulburn Central Business Heritage Conservation Area

3.3.23.2 Character

The central business area contains a mix of major retail, civic, office and administrative functions of the City of Goulburn as well as a number of ecclesiastical, educational (former) and rail related services. The road pattern is based on the original grid pattern set out in the development of Goulburn and assists in providing dramatic vistas and view corridors. The area includes six distinct land use areas which contribute to the existing character including the following:

- Auburn Street commercial area;
- Belmore Park and Civic area;
- Montague Street Offices;
- Southern ecclesiastical group;
- South eastern rail area; and
- North eastern mixed use zone.

The following areas make a lesser contribution to the Goulburn CBD area, including but not limited to, central block car parking, service industries, car sales yards and service stations.

The area's built environment ranges from 1-3 storeys in height and includes a mix of architectural elements from a variety of eras.

3.3.23.3 History

Little of the built fabric of early Goulburn in the 1840-50s remains today. The arrival of the railway in 1867 together with the late 19th Century public and private building boom and contemporary development has had a marked impact.

The timeline below from the CBD report shows the history of development for the Goulburn Centre. There were a number of events that has helped shape how Goulburn developed and appears today.

HISTORIC DEVELOPMENT

The CBD has developed around its original planned city centre incorporating a uniform grid subdivision pattern. The formal axis along Montague Street from Victoria Park through St. Saviours Church to Belmore Park was an important component of the original town plan.

TIMELINE

1817-1820	Exploration by Hume, Throsby, Meehan and Oxley alerted early colonists to good grazing potential of the southern highlands	1880s	Period of significant growth in the City (1881 Auburn Street Post Office opened)
1828	Governor Macquarie marked out the new town of Goulburn as a key service centre of the southern highlands – built at the confluence of the Wollondilly and Mulwaree Rivers	1887	Court House opened
1833	Present city centre laid out on higher land to the south west to avoid repeated flooding	Early 20th C	Moderate expansion with only minor change. Rail as an employment and development focus diminished with growth in road transport
1841-1845	Town population increased from 655 to 1,200	1950s >	Period of decline with many regional headquarters relocating to Sydney or other regional centres.
1868	Construction of railway completed and physical connection of the City Centre with the river severed	1992	Hume Highway by-pass. Loss of highway traffic caused a change in business mix but not significant loss of business. Council began Main Street Improvement Program to capitalise on new opportunities for public domain improvement.

Source: Adapted from figure from Goulburn CBD Plan, Interim report 1, 29 August 2008 Edaw/AECOM

3.3.23.4 Statement of Significance

Defined by the original rectangular grid road system and incorporating the Australia's earliest inland town settlement, Goulburn's Central Business area is highly significant as an outstanding example of historic townscape and cultural continuity since the early 1800s.

Goulburn includes a large number of building types dating from the Victorian and Federation periods reflecting the setting and character of Goulburn as an important administrative regional centre of the time. Despite changes to the historic buildings and loss of some significant aspects, particularly verandahs and balconies supported on timber posts over the footpaths, the area maintains its overall cohesive historic town character. The area's rich and exceptional

historical importance is evident by the large number of heritage items within the centres boundaries.

The area demonstrates a good diversity of building types and styles as development ranged from the Georgian style workers cottages of the early 1850s to the Inter-War commercial buildings and Victorian civic and ecclesiastical buildings. The significant historic character of the central area has been diminished slightly due to the intrusive, yet reversible, introduction of single-storey and uncharacteristic infill buildings within a consistent two to three-storey continuous streetscape and the removal of traditional verandahs and balconies.

The recent introduced elements including service stations, industrial buildings, corporate establishments and block car parking make no reference to the traditional main street character and architectural styles. They have detracted from the cohesive streetscapes and urban setting.

The topography of the land within the CBD (as well as in Goulburn City) is defined by a number of ridges and hills that create distinctive views and vistas in the study area and this allows the whole city to be experienced when approached from the north. Tree lined streets in some areas enhance the historical character of the CBD. (from SHI)

3.3.23.5 Positive Characteristics

There are a number of positive characteristics for the business centre of Goulburn which reflect their contributory nature. These include the following:

- Original grid form of subdivision and street pattern;
- Relatively intact sections of commercial streetscape with 2-3 storey continuous character;
- Commercial architectural features including vertically proportioned above awning façades and decorative parapets;
- Traditional shop front areas;
- Generally intact housing stock;
- Topography is characterised by small hills and ridges that create distinctive view corridors; and
- Well established and defined public domain areas including parks, street trees, footpaths and grass verges.

The central area also includes some uncharacteristic elements that should be avoided. These elements include:

- Uncoordinated and unregulated advertising and signage that is out of proportion and not integrated with the building facade can create unpleasant presentation;
- Unsympathetic infill development that is single storey or oversized with an inconsistent streetscape;
- Buildings painted in corporate colours and signage with no regard to building elements, including those of neighbouring or nearby buildings;
- Contemporary buildings that have not been designed with regard to the historic streetscape;
- Overhead wires and antennas in residential or low scale areas; and
- Large vacant areas for car parking, service stations, car yards or similar.

The majority of buildings and places within this area contribute in some form to the heritage character and appeal of the HCA. Part 8.1 of this Development Control Plan includes a character summary or statement for each street located within the HCA area. These outline important aspects of streets and landscapes that can be respected or avoided.

3.3.23.6 Objectives

- To ensure the HCA supports a local business centre that can balance development with heritage conservation elements and adaptive reuse of existing contributing buildings.
- To maintain, protect and enhance the city's built and natural heritage;
- To provide standards and guidelines to improve the image, attractiveness and function of the centre;
- To promote adaptive reuse of buildings that may otherwise be demolished or left in state of disrepair; and
- To attract new development to the centre through tourism and new business options.

3.3.23.7 Controls for Future Development

This section should be read in conjunction with the more extensive development controls included in Sections 3.1.5 and 3.1.6 of this DCP.

Scale	Generally	Maintain development similar in scale to existing commercial and residential areas.
	Storeys	Maintain consistent main street with 2-3 storeys. Outer residential areas are predominantly single storey uniform

		streetscapes.
	FSR	Commercial core (B3) – 2:1 and Mixed Use (B4) – 1.5:1
Setting / Subdivision	Subdivision	Maintain original grid form subdivision, including lanes and rectangular allotments addressing the streets.
	Setbacks	Maintain consistency in setbacks.
	Landscaping	Maintain parks and open space areas. Streets dominated by street trees.
	Car parking	Limit car parking to rear of developments. Residential car parking should be low impact and not dominate the streetscape.
	Front fencing	In residential areas maintain garden settings with low or no fencing.
	Views	Maintain important views and vistas within and to and from the city centre.
Form / Massing	Roof	Maintain simple roof forms, retain existing chimneys and roof pitches for new development should be at least 27.5 degrees. In commercial areas parapets should dominate roofs.
	Façade	Vertical features above awning facades. Corner features are important. Traditional shop windows, with narrow frontages to match existing / original development.
	Height	Commercial core (B3) – 15m and Mixed Use (B4) – 10m
Design	Residential	Street facing prominent gables, hipped or pitched corrugated iron or tile roofs, timber framed windows, front verandahs, asymmetrical façades, and face brick finished.

3.3.24 Goulburn Residential Heritage Conservation Areas

3.3.24.1 Definition and Location

There are three residential localities that surround the central business area and overlap with it in some cases. These areas are located to the west, south and north of the central business area and provide important support elements. The extent of the HCA is shown in Goulburn Mulwaree LEP 2009 and in Figure 3.21 below.

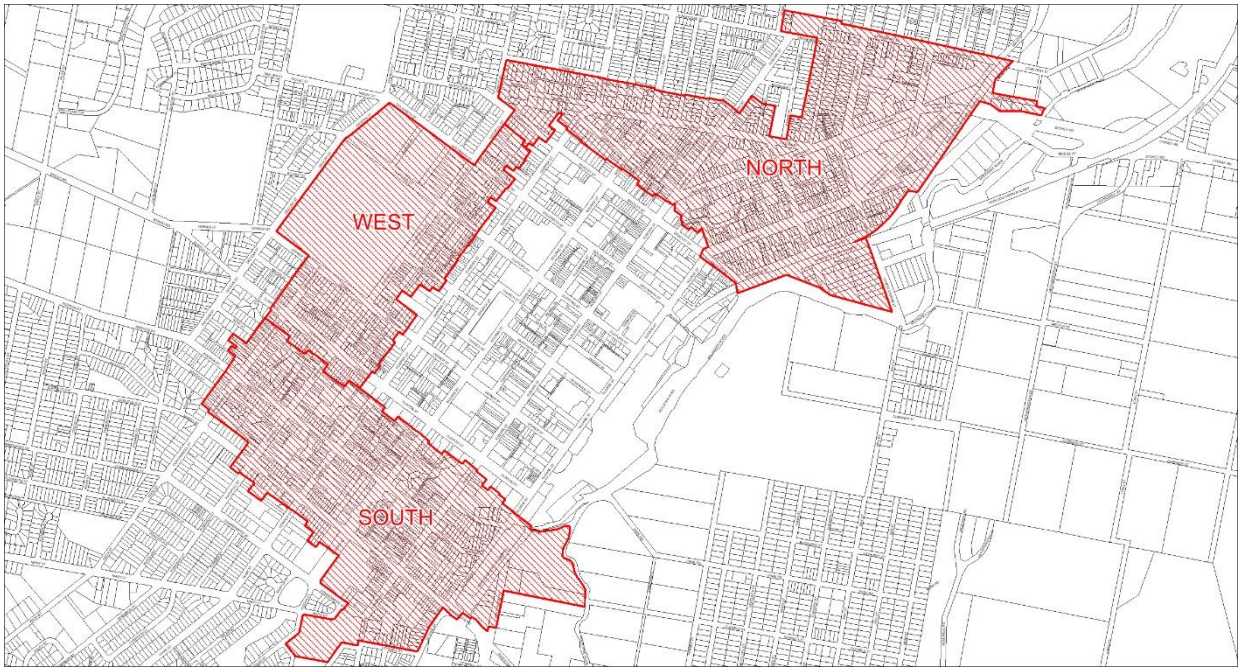


Figure 3.22: Goulburn Housing Heritage Conservation Areas

3.3.24.2 Character

These three areas to the north, south and west of the town centre all include predominantly residential elements interspersed with schools, ecclesiastical elements and small scale retail and commercial development.

The Western area, due to the topography, includes a number of grand homes and landscape areas from both the Victorian and Federation periods. The land rises westwards from the City centre area. A small number of Georgian buildings remain scattered through the area. The streets are tree lined with relatively consistent setbacks.

The Southern area past Clinton Street is also residential in character and includes a mix of dwelling styles from the boom of the 1880s / Victorian to the post World War I growth period. The area includes a largely uniform road grid pattern, with a mix of setbacks from being on the street to setback semi-rural dwellings that are oriented northward rather than to the street dating from the Georgian cottage / farmhouse period. The landscaping in this area is also diverse, with some tree lined streets and some sparse.

The North eastern area includes a mix of residential and commercial development, including the main entrance to the town area, which was part of the Great South Road. This means there are

a number of former two storey inns and other travel type related former buildings including small shops. The character is mainly determined by small scale, simple Georgian and Victorian cottages, terraces and semi-detached. Further north is the original subdivision of Goulburn Township, of which little remains. It continues the mix of land use for this precinct.

3.3.24.3 History

Apart from the original Goulburn Township which is in North Goulburn, the majority of these areas remained relatively undeveloped until the building boom of the 1880s. They then continued to develop through the years, with additions around the turn of the century, post-World War I and following World War II, especially with housing commission in the late 1940s.

3.3.24.4 Statement of Significance

Occupying the outer areas of the original centre of Goulburn, these mainly residential areas developed from the 1880s when the building boom in Goulburn commenced and Goulburn was declared a City.

Like the other parts of Goulburn, these areas include a large number of building types dating from the Victorian and Federation periods reflecting the setting and character of Goulburn as an important regional centre of the time. Although there has been loss and changes to a number of the elements within these areas, the rich and exceptional historical importance of the area is still evident though the extensive numbers of heritage items and contributory buildings.

The areas demonstrate a good diversity of building styles from a variety of periods dating from the Georgian style workers cottages of the early 1850s. The character has been diminished slightly by inappropriate infill development from the 1970s.

The topography of the western area in particular and the wide tree lined streets of the residential area further contribute to the significance of the area.

3.3.24.5 Positive Characteristics

There are a number of positive characteristics for these mixed use areas surrounding the business centre of Goulburn which reflect their contributory nature. These include the following:

- Original grid form of the subdivision and street pattern;
- Relatively intact residential streetscape;
- Street tree plantings that contribute to the streetscape and character of the areas;
- Traditional shop fronts and former inn developments;

- Generally intact housing stock from a variety of eras;
- Topography, particularly in the western and southern areas, is characterised by small hills and ridges that create distinctive view corridors;
- The remaining topography is relatively flat and view corridors are limited and localised;
- Groupings of ecclesiastical based development; and
- Established public domain areas including parks, street trees, footpaths and grass verges.

The north, west and southern areas also include some uncharacteristic elements that do not contribute to the heritage value of the HCA. These elements include:

- Impacts of past road widening for former highway development;
- Inappropriate additions and alterations to early buildings;
- Unsympathetic infill development that is not consistent with the streetscape and uses inappropriate materials, colours and finishes;
- Location of industrial and services;
- Contemporary buildings that have not been designed with regard to the historic streetscape;
- Overhead wires and antennas in residential or low scale areas;
- Removal of street trees and other landscaping within the area;
- Lack of maintenance of historic buildings that have led to disrepair and potential requests for demolition; and
- Breaks in built form such as large vacant areas for car parking, service stations, or car yards are uncharacteristic and can detract from the historic built form of the centre.

The majority of buildings and places within these areas contribute in some form to the heritage character and appeal of the HCA. To ensure the areas maintain the character for which they are known, the controls in Sections 3.1.5 and 3.1.6 should be followed to maintain the landscape and visual appeal.

3.3.24.6 Objectives

- To ensure the HCA permits mixed use development (although the majority of which is residential) that can balance development and conservation sustainably;
- To maintain, protect and enhance the city's built and natural heritage;
- To provide standards and guidelines to improve the image, attractiveness and landscape of the localities;

- To promote adaptive reuse of buildings that may otherwise be demolished or left in state of disrepair;
- To ensure alterations and additions to contributory and heritage properties and infill development are sympathetic to the heritage value and character of the area in which they are located; and
- To ensure the landscape and street trees in the area are protected and maintained by requiring new development to have large gardens and where possible a tree.

3.3.24.7 Controls for Future Development

This section should be read in conjunction with the more extensive development controls included in Sections 3.1.5 and 3.1.6 of this DCP.

Scale	Category	Controls
	Storeys	1-2 storeys in residential area 2-3 storeys in mixed use area
	FSR	Mixed Use (B4) – 1.5:1 Residential area – no statutory FSR
Setting / Subdivision	Subdivision	Maintain traditional subdivision layout and grid street pattern. Limit subdivision in residential areas that detracts from heritage significance of the area and views to and from significant buildings.
	Setbacks	Maintain existing setbacks, especially for any new development.
	Frontage	Maintain consistent frontages for residential lots.
	Landscaping	Maintain tree lined street trees and significant landscaping. Ensure front landscaping is maintained, including settings of historic homes. Infill development should include large garden areas with at least one tree per dwelling to retain the landscape setting.
	Car parking	Car parking should be located at the rear or located where the least impact to the streetscape and heritage significance or the area.
	Front fencing	No or low front fencing in residential areas.
Form / Massing	Roof	Ensure original roof form and materials are maintained. Retain existing chimneys. New development should include simple roofs with similar

		pitches to existing, especially in residential areas – over 27.5 degrees.
	Façade	Maintain and restore existing facades, especially in mixed use areas.
	Height	Residential (R1) areas – 8m and Mixed Use (B4) areas – 10m. Overall heights in the residential and mixed use areas should be respected for existing and new development.
Design	Residential	Street facing prominent gables, hipped or pitched corrugated iron or tile roofs, timber framed windows, front verandahs, asymmetrical façades, and face brick finished. Attic rooms can be considered to the rear of items or within new buildings where not visible or obtrusive from the front façade or streetscape.

3.3.25 South East Goulburn Heritage Conservation Area

3.3.25.1 Definition and Location

The South East Goulburn Heritage Conservation Area (HCA) was previously called the Lansdowne Estate conservation area. The Lansdowne Estate is a precinct located as the name suggests to the south east of Goulburn and is located on either side of the Mulwaree River, which is crossed by the Lansdowne Bridge. The extent of the HCA is shown in Goulburn Mulwaree LEP 2009 and in Figure 3.22 below and includes the Lansdowne Homestead, Lansdowne brewery and associated buildings and landscape.

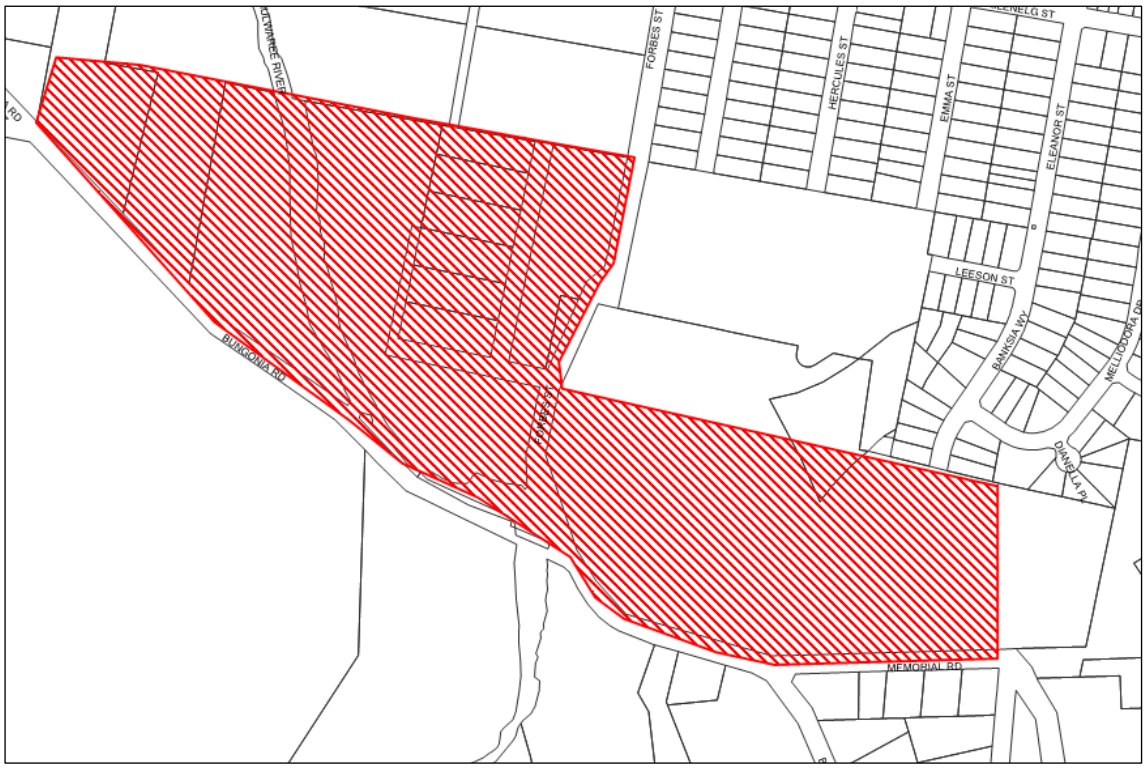


Figure 3.23: South East Goulburn Heritage Conservation Area

3.3.25.2 Character

The Lansdowne precinct in South East Goulburn is characterised by a mainly rural landscape along the river flats of the Mulwaree River. It includes rural homesteads and the oldest industrial complex in the Goulburn Region. The industrial character of the brewery group is the predominant physical element of this HCA followed by the original Lansdowne homestead.

3.3.25.3 History

Jonas Bradley was a pioneer in the cultivation of tobacco and he went on to become the first to plant and harvest tobacco as a crop in the Goulburn district and more specifically Lansdowne. In 1836, 1.5 tons of tobacco was harvested from Lansdowne.

William Bradley also opened a brewery complex at the base of the hill below Lansdowne (homestead) in 1836 and between 1836 and 1840 a steam powered mill was added. This was one of the first steam powered industries in the colony. The mill, when completed in 1838, processed about 100,000 bushels of wheat per annum.

After Bradley's death in 1868 the complex was sold to Messrs Walford, Sparks & Emanuel who continued the milling but ceased the brewery operation. Emanuel was also the purchaser of Lansdowne at this time. The new owners sold on to Messrs Bartlett and Oddy who operated only the brewery.

Jonas' scientific approach to agriculture was shared by William - inspired by his father's interest in and knowledge of tobacco, he is reputed to have developed a nicotine based treatment for scab in sheep that led to the eradication of scab from NSW flocks. Bradley's work on scab and catarrh for the sheep industry is ranked equal in importance to that of Farrar's for rust in the wheat industry. Bradley also introduced the first Southdown (coarse haired) sheep to NSW in the Monaro. (SHI)

3.3.25.4 Statement of Significance

Lansdowne homestead, brewery and surrounding precinct is of outstanding heritage significance. It has been associated with the development of Goulburn since the earliest days of exploration in the area and was one of the first properties settled in the area south of the Cumberland basin. It provides physical evidence of its establishment and occupation by one of the most powerful men in the colony who played an important role in shaping the development of NSW.

The homestead is a rare example of an early timber colonial homestead with its 'U' plan, high-pitched roof and encircling verandah. The fabric provides rare physical evidence of early timber building techniques used in the colony.

Lansdowne has retained extensive evidence of its early period of development along with evidence of most of the outbuildings which once supported the house. It provides evidence of early colonial life, including all facets of human activity. The homestead forms part of an intact

group of buildings which have the potential to provide a complete vignette of 19th century rural life and activity.

The property exhibits strong associations with the Aboriginal population as it was used as both a meeting place and burial ground. It was also a place of primary contact between Aboriginal and European peoples.

Lansdowne's location on a spur overlooking the flood plain has enabled a strong relationship to develop between the city and the rural hinterland. The property has largely retained its rural curtilage and yet continues to define the boundary between the town and rural land as Bradley's properties have done for over 180 years (to 2017).

The property provides physical evidence of the close association with one of the earliest industrial enterprises in Goulburn. The Goulburn Brewery and Mill is a rare surviving example of a vernacular 19th century industrial complex. In terms of its longevity, complexity and intactness the place is of high heritage significance. It is a well-designed, integrated industrial complex that has been put to different uses in response to shifts in the economy. Its changes in function illustrate the fluctuating fortunes of the flour milling and brewing industries in country NSW in general and the Southern Tablelands and Goulburn in particular.

It is a rare example of a pastoral, industrial and political empire, providing information of the development and concomitant development of the colony. It demonstrates the characteristics associated with important pioneering family homesteads.

The site has the potential to provide valuable archaeological information about both Aboriginal and European periods of occupation (SHI)

3.3.25.5 Positive Characteristics

There are a number of positive characteristics for the South East Goulburn HCA which reflects their contributory nature to the precinct. These include the following:

- Important ecological areas along the Mulwaree River;
- Rural homestead group;
- Significant industrial complex relating to brewing, flour mill and tobacco growing; and
- Supporting rural buildings and facilities related to farming and cultivation.

The landscape and buildings of the Lansdowne precinct contribute to the HCA and create a standout complex significant at a State level, not only for design but relationship to important architects and farming families.

3.3.25.6 Objectives

The objectives of the HCA for South East Goulburn include:

- Ensure the HCA controls and guidelines encourage sustainable conservation and development;
- Maintain, protect and enhance the HCAs built and natural heritage;
- Provide standards and guidelines to ensure the significance of the Lansdowne precinct is protected; and
- Promote adaptive reuse of rural and industrial buildings to ensure they do not fall into a state of disrepair.

3.3.25.7 Controls for Future Development

This section should be read in conjunction with the more extensive development controls included in Sections 3.1.5 and 3.1.6 of this DCP.

Scale	Category	Control
	Storeys	Two storey limit for new development.
	FSR	No FSR identified in LEP.
Setting / Subdivision	Subdivision	Rural nature of the area should be retained if any subdivision is proposed.
	Landscaping	Landscaping should retain the rural nature of the locality. Landscaping around buildings should reflect the nature of the building and any historic information about garden elements.
	Car parking	Garages should reflect the rural nature of the area and low scale sheds out of important view lines or vistas. Extensive parking areas should remain open air with informal base.
	Fencing	Fencing should reflect the rural nature of the area and be open in appearance.

Form / Massing	Height	Height limit 8m
Adaptive Re-use	Options	**Adaptive reuse of this area should be considered to ensure buildings do not fall into state of disrepair.** **Options to consider could include light industrial, tourism, events,** accommodation or the like.

3.3.26 Kenmore Heritage Conservation Area

3.3.26.1 Definition and Location

The Kenmore Goulburn Heritage Conservation Area (HCA) is a precinct based around the Kenmore Asylum and Psychiatric Hospital. The extent of the HCA is shown in Goulburn Mulwaree LEP 2009 and in Figure 3.23 below and includes:

- The former buildings associated with the hospital including administration, maintenance, service areas, storage, staff amenities, and wards;
- Orphanage;
- Recreation areas and buildings;
- Cemetery and chapel;
- Farm buildings, including stables; and
- Cottages.

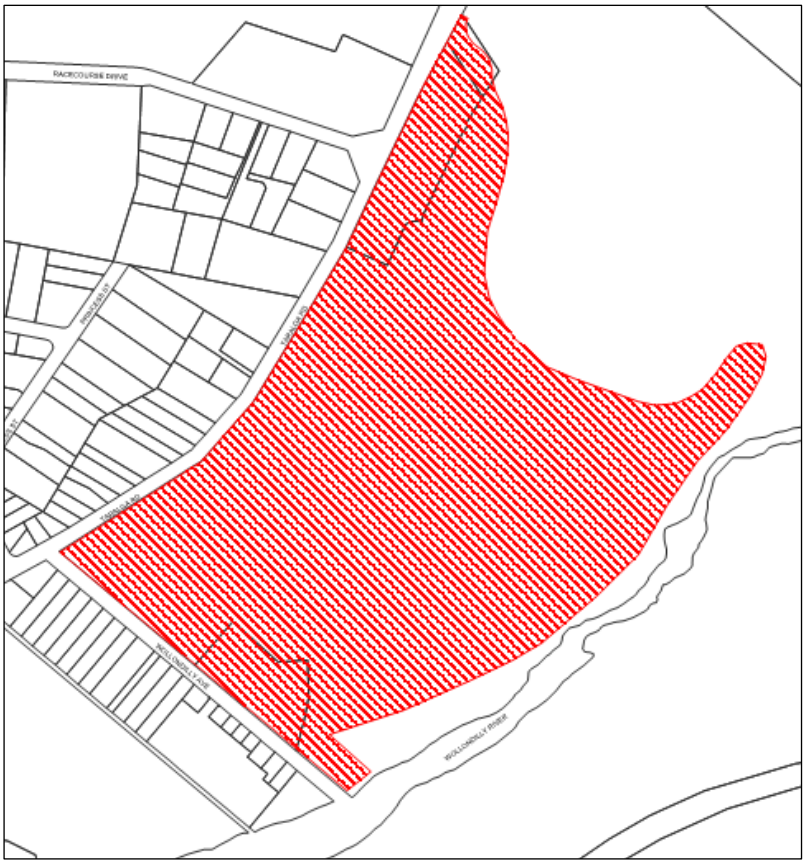


Figure 3.24: Kenmore Heritage Conservation Area

3.3.26.2 Character

The Kenmore HCA has the character of an institutional complex that includes a complex series of buildings and landscape elements. There is a variety of buildings from a mix of historic periods that together form an important precinct of the oldest psychological facility in Australia.

3.3.26.3 History

The Kenmore estate was originally owned by William Lithgow and Andrew Allen. Their grants of land can be traced back to the mid-1820s, the time of Goulburn's first European settlement. The village of Kenmore developed from a number of land sales from the late 1870s. Dr. Frederick Norton Manning, a prominent early Australian psychiatrist and Inspector-General of the Insane, fought to establish a psychiatric hospital in the serene estate of Kenmore. In 1895 it was opened as the Kenmore Lunatic Asylum; its architect was Government Architect Walter Liberty Vernon. The acquisition of Kenmore was the first major achievement of Mannings in his role as Inspector General of the Insane.

Throughout much of the 19th and 20th centuries, both this facility along with Morisset on the Central Coast once accommodated up to 1500 and 1400 mental health patients respectively. Kenmore was also used as a repatriation hospital following both World Wars. Kenmore patient records are available from State Records NSW (SHI).

THE BUILDING OF THE HOSPITAL 1894-1900 – The first contracts for the construction work were let in 1894, the major one going to the Sydney builder, John Baldwin, for an amount of 12,760-6-5 pounds. A second contract for about 923-9-0 pounds was awarded to the local Goulburn builder, JC O'Brien. Baldwin's contract involved the erection of a number of permanent buildings in brick, as well as some temporary wooden structures.

Although the first patients would be chosen for their quiet and industrious natures, it was necessary to provide separate accommodation for any patients who became violent or uncontrollable. O'Brien's contract called for the erection, at a cost of 423-9-0 pounds, of a small brick 'special ward' (site of the dental clinic) where such patients could be kept under lock and key.

In March 1941, the NSW government offered the hospital to the army as the site for a military hospital, an offer the army promptly accepted. Over the next twelve months, Kenmore's patients were moved to various mental institutions in Sydney, in preparation for the army's occupation of the site.

The army moved out at the end of January 1946, the Department of Health resuming control of Kenmore a week later.

REVERSION AND REDIRECTION 1946-93 – With the army's departure, patients were gradually moved back in to Kenmore, ward by ward, from other mental institutions in the state. It was not long before the accommodation situation at the hospital took on a familiar pre-war appearance. By 1949, Kenmore was once again overcrowded.

The hospital was modernised in the 1960s and 70s with an orientation towards rehabilitation. By 1974 the capacity of the hospital was 700 and continued to reduce further in the 1980s as the emphasis was on removing patients from the hospital environment. It closed in early 2000s and was sold in 2003 and later in 2010. Plans for its redevelopment are being considered.

3.3.26.4 Statement of Significance

The Kenmore Psychiatric Hospital site is of State significance: as the first purpose-built, whole complex for mental health care in rural NSW; as the largest example of the work of W.L. Vernon

(the first Government Architect); and for having been used and maintained by the one agency for the original purpose continuously (except for the brief Defence period during WWII).

The Kenmore Psychiatric Hospital complex is a representation, in physical form, of the changing ideas and policies concerning the treatment of the mentally ill and handicapped people, in the State, spanning over one hundred years.

Within the Hospital precinct, and within the actual layout and design of the precinct buildings and landscape, these changing ideals are 'laid out' one upon another like successive occupation layers of an archaeological site. The Hospital fabric also clearly evidences the Military occupancy of the site.

The original 1890s Vernon complex of buildings still evidence the features that made Kenmore Psychiatric Hospital one of the most modern psychiatric institution of its day. Many of the buildings which followed the Vernon structures have significant historical associations in their own right and in their functional relationships with the original Vernon buildings.

The early buildings of Kenmore, particularly the 'core' Vernon buildings, represent perhaps the finest 'corporate' architectural expression of the Edwardian (later Federation) Free style in Australia.

The institution of Kenmore has important links with the community of the locality and region. These links were particularly strong in the early 20th century, when Kenmore was a focal point for regional sporting and cultural activities.

The institution of Kenmore has played a pivotal role in the evolution and development of treatment for the mentally ill and handicapped in the State of NSW.

The farm complex of Kenmore is culturally significant as a physically intact precinct created as an integral part of rehabilitation treatment for the patients of Kenmore. The sporting related functions, particularly the cricket pavilion, are significant as exemplars of the close connection of Kenmore to its community, and the use of sport as an integral part of rehabilitation treatment.

The cemetery complex, and its landscape, is a significant element of the life / death cycle of the Kenmore Psychiatric Hospital. It is one of the few 'pauper' cemeteries in the state.

The institutionalisation of psychiatric patients is a function now less practised. A large psychiatric institution, such as Kenmore, although not unique, demonstrates a way of life and a

treatment ethic now no longer practised. The layout and design of the core buildings clearly evidence the institutional beliefs and treatments of psychiatric patients in the late 19th century.

The Kenmore Psychiatric Hospital, although not unique as a remnant late 19th century psychiatric hospital, is by its intactness and architectural excellence an exemplar of the structure and philosophy and physical basis of the institution. The hospital also has specific association with those Inspectors General who ran it. (SHI).

3.3.26.5 Positive Characteristics

There are a number of positive characteristics for the Kenmore HCA which reflects the contributory nature of the buildings and landscape to the precinct. These include the following:

- Important ecological areas along the Wollondilly River;
- Early government architecture designed buildings;
- References to changes to psychiatric treatments over more than 100 years;
- Farm complex;
- Sporting and recreational complex;
- Series of dwellings;
- Cemetery complex;
- Tree and vegetation plantings creating important landscape elements; and
- Relationship to nearby developments and the community of Goulburn

The landscape and buildings of the Kenmore precinct are the major part of the HCA and create a standout complex significant at a State level, not only for design but relationship to important architects and medical treatment and facilities of the past 100 plus years.

3.3.26.6 Objectives

- To ensure the HCA controls and guidelines encourage sustainable conservation and development;
- To maintain, protect and enhance the HCAs built and natural heritage;
- To provide standards and guidelines to ensure the significance of the Kenmore precinct is protected;
- To ensure the site is interpreted through appropriate signage and information; and
- To promote adaptive reuse of buildings to ensure they do not fall into a worse state of disrepair.

3.3.26.7 Controls for Future Development

This section should be read in conjunction with the more extensive development controls included in Sections 3.1.5 and 3.1.6 of this DCP.

Scale	Category	Control
	Storeys	1-2 storeys for new development to limit impact on existing development on the site.
	FSR	No FSR is applicable to the site.
Setting / Subdivision	Subdivision	Any subdivision proposed for the site should respect the historical buildings and their relationship to each other and impacts of such subdivision such as fencing. Strata subdivision would be more appropriate for this site.
	Landscaping	Significant landscaping on the site should be retained. Ecological areas along Wollondilly River should be maintained and restored.
	Fencing	Fencing should be limited and only used where needed and should be open and rural in nature. Views to and from items of significance should be maintained.
Form / Massing	Roof	Roof pitch and materials should be maintained.
	Height	Height limit 8m
Design	Building	New development should respect the existing and historic buildings on the site, in terms of scale, bulk, design and materials.
	Use	Adaptive reuse of the site and buildings is encouraged to ensure that they are maintained and their history can be established through interpretation.

3.3.27 Goulburn Waterworks Heritage Conservation Area

3.3.27.1 Definition and Location

The Goulburn Waterworks Heritage Conservation Area (HCA) is a precinct located to the north west of Goulburn on the banks of the Wollondilly River at the Marsden Weir. The extent of the HCA is shown in Goulburn Mulwaree LEP 2009 and in Figure 3.24 below and includes the only complete, functioning Beam engine powered municipal water supply left in its original location, in the Southern Hemisphere.

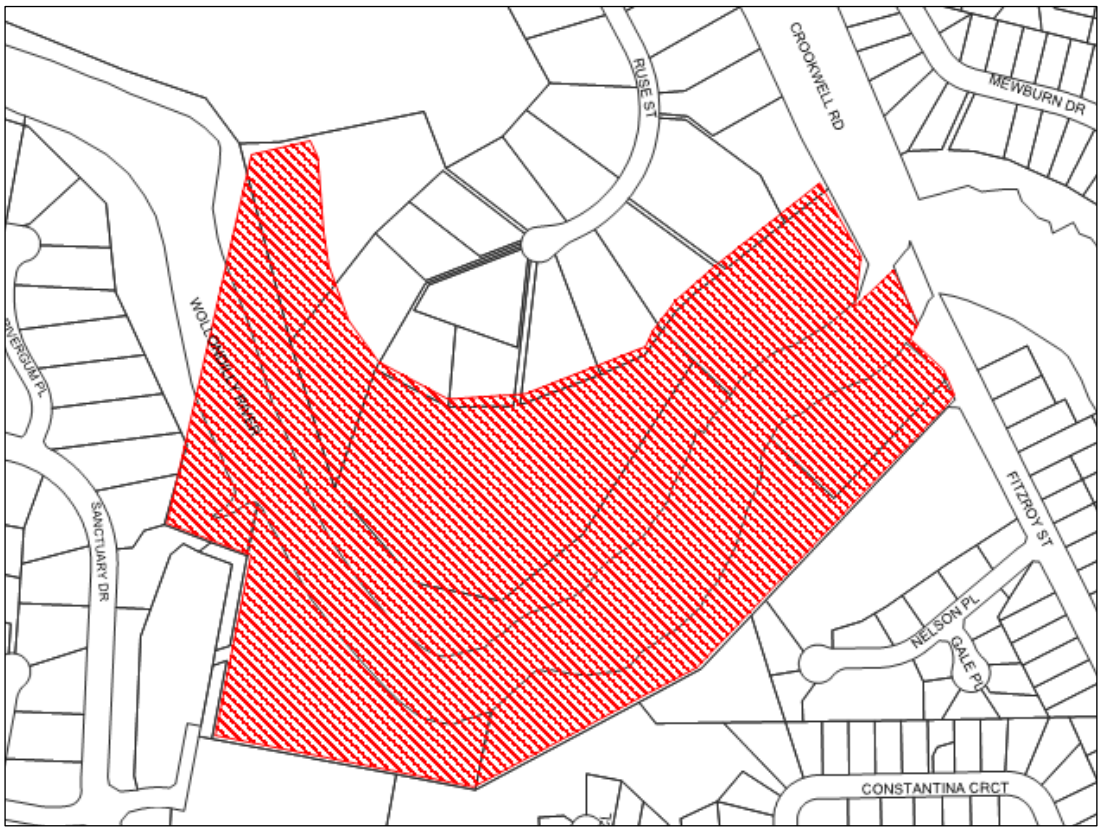


Figure 3.25: Goulburn Waterworks Heritage Conservation Area

3.3.27.2 Character

The Goulburn Waterworks HCA has an industrial character made up of steam engines and water supply systems. There is a mixture of built and landscape elements set on the banks of the Wollondilly River. The waterworks is now the site of the Historic Waterworks Museum, which is managed by volunteers with assistance from Goulburn Mulwaree Council.

3.3.27.3 History

Built in 1887 and set on the banks of the picturesque Wollondilly River at Marsden Weir, Goulburn, the steam operated pumping facility provided Goulburn's first reticulated water supply. The pumphouse still contains the original Appleby Bros. Beam Engine pump and Lancashire Boilers.

The original Goulburn Waterworks became operation in January 1886, providing a reticulated water supply to the growing City of Goulburn. The pumphouse was powered by timber / wood piles which fired the boilers 24 hours a day, seven days a week. Before 1886 the residents of Goulburn would have collected water in tanks or wells or purchased supplies from a carter. The demand of the growing city resulted in the Rivers and Harbours Board installing a waterworks on the Wollondilly River powered by a steam operated Beam engine. Water was pumped from the river to a filtration plant and reservoir, then gravity fed to residents of the city.

The original 1883 Appleby Bros. steam engine situated inside the pumphouse was one of four installed in Pumphouses around NSW. The others were at Wagga Wagga, Albury (both scrapped in 1936) and Bathurst. The steam engine is known as a beam engine because of the large overhead rocking beam that transmits motion from the pistons to the cranks.

This great beam engine was one of the types first invented by Thomas Newcomen in 1712 and is an example of the powerhouse that drove the Industrial Revolution. Originally designed for pumping water out of mines in the UK it was improved by Watt, Smeaton, Maudsley and other engineers of the steam age until it became a very efficient and reliable engine.

The Goulburn Waterworks Beam engine is of medium size and produces 120 horse power. It has compound cylinders and a jet condenser. The fly wheel is 5 metres in diameter and at 18 r.p.m. the pumps delivered 660,000 litres of water per hour. The two boilers that produce the steam that powers the engine, are located in the western wing of the building. Fired by wood or coal, they produce high temperature steam that is piped through to the beam engine in the central part of the building. Only one boiler would have been operational at any one time. The other being shut down for regular cleaning and maintenance.

Steam from the boilers enters the valve chest on the cylinders from where it is transmitted to the cylinders by means of a valve mechanism. The action of the steam on the pistons causes them to reciprocate. Rods connect the pistons to the beam at one end, and to the crank at the other. This converts the 'rocking' motion to rotary motion which makes the flywheel turn, giving a smooth and continuous action.

By 1918 the beam engine had become obsolete when electric motors were installed. It was idle for many years and was restored in 1958.

The Pumphouse – The east wing of the building houses a horizontal steam engine, the Hick Hargreave and the early dynamo room with its electric pump. The Waterworks is notable not just for its historic steam engine, but for the elegant Victorian building that houses the beam engine and boilers. Only metres away further up the hill stands the original fireman's cottage, also of Victorian design.

From 1968 the Goulburn Waterworks operated as a museum of engines. It was during this period that a grant was made available under the Regional Employment Development Scheme (1975) which saw some of this funding used for the installation of the Hick Hargreaves engine now on display and operational on steaming days, in the annexe of the pumphouse.

The single cylinder horizontal engine measures 9 metres in length, weighs 17 tons with the flywheel being 4 metres in diameter. It was originally used to power equipment in a Sydney tannery, becoming discarded in 1961. It was reported that it had been acquired to represent the nest stage of steam engine development after the beam type engine (SHI).

3.3.27.4 Statement of Significance

The former Goulburn Water Works now referred to as the 'Goulburn Waterworks Museum' is listed on the NSW State Heritage Register. It is highly significant for its association with the original water supply to the town of Goulburn. Built in 1885, the steam operated pumping facility provided Goulburn's first reticulated water supply. The pump house contains the original Appleby Bros. Beam engine pump and Lancashire Boilers. This unique facility is the only complete, workable beam engine powered municipal water supply in its original location, in the Southern Hemisphere. The buildings and engine are of national significance and are listed on the NSW State Heritage Register.

3.3.27.5 Positive Characteristics

There are a number of positive characteristics for the Goulburn Waterworks HCA which reflects the contributory nature of the buildings and landscape to the precinct. These include the following:

- Important ecological areas along the Wollondilly River;
- Landscape elements for recreational areas along the river;

- Historic buildings that house the pumps, including the pumphouse; and
- The historic steam engines which are the basis of the historic linkages.

The landscape and the design and architecture of the buildings within the Waterworks precinct are the major part of the HCA and create a standout complex significant at a State level, not only for design but relationship to important steam engines and the progress of the industrial revolution in regional Australia.

3.3.27.6 Objectives

- To ensure the HCA controls and guidelines encourage sustainable conservation and development;
- To maintain, protect and enhance the HCAs built and natural heritage;
- To provide standards and guidelines to ensure the significance of the waterworks precinct is protected; and

To ensure the site is interpreted through appropriate signage and information.

3.3.27.7 Controls for Future Development

There are no specific development controls for this area. Refer to those controls and guidelines within the Goulburn Mulwaree LEP 2009 and Sections 3.1.5 and 3.1.6 of this DCP.

3.4 Bungonia Heritage Conservation Area

3.4.1.1 Definition and Location

The Bungonia Heritage Conservation Area (HCA) has been included in the Goulburn Mulwaree LEP and DCP to reflect the archaeological significance of the town of Bungonia which is located 28kms south east of Goulburn. The extent of the HCA is shown in Goulburn Mulwaree LEP 2009 and in Figure 3.25 below.



Figure 3.26: Bungonia Heritage Conservation Area

3.4.1.2 Character

Bungonia retains its village characteristics and remains a small town, with a historical built form. The Village has a wide ranging contextual heritage and is significant for its place in pastoral expansion and development in south-eastern New South Wales from 1820.

The landscape elements of the town with the undulating topography show the importance of spiritual elements, being the churches located on the high points. Significant trees and ecological elements also form a significant part of the landscape.

3.4.1.3 History

Bungonia was established following the development of the New South Road through to Braidwood and Bungendore in about 1830, formally surveyed in December 1831. It thrived as a major centre on the road, providing water from Bungonia Creek and other services for those travelling along the road including inns, wheelwrights, and blacksmiths. Unfortunately, the growth of Bungonia stopped when the traffic began favouring the route through Goulburn south.

The town remained as a centre for the surrounding pastoralists and includes, on top of the travelling-based services, police, school, courthouse and churches. In the 1930s the Bungonia Caves were officially reserved and became a destination for recreation and holidays. Although the caves are not part of the HCA, they are important in the development of the town.

Today most of Bungonia has been lost, apart from a few key buildings and the existing lot / title layout. It has significant archaeological importance which has been recently researched.

Bungonia's historical built form includes St Michael's Catholic Church, which was built over a period of nearly eight years officially opening in 1847, making it one of the oldest operating Catholic Churches in Australia.

3.4.1.4 Statement of Significance

The town of Bungonia superseded Inverary and predated Goulburn as the administrative centre of the southern inland colony. The former Town of Bungonia provides physical evidence of the early historical development of inland southern NSW in the 1820s through to the 1840s. The development of Bungonia indicates its aspirations to be a major centre on the Great South Road and demonstrates the demise of the town when that did not eventuate due to the Great South Road being developed on the Goulburn Plains. The pre-1850s buildings and ruins in Bungonia are evidence of the role the village played in hosting travellers and administering a pastoral community. The place has associations with administration of justice and convict road gangs and stockades.

Bungonia has an historical association with the use of indentured labour. Many of the original buildings and archaeological sites provide physical evidence of the convict history of Bungonia between 1822 and 1841. The village has high archaeological potential relating to the early colonial period when the town serviced travellers due to its location on the eastern branch of the Great South Road and for its role as an administration centre for the surrounding district.

The remnants of the town of Bungonia is rare as an early inland Colonial town established south of the Sydney penal settlement that has retained most of its setting and original buildings in their original context. It has aesthetic value due to its location on a rise at a bend in Bungonia Creek and the historic character of the buildings within the Village, in particular the Catholic and Anglican churches and other stone buildings and structures within the Village.

3.4.1.5 Positive Characteristics

There are a number of positive characteristics for the township of Bungonia which reflect their contributory nature. These include the following:

- Important ecological areas;
- Archaeological remains of former buildings and sites;

- Small number of historic buildings in a variety of conditions and their relationship to each other;
- Sandstone construction of several the remaining buildings including two churches; and
- Proximity to the water supply of Bungonia Creek.

There are a number of buildings and places that contribute to the character of the precinct. They include:

- Small number of historic dwellings of different styles and ages;
- St Michaels Catholic Church, oldest standing Catholic church in mainland Australia and Gothic style Christ Church, Anglican Church, both set in rural landscape settings;
- Georgian style former Hope Inn served travellers through Bungonia;
- Bungonia Police Station associated with law enforcement in the village and rural areas;
- Former primary school, provided education to the local community;
- Bungonia Hall is a social focal point for the community;
- War Memorial provides memory of those killed in wars and conflict; and
- Archaeological remains of several other buildings including former inns and the like that show the history of the village and its importance in the growth of the area.

The landscape of the area including a number of important stands of trees and vegetation contribute to the rural landscape and backdrop of the town. The village appears to be delineated / surrounded by these vegetated area, of note include those to the north and south around the Catholic and Anglican Churches, to the west along Bungonia Creek and to the east along Inverary and The Lookdown Roads. This environmental based landscape is important to maintain the setting of the township.

3.4.1.6 Objectives

- To ensure the HCA permits development that can balance development and conservation sustainably;
- To maintain, protect and enhance the existing visual, built and environmental heritage and landscape character;
- To provide guidance for new development in the HCA that respects archaeological evidence; and
- To ensure new development complements the unique and positive characteristics of the town and rural lifestyle using materials, colours and finishes that complement the existing built form.

3.4.1.7 Development Controls

This section should be read in conjunction with the more extensive development controls included in Sections 3.1.5 and 3.1.6 of this DCP.

Scale	Category	Control
	Storeys	1-2 storeys.
	FSR	No FSR is applicable for the area.
Setting / Subdivision	Subdivision	Subdivision within the area reflects the grid pattern of the village. No additional subdivision should be proposed that detracts from this pattern. Disposal of effluent should be a major consideration.
	Setbacks	Reflective of existing development within the village.
	Landscaping	Informal and significant landscaping should be retained. Any ecological stands of vegetation should be retained especially along Bungonia Creek. If replacement vegetation or new landscaping are required, they should be native species indigenous to the area.
	Car parking	Mainly located at the rear of housing and should be separate and semi-rural in nature.
	Front fencing	Low scale or rural type fencing.
Form / Massing	Roof	Relatively simple hip or gable roofs, retain chimneys. Use of roof pitch of 27.5 degrees or more.
	Height	Village (RU5) – 8m
Design	Building	New development should respect the existing and historic buildings in the village, in terms of scale, bulk, design, materials, finishes, and colours.
	Materials	Traditional materials should be used on new buildings or extensions to existing ones that relate to the village feel, including timber and iron.

Note: Please also refer to Section 3.3.3 relating to non-indigenous archaeology.

3.4.2 Rural Villages

The Goulburn-Mulwaree local government area comprises the historical landscape of the city of Goulburn and the villages of Bungonia, Tallong, Tarago, Lake Bathurst and Marulan. These villages are evident in the subtle landscape transition from urban to rural areas.

Traditional conservation principles focus on historical building fabric and heritage landscape context. In addition, social significance should be considered equally with scientific, historical and aesthetic significance in heritage assessments, and statements of heritage impact. Significant social benefits flow to smaller communities from participation in the management of their cultural heritage.

These principles refer to:

- The conservation of places, objects, features and landscapes of cultural value
- The conservation of natural values
- Provision for sustainable visitor use and enjoyment that is compatible with the conservation of the village's natural and cultural heritage values
- Provision for the sustainable use, including adaptive reuse, of any buildings or structures or modified natural areas, having regard to the conservation of the historical landscape context
- Promote public appreciation and understanding of the villages' natural and cultural values.

The objectives of such conservation are:

- To protect the village curtilage, landscape setting, and its visual prominence
- To encourage an 'active' village, built upon the surviving fabric and cultural landscapes that reflect its heritage
- To promote landscape themes that provide identities for the individual villages, yet maintain a coherent whole and link them together with Goulburn as a city centre
- To promote an architecture and built-form that is civic, yet relates to the culture, identity and character of the village
- To ensure a visual landscape that retains a natural, uncluttered ambiance, free from visually intrusive hard elements, surfaces and structures
- To preserve and enhance native bushland and significant flora and fauna habitats.

These principles and objectives should be considered when preparing development applications for villages with Goulburn Mulwaree local government area.

3.5 Landscaping

Objective

Provide well-designed, constructed and maintained landscapes that are an asset to the community. Well-designed landscapes contribute to the attractiveness of outdoor spaces, to the protection of the natural environment and to the health and well being of the community.

Promote good landscape design. Good design is critical in producing environmentally sustainable landscapes.

Provide attractive landscapes that are consistent with the visual character of the landscapes within the Goulburn Mulwaree local government area.

Provide for public safety by allowing for passive surveillance and other management techniques.

Provide open space for recreation within residential developments.

Provide for privacy, summer shade and winter solar access.

Promote the use of local native plant species to provide habitat for native fauna, to minimise water usage, to decrease the need for insecticide and pesticide for exotic plant species and to achieve biodiversity objectives.

Ensure that landscaping is an integral part of the site planning process and that it suits the proposed development.

Ensure that the positive landscape values of the site are not compromised.

3.5.1 Landscape plan design requirements

Development proposals over $250,000 value are to be accompanied by landscape plans prepared by a qualified landscape architect, designer or other suitable qualified person.

Base the design on a thorough analysis of the site and surrounding areas attributes and context. Take advantage of opportunities and heed constraints (refer to **Appendix G**).

Landscape design and vegetation should be considered as a component of the site planning process and reflect the scale of development and context it is in. It should complement the surrounding streetscape and landscape.

Landscape design should be sensitive to site attributes such as existing landscape features, existing vegetation both native and exotic, streetscape character, land capability, micro-climate, views and vistas.

Allow for views to and from the site by not creating visual blockages, especially the views of important buildings.

Evergreen plant species should be used where screening of views is required.

Provided dedicated pedestrian access to all developments, design to avoid conflict with motor vehicles.

Assess the significance and health of the existing vegetation on the site prior to design; retain as much of the significant vegetation as possible. Protect existing native vegetation and fauna habitat. Provide protection for vegetation to be retained during the construction phase.

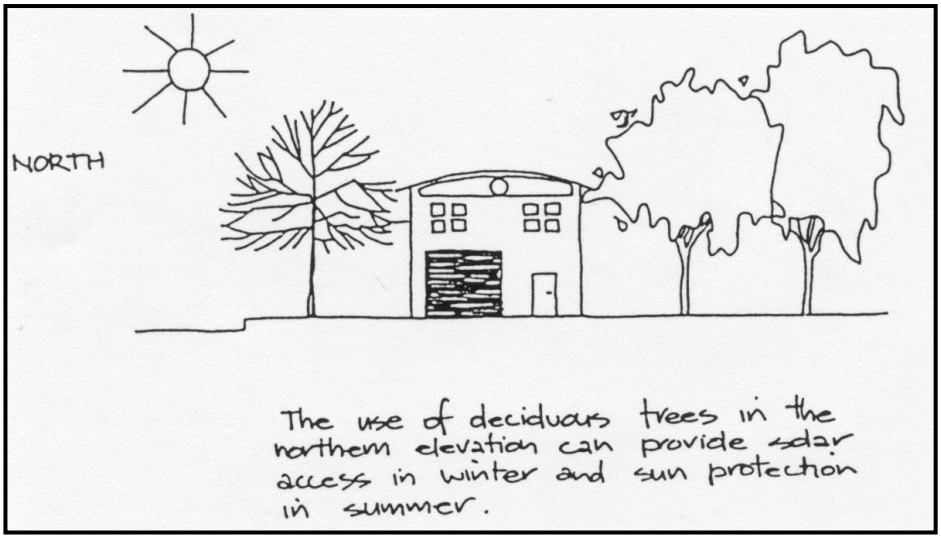
Landscape works shall maintain existing heritage significant plantings that contribute to the heritage significance of listed items and heritage conservation areas.

Note: vegetation in Heritage Conservation Areas and in listed heritage items requires Council approval prior to removal or significant modification.

Select plant material that reflects the character of the area. (**Part 2** of this Plan looks at character in detail).

Design vegetation to provide privacy and allow for summer shade and winter solar access (refer to **Figure 3-3**).

Figure 3-1: Use of vegetation for solar access



Outside Heritage Conservation Areas the use of local native plant species is preferred (refer to **Appendix B** for a list of preferred planting species suitable for varying conditions and locations within the Goulburn Mulwaree local government area). Choose plants that will not spread and become weeds in natural bushland but act as a buffer area.

Proposed landscaping is to include species that will grow to a height consistent with the height and scale of the building and the neighbouring buildings (refer to **Figure 3-4**).

Shrub and ground cover plants are to be planted at spacings so that when mature they form a continuous cover of the ground.

Figure 3-2: Example of landscaping complementing building scale



Minimise use of water by using drought tolerant plant species and reducing areas of lawn.

Use irrigation systems and practices that minimise the use of water. Utilise water collected in rainwater tanks for irrigation of plant material.

Use surface mulch to conserve moisture in the ground, inhibit weed growth and lessen the need for herbicide use (minimum thickness of mulch 75mm).

Provide site lighting.

Select environmentally friendly construction materials.

Do not remove or import bush rock as it provides habitat for native fauna. Enhance fauna habitats e.g. by providing rockeries, ponds for frogs and habitat plants (nectar for small birds).

Locate above and below ground services away from significant vegetation that is to be retained and protected. Maximise the use of common trenching for compatible underground services to reduce repeated disturbance of established plantings, now and into the future.

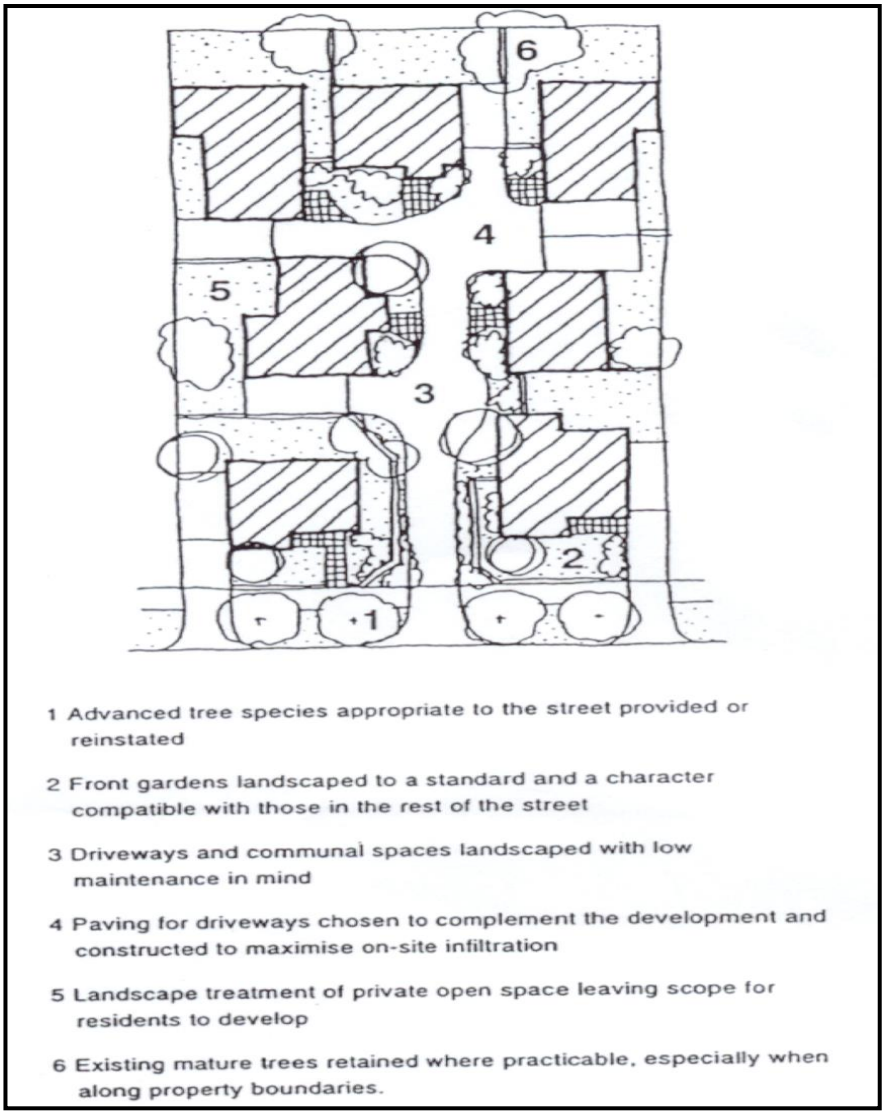
Provide waste and recyclables storage facilities that are not adjacent to communal outdoor/recreation areas. The storage area is to be suitably screened.

3.5.2 Residential development

Developments of two or more dwellings require a landscape plan (refer to **Figure 3-5**).

(Refer to **chapter 4** of this Plan for further development controls)

Figure 3-3: Example of a landscaping plan



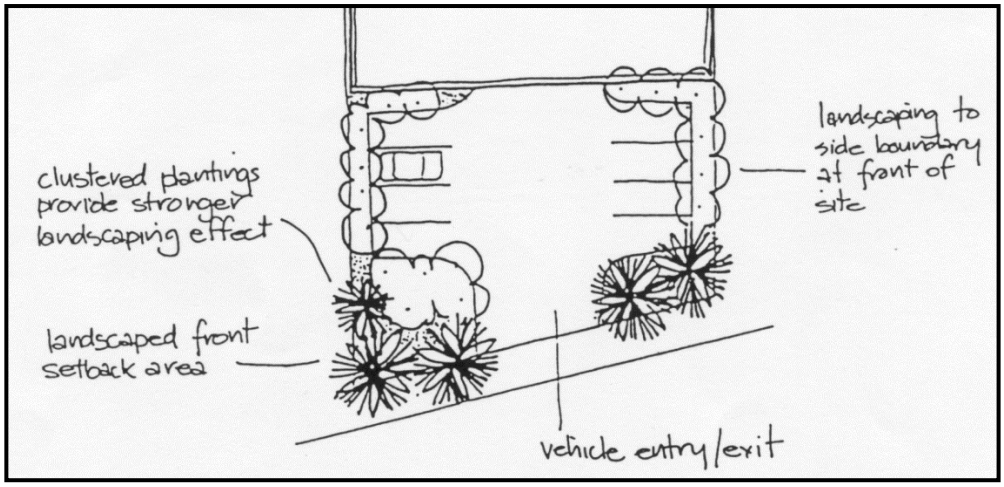
Provide communal open space area/s in residential developments containing five or more dwellings, the open space area is to be suitably landscaped.

Shade tree planting is required in parking areas where 6 or more places are provided at the rate of one tree per six parking spaces.

3.5.3 Non-residential development

All major non-residential developments require a landscape plan (refer to **Figure 3-6**).

Figure 3-4: Non-residential landscape planning



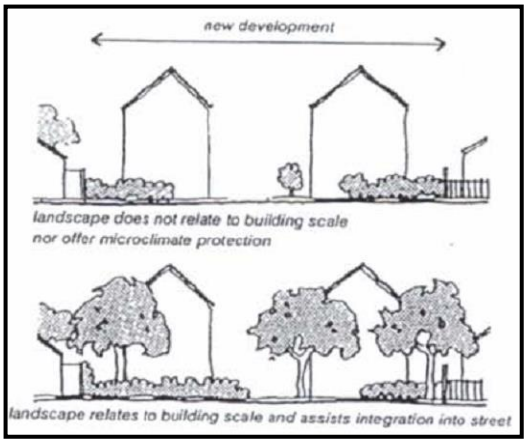
3.5.4 Streetscape (urban)

Objectives

To provide attractive streetscapes that reinforce the functions of a street, enhance the amenity of buildings, and are sensitive to the built form, landscape, environmental conditions and services of the locality.

Controls

Figure 3-5: Landscape designed to integrate with development



For infill development that abuts an existing public street, the application should demonstrate how the development fits in with the existing streetscape and makes efficient use of the site.

For new release urban areas, the provision for appropriate street tree planting taking into account the image and role of the street, solar access requirements, soils, selection of appropriate species and services (refer to **Figure 3-7**).

The site layout and building design enables the use of features of the site such as views, existing vegetation and landmarks.

3.5.5 Fences and gates (urban)

Objectives

Design fences to complement the architectural styles of the building and the local area.

Controls

Design fences to respect the architectural character of the house and heritage context. Design fences to take account of streetscape, privacy and security issues, and to enhance entrances to the site and building. Use fences to define the edge between the street and semi-public front garden space.

Original fencing should be retained where possible and, if damaged, should be repaired rather than replaced.

Fencing shall complement any original fencing relating to the architectural style of the dwelling or found on adjoining properties and in the wider streetscape in terms of style, height and materials.

Where side fences project in front of the building line ensure that they complement the scale of the adjoining front fence and function of the front yard.
The height limit for front fences should coincide with that that of neighbouring dwellings, measured from the finished footpath level at any point adjacent to the fence to the top of the main part of the fence. This does not include supporting posts or mailboxes.

Where there is a change in ground level along the street boundary, the higher of the two levels will be taken when measuring fence heights:

- fencing over 1.2 metres in height shall be 50% transparent; or
- where there is dual street frontage, consideration may be given for the allowance of a higher side fence to ensure privacy.

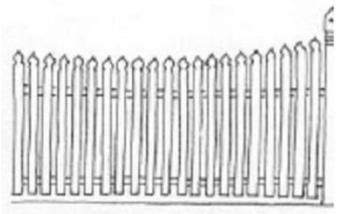
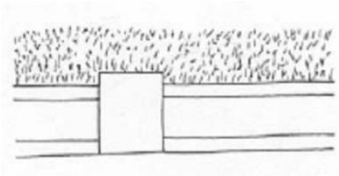
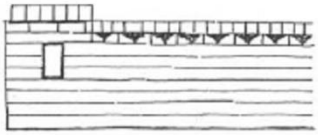
All controls are subject to the provision of adequate sight lines for emerging vehicles to enable surveillance of pedestrians.

Integrate the design of fences, with the location of mail boxes, nameplates and street numbering.

The use of intervening fences/walls setback from the front property boundary is discouraged and should not be used to determine the measuring point for the building envelope.

Generally, the fencing styles identified in **Table 3-1** should be reflected in the design of fences and gates, according to the character of the surrounding area and property.

Table 3-1: Preferred period fencing styles

Period	Example
Georgian/Victorian ▪ simple round or square picket ▪ more decorative posts in grander dwellings, including wrought iron palisade ▪ regular spacing	
Edwardian/Federation ▪ timber pickets ▪ round, square or tulip ▪ top edge stepped up at post in some examples	
California Bungalow ▪ low fences 405-900mm high ▪ open weave wire and timber or square topped pickets ▪ rendered brick with brick posts	
Post-War ▪ rendered cappings and inset panels with unrendered brick posts ▪ pierced pre-cast concrete panels ▪ decorative brick capping ▪ decorative brick to match house fascia	

3.5.6 Set backs

All setbacks are to be landscaped (refer to **Figures 3-4, 3-5, 3-6** and **3-7**)

No parking will be permitted within setback areas.

Minimum Setbacks:

- **Urban** – Refer to **chapter 4** for residential building setbacks.

- **Industrial** – Refer to **chapter 4** for industrial building setbacks.
- **Rural** – Refer to **chapter 5** for rural dwelling setbacks.

In front setbacks for developments facing a classified road or a public place plant trees with a mature height of a least 8 metres.

Trees must be a least 3 metres in height at the time of planting.

3.6 Vehicular access and parking

This policy aims to provide sufficient and convenient parking for residents, visitors and service vehicles; to ensure vehicular and pedestrian safety and to encourage access design to form part of the overall landscape design.

3.6.1 Parking layout, servicing and manoeuvring

Objective

Where on-site car parking or service areas are required, ensure that the layout and design does not detract from the amenity of adjoining areas.

Ensure the design of parking and servicing areas is efficient, safe, convenient, discrete and suitably landscaped.

Minimise nuisance caused by traffic movement, generation and servicing

Controls

The layout and design of access, parking and service areas should address the needs of the site occupants and visitors as well as respecting the amenity of the area. Account should be taken of potential noise disturbance, pollution and light spillage. Car parking areas can have a significant impact on the streetscape and should therefore be carefully designed having regard to landscaping, layout and location to ensure that parking and service areas are integrated sympathetically with the development and locality.

Provision should be made for various modes of transport for employees and visitors to the site. Where parking is provided it must be in a safe and efficient manner, allowing for easy access for occupants, visitors and service vehicles, whilst ensuring the safety of pedestrians and other road users.

Where non-residential development is within or adjoining a residential zone, locate and design parking areas, servicing areas and the means of access/egress to:

- minimise conflict between non-residential, residential and pedestrian traffic;
- provide off-street parking and servicing of premises;
- respect the character of the existing residential areas and streetscape character by means of siting, design and landscaping.

Surface parking should be visually articulated by the use of soft and hard landscaping and the use of different surface treatments.

Parking areas and accessways should be designed, surfaced and graded to reduce run-off and allow stormwater to drain into the site.

Ventilate enclosed parking areas using natural ventilation techniques.

Mechanically assisted parking facilities should not be provided.

Ensure public car parking and service areas are well signposted or otherwise identified from the entry point.

3.6.2 Specific land use requirements

Off-street parking shall be calculated in accordance with **Table 3-2** or you may take the option of undertaking a traffic impact and parking study. .

Disabled standard will apply to most land uses at a rate of 1 space per 50 spaces or part thereof. The Building Code of Australia Part D prescribes the minimum requirements for the provision of parking spaces for people with disabilities. This plan does not relieve an applicant of any obligation to comply with the Building Code of Australia.

Bicycle parking/racks should be considered for shopping and recreational developments.

Table 3-2: Off-street parking requirements

Land use	Number of spaces
Commercial/business	
Car tyre retail outlet	3 spaces per work bay
Catering and reception centre	1 space per 3 seats; or 1 space per 40m^2 of GFA for centres less than 100m^2 GFA
Drive-in liquor store (separately or in conjunction with a hotel/club)	1 space per 40m^2 of “browse room” area plus 1 space per employee
Hotel, (tavern), club (licensed)	20 spaces per 100m^2 of licensed floor area (bar,

Land use	Number of spaces
	lounge, beer garden, bistro/dining areas) plus 1 space per motel unit
Motel	1 space for each unit; plus 1 space for each 2 employees; plus 1 space per 40m^2 of restaurant GFA
Motor showroom	1.5 spaces per 200m^2 of site area; plus 5 spaces per service work bay
Office premises	1 space per 40m^2 of GFA
Outdoor displays and sales	1.5 spaces per 200m^2 of external site area for storage, display and sale of goods
Restaurant or café	1 space per 3 seats for restaurants 100m^2 or greater or 1 space per 40m^2 of GFA for restaurants less than 100m^2 GFA
Roadside stall	Minimum number of spaces 4
Service stations	6 spaces per work bay; plus 1 space per 40m^2 of GFA for a convenience store; plus 1 space per 40m^2 of GFA for a restaurant
Shop	1 space per 40m^2 of GFA for shops less than 200m^2 GFA
Shopping centre (supermarket/convenience stores)	4.4 spaces per 100m^2 of NLS for developments of 200m^2 or greater
Drive-in take-away food outlet (fast food outlet)	12 spaces per 100m^2 of NLS plus 1 space per 3 seats plus, for development with drive-through facilities, a queuing area for 5 to 12 cars measured from pick up point and a separate area for vehicles waiting pickup
Education	
Child care centre	1 space per 2 employees plus set down/drop off area
Schools	1 space per 2 employees; plus minimum 10 spaces for students; plus bicycle racks
Tertiary institutions/adult education	1 space per employee; plus 1 space per 3 students

Land use	Number of spaces
Health care	
Hospital	Subject to parking study
Medical centre/health consulting rooms	3 spaces per consulting room; plus 1 space for each 2 employees
Veterinary surgery	3 spaces per surgery (Note: total parking may be reduced where it can be demonstrated that all consulting rooms will not be in concurrent operation)
Industry/employment	
Road transport terminal/container depot/bus depot	1 space per 3 employees; plus 1 space per company vehicle, including vehicles leased for or servicing the company
Truck stop	1 space for each motel unit; plus 1 space for 2 employees; plus 15 spaces per 100m^2 of GFA for public restaurant, with 50% of these spaces being truck parking spaces
Industrial building	1 space per 100m^2 of GFA; plus 1 space per 40m^2 of office GFA; plus 1 space per 37m^2 of retail GFA
Wrecking yard/junkyard	1 space per employee; plus 1 space per 200m^2 of site area
Warehouse/bulk stores	1 space per 300m2 of GFA; plus 1 space per 40m^2 of retail GFA
Home industry	1 space per 3 employees; plus 1 space per dwelling
Extractive industry	1 space per company vehicle; plus 1 space per 2 employees
Vehicle repair station	5 spaces per work bay. This may include the area available within the work bays where vehicles are worked upon
Places of assembly	

Land use	Number of spaces
Hall, meeting place, church, convention centre, cinema, community facility	1 space per 10 seats; or 1 space per 10m^2 of space used by the public, whichever is the greater (Note: Total parking provision may be reduced where it can be demonstrated that the time of peak demand for parking associated with locality does not coincide). Cinema complex may require a parking study.
Recreational	
Recreational facility	3 spaces per squash court; 3 spaces per tennis court; 3 spaces per bowling alley; 30 spaces for first bowling green; plus 15 spaces for each additional bowling green; 4 spaces per gymnasium; 16 spaces per indoor cricket court; 1 space per 40m^2 GFA, otherwise.
Tourist recreation	1 space per 40m2 of GFA for restaurant; plus 1 space for each unit; plus 1 space per 40m2 of GFA for commercial/retail; plus 1 space per 2 employees
Caravan park	1 space for each site; plus 1 space for each 10 long-term sites; plus 1 space for each 20 short-term sites; with a minimum visitor parking of 4 spaces
Residential	
Dwelling house	1 space per dwelling
Dual occupancy	2 spaces
Multi dwelling housing	2 spaces per dwelling unit, plus 0.25 spaces per dwelling unit (visitor spaces)
Housing for older people or people with a disability	Refer to *State Environmental Planning Policy.(Seniors Living 2004)*

Gross floor space GFA *is defined under the Goulburn Mulwaree Local Environmental Plan 2009*

Net leasable space (NLS) *means the internal area of a building excluding all stairs, toilets, cupboards, vertical ducts, lifts, shafts, escalators, tea rooms, amenities, lobbies, plantrooms, service vehicle deliver areas, kitchens, corridors and the like.*

3.7 Crime prevention through environmental design

Objectives

The objectives of this plan for crime prevention through environmental design (CPTED) are to:

- enhance and improve community safety within the Goulburn Mulwaree local government area
- create a physical environment that encourages a feeling of safety
- address community concerns with regard to issues of community safety and crime prevention
- reduce the level of crime within the Goulburn Mulwaree local government area
- prevent the opportunity for criminal activity
- ensure that new developments promote CPTED

Controls

These controls apply to all development in the Goulburn Mulwaree local government area on both public and private land. Some of the controls, however, are tailored to specific development types and are clearly stated as such.

3.7.1 Lighting

Lighting plays a vital role in crime prevention and personal safety as you can see and respond to what is around you and ahead of you. Moreover, others can see you, which further reduce the likelihood of a crime being committed. The following CPTED requirements for lighting apply:

- all areas intended to be used at night should allow appropriate levels of visibility
- pedestrian pathways, lane ways and access routes in outdoor public spaces should be lit to the minimum Australian Standard (AS 1158). Lighting should be consistent in order to reduce the contrast between shadows and illuminated areas. Lighting should be designed in accordance with AS4282 – Control of the obtrusive effects of outdoor lighting
- lighting should have a wide beam of illumination, which reaches to the beam of the next light, or the perimeter of the site or area being traversed. Moreover, lighting should clearly illuminate the faces of users of pathways
- streetlights should shine on pedestrian pathways and possible entrapment spaces as well as on the road

- lights should be directed towards access/egress routes to illuminate potential offenders, rather than towards buildings or resident observation points
- lighting should take into account all vegetation and landscaping that may act as a entrapment spot
- lighting should be designed so that it is difficult for vandals to break
- where appropriate use movement sensitive and diffused lights
- avoid lighting spillage onto neighbouring properties as this can cause nuisance and reduce opportunities for natural surveillance
- illuminate possible places for intruders to hide
- as a guide areas should be lit to enable users to identify a face 15 metres away
- all lighting should be maintained and kept in a clean condition with all broken or burnt out globes replaced quickly
- use energy efficient lamps/fittings/switches to save energy

3.7.2 Fencing

If fencing is too high or made of inappropriate materials it reduces the opportunity for casual surveillance of the street and for users of the public domain to see what activities are taking place on your site. This then further increases the likelihood of a crime being committed. The following CPTED requirements for fencing apply:

- fence design should maximise natural surveillance from the street to the building and from the building to the street, and minimise the opportunities for intruders to hide
- front fences should preferably be no higher than 1.2 metre. Where a higher fence is proposed, it will only be considered if it is constructed of open materials (eg. spaced pickets, wrought iron etc)
- if noise insulation is required, install double-glazing at the front of the building rather than a high solid fence (greater than 1 metre)

3.7.3 Car parking

Poorly designed car parks whether underground or not can be a dangerous environment for their users. Through the provision of some basic design elements, such as lighting and signage, these spaces can be made safer. The following CPTED requirements for car parking apply:

- car parks, aisles and manoeuvring areas shall be:
  - designed with safety and function in mind

  - have dimensions in conformity with AS2890 - Parking Facilities (relevant parts of this standard are AS2890. 1 - Off-street parking, AS2890.2 - Commercial vehicle facilities, and AS2890.3 - Bicycle parking facilities)
- where parking spaces are to be provided for people with disabilities, these spaces are to be:
  - suitably located near entrances to the building and lifts/ access ramps, if required
  - provided in accordance with Australian Standards 1428.1 - Design for access and mobility
  - appropriate signage and tactile pavement treatments should also be installed, where required
- the design of car parking areas should incorporate the following elements:
  - provision of a safe and convenient vehicle entry and exit that avoids traffic/pedestrian conflict and impact on the surrounding road
  - the internal (vehicular) circulation network is free of disruption to circulating traffic and ensures pedestrian safety
- the movement of pedestrians throughout the car park should be clearly delineated by all users of the car park and minimises conflict with vehicles
- the design of the car park should ensure that passive surveillance is possible and where appropriate, incorporate active measures such as cameras and security patrols. Car parks should be designed to minimize dark areas through the provision of appropriate lighting
- large car parks should incorporate communication devices such as:
  - intercoms
  - public address systems
  - telephones
  - emergency alarms
- to ensure users of large car parks are easily able to determine their location, exit and access points security intercoms, and the like appropriate signage is to be included
- all surfaces in the car park should be painted in light coloured paint or finished in light grey concrete to reflect as much light as possible
- all potential entrapment points should be avoided (e.g. under stairs, blind corners and wide columns). Adequate lighting and mirrors should be used when certain design features are unavoidable

3.7.4 Entrapment spots & blind corners

Entrapment spots and blind corners provide opportunities for perpetrators of crime to hide and or commit crime. The following CPTED requirements for the avoidance of entrapment spots and blind corners apply:

- pathways should be direct – all barriers along pathways should be permeable (including landscaping, fencing etc)
- consider the installation of mirrors to allow users to see ahead and around corners – the installation of glass or stainless steel panels in stairwells can also assist in this regard
- entrapment spots adjacent to main pedestrian routes such as a storage area or small alley should be eliminated from all designs
- if entrapment spots are unavoidable they should be well lit with aids to visibility such as convex mirrors and locked after hours
- to eliminate excuse making for individuals to loiter, avoid placement of seating near or adjacent to ATM's, public phone boxes, toilets, corridors and isolated locations

3.7.5 Landscaping

Trees and shrubs that are inappropriately located can easily reduce surveillance opportunities and provide entrapment spots and blind corners. The following CPTED requirements for landscaping apply:

- avoid medium height vegetation with concentrated top to bottom foliage. Plants such as low hedges and shrubs, creepers, ground covers and high-canopied vegetation are good for natural surveillance
- trees with dense low growth foliage should be spaced or crown raised to avoid a continuous barrier
- use low ground cover or high-canopied trees with clean trunks
- avoid vegetation, which conceals the building entrance from the street
- avoid vegetation screening of all public use toilets
- avoid vegetation that impedes the effectiveness of public and private space lighting
- use 'green screens' (wall hugging vegetation that cannot be hidden behind) if screening large expanses of fencing to minimise graffiti

3.7.6 Communal/public areas

Communal or public open space areas that do not have adequate natural surveillance are a risk to personal safety. The following CPTED requirements for communal/public areas apply:

- position active uses or habitable rooms with windows adjacent to main communal/public areas (playgrounds, swimming pools, gardens, car parks etc)
- communal areas and utilities (e.g. laundries and garbage bays should be easily seen and well lit)
- where elevators or stairwells are provided, open style or transparent materials are encouraged on doors and/or walls of elevators/stairwells
- waiting areas and entries to elevators/stairwells should be close to areas of active uses, and should be visible from the building entry
- seating should be located in areas of active uses

3.7.7 Movement predictors

Movement predictors are routes which people move through on a regular and predictable basis such as a pedestrian underpass. Careful design is needed to ensure that they are not included in a development or are appropriately treated where included to reduce the risk. Through site links are another type of movement predictor, however, unlike under passes these can provide a benefit to the community if designed appropriately to ensure safety. The following CPTED requirements for movement predictors apply:

- pedestrian underpasses should not be included in new developments
- where movement predictors are used the users of it should have clear site lines so they can see what is ahead and behind at all times
- lighting of movement predictors is essential. Natural lighting should be used where possible with consideration given to wall and ceiling materials to help reflect light
- emergency intercoms, telephones and security videos should be included in the design of movement predictors. Adequate consideration should be given to who will be monitoring such equipment
- no entrapment spots should be included in any movement predictor

3.7.8 Entrances

Entrances to all types of development that are not visible from the public domain provide an opportunity for perpetrators of crime to hide and or commit crime. Entrances to all types of development need to be clearly visible and legible so that the users can obtain entry quickly and expediently. The following CPTED requirements for entrances apply:

- entrances should be at prominent positions and clearly visible and legible to the users
- design entrances to allow users to see into the building before entering
- entrances should be easily recognisable through design features and directional signage

- minimise the number of entry points – no more than 10 dwellings should share a common building entry
- if staff entrances must be separated from the main entrance, they should maximise opportunities for natural surveillance from the street
- avoid blank walls fronting the street
- in industrial developments, administration/offices should be located at the front of the building

3.7.9 Introduction to next subsections 3.7 – 3.16

The next subsections generally deal with the maintenance and improvement of amenity and natural resource areas. The following overall objectives are the target outcomes expected of development proposals.

Objectives

To maintain and improve existing biodiversity values and habitat connectivity corridors between conservation reserves and remaining areas of native vegetation for the purpose of facilitating species movement, dispersal and interchange of genetic material.

To minimise the fragmentation of land through subdivision.

To protect land within zones from adverse impacts of development located on land with an adjoining zone.

To ensure that there is no net loss of native vegetation.

To have regard to the likely long term effects of climate change on the areas natural environment when considering development proposals including:

- Increased bushfire and flood risk and any associated measures required to mitigate that risk to protect human assets.
- The long term sustainability of water supply and its availability to natural area.
- The cumulative impacts of water extraction and use on the catchment surface and underground waters and water quality.
- The impacts of climate change on biodiversity, natural habitats, endangered ecological communities, threatened species and native fauna.

3.8 Flood affected lands

Objective

This plan aims to minimise the impacts of flooding on development within the flood planning area.

Controls

3.8.1 Definitions

Flood planning area means the area of land that is at or below the flood planning level and thus subject to flood related controls.

Flood planning level means that the level of a 1:100 ARI (average recurrent interval) flood event plus 0.5 metre freeboard

3.8.2 Controls for development at or below the flood planning level

- applicants must have regard to the provisions of clause 7.1 LEP 2009
- **construction** – pier and beam construction or suspended reinforced concrete slabs must be used, as these minimise the requirement for cut and fill and allow floodwaters to flow under the building
- **cut and fill** – cut and fill should be minimised for all development within the floodplain. Filling can result in a reduction in flood storage or change flow patterns and is not permitted unless it can be demonstrated that there is no decrease in storage capacity on the property and that flow characteristics will not significantly be changed. Cutting can result in an increase in flood depths and potentially, an increase in flood hazard and/or extent of inundation, and is not permitted unless it can be demonstrated that flood behaviour will not be altered
- **flood storage** – no development is permissible in areas designated as flood storage, unless it can be demonstrated that there will be no decrease in net flood storage available on the site
- **building materials and construction methods** – all buildings at or below the flood planning level must be constructed of flood compatible materials
- **structural soundness** – all development applications must demonstrate that the proposed structure can withstand the force of floodwater, debris and buoyancy.

- **fencing** – solid fences that impede the flow of floodwaters are not permissible. Fences must be at least 50% open to allow the progress of floodwaters
- **residential floor levels** – all habitable rooms within residential development must be at or above the flood planning level
- **commercial and industrial development**:
  - **flood evacuation and management** – all development applications for industrial and commercial development must be supported by a flood emergency plan. Appropriate warning and advisory signage must be prominently visible at entry/exit points.
  - **parking – no excavated underground car parking is permitted on land at or below the flood planning level. Undercroft parking is however appropriate.**

Following recommendations from Wollondilly River and Mulwaree Chain of Ponds Floodplain Risk Management Study and Plan (the SMEC Report March 2003):
Recommended permissible and prohibited uses in relation to flood hazard categories:

LAND USE	HAZARD CATEGORY					
	Low Hazard Flood Fringe	Low Hazard Flood Storage	Low Hazard Floodway	High Hazard Flood Fringe	High Hazard Flood Storage	High Hazard Floodway
Agricultural Uses	✔ 1	✔ 1	✔ 2	✔ 1	✔ 1, 4	✔ 2
Residential Uses	✔ 3	✔ 3	✕	✕	✕	✕
Commercial Uses	✕	✕	✕	✕	✕	✕
Industrial Uses	✔	✔	✕	✔	✔ 4	X
Special Uses	✕	✕	✕	✕	✕	✕
Open Space /Recreation	✔	✔	✔ 2	✔	✔ 4	✔ 2

✔ Permissible **✕ Prohibited**

Non-habitable buildings:

- Class 10 buildings and structures in association with a permissible / existing use are permitted in a flood-affected area other than a floodway hazard category.
- Engineering details for the effect of flooding are not required for non-habitable buildings and structures.
- Advisory Note to be included in any approval indicating:

- Flood Hazard Category
- Flood levels (1%, 5%, Extreme)
- Any site levels for the property
- Building / structure may be damaged by floodwaters

Key:

[1] A single dwelling is permissible, subject to the Flood DCP, on a rural allotment in these hazard category areas, where residency is essential for operational or security purposes.

[2] No development or building, such as a dwelling, clubhouse, barn facilities block, shed etc, is permissible in a floodway.

[3] Only development of single dwellings is permissible. Any development that would increase density (dual occupancies, multi-unit developments, etc) is not permissible. Subdivision is not permissible.

[4] Development is permissible in areas designated as flood storage, only if it can be shown that there will be no decrease in net flood storage available on the site.

3.8.3 Mapping

For the purposes of this section the mapped Flood Planning Area is provided by the Flood Plain Management Plan for Wollondilly River and Mulwaree Chain of Ponds prepared by SMEC, March 2003, held at the office of Council.

Reference Material

The following reference material is highly recommended for designs when preparing development applications in a mapped flood planning area or land suspected and / or expected on topographic evidence to flood. These guidelines aim to reduce vulnerability to flood impacts and thus substantially lower the levels of flood risks.

i) "Designing safer subdivisions, Guidance on Subdivision Design in Flood Prone Areas, Hawkesbury – Nepean Floodplain Management Steering Committee, 2006."

Though this document was written for the Hawkesbury – Nepean lowland areas it is also totally appropriate for Goulburn Mulwaree Area.

Chapters include details on:

(1) The subdivision process;

(2) Understanding catchments and flooding;

(Note: Goulburn Mulwaree catchment zone characteristics would be classed as upper and middle reaches).

(3) Identifying the floodrisk;

(4) Hydraulic impacts;

(5) Designing subdivision on flood prone land;

(6) Designing for emergency response and evacuation;

(7) Design of associated stormwater systems;

(8) Medium density and high rise developments; and

(9) Case studies

ii) "Reducing vulnerability of Buildings to flood damage, guidance on building in flood prone areas, Hawkesbury Nepean Floodplain Management Steering Committee, 2006."

This is another excellent publication.

Chapters include details on:

(1) Controlling risk exposure through flood aware design;

(2) Vulnerability of housing to floods and potential solutions;

(3) General design and construction considerations;

(4) Structural component design; and

(5) Non-structural component design.

iii) "Managing flood risk through Planning opportunities, guidance on land use planning in flood prone areas, Hawkesbury – Nepean Floodplain Management Steering Committee, 2006."

This publication is a general reference document aimed at professional planners and other related professionals in the public and private sectors with responsibilities for planning and development in the Goulburn Mulwaree Local Government Area.

3.9 Tree and vegetation preservation

Objective

The objective of these provisions is to preserve the amenity, biodiversity and ecology of the area through the preservation of trees and other vegetation.

Controls

3.9.1 Definitions

tree means:

a perennial plant with:

(i) one or more self supporting trunks, any one of which has a circumference of 30cm or more (at a height of 40 cm above existing ground level), or

(ii) a height of 2.5 metres or more, or a branch spread of more than 2.5 metres.

Other Vegetation means:

Remnant Native Vegetation including:

(i) trees,

(ii) understorey plants,

(iii) ground cover,

(iv) plants occurring in a wetland.

Note: Native Vegetation has the same meaning as in the Native Vegetation Act 2003.

3.9.2 General

Clause 5.9 of the *LEP 2009* applies to all trees and shrubs in Heritage Conservation Areas, on land that contains a Heritage Item and land identified as 'Biodiversity Hot Spots' and mapped wetlands.

Heritage Conservation Areas are shown on the LEP 2009 Heritage Maps.

Heritage Items are listed in Schedule 5 to the *LEP 2009*.

'Biodiversity Hot spots' are identified in figure 3.9 and mapped wetlands in figure 3.8.

A person must not ringbark, cut down, top, lop, remove, injure or wilfully destroy any tree or other vegetation identified above without the authority conferred by a development consent or a permit granted by the Council.

Any removal of native vegetation including trees, shrubs and other vegetation that occurs in an area zoned non-urban and non-industrial, may require consent under the Native Vegetation Act unless on exemption applies.

Applicants should contact the NSW Local Land Services – South East for details.

3.10 Dryland salinity

Objective

To direct development away from actual and potential salinity affected areas.

Controls

Moderate dryland salinity and urban salinity occurs in the Goulburn Mulwaree LGA. The first principle in development assessment in regards to salinity is to avoid development in any area identified as having dryland or urban salinity.

Information is available from the Council on potential salinity areas.

As a known hazard all residential development needs to be designed, constructed and managed with salinity in mind. Applicants should be aware that issues such as cut and fill, road and house construction and stormwater discharges can exacerbate salinity affection and design accordingly.

3.11 Waterbody and wetland protection

Objective

Manage and protect natural resources in an ecologically sustainable manner.

Controls

Applicants must have regard to clause 7.2 *GM LEP 2009*. Further information is available from Council on known wetland areas such as Lake Bathurst. The Morass, Wollogorang Lagoon, Narrambulla Creek, Breadalbane Plains and Roses lagoon are mapped as part of the Goulburn Mulwaree Biodiversity Strategy.

The following table is taken from the Lake Bathurst and the Morass wetland Management Plan.

The table is generally representative of all the local government areas mapped wetland areas.

Developers of land, including agricultural development in the catchment areas of the identified wet lands are to demonstrate how their development proposals will satisfy the applicable management objectives detailed in table 2 to the Lake Bathurst and the Morass Wetland Management Plan.

Tabl

Man	Management Objectives	Targets	Actions
*Pro nati	**Re-establish the filled in link between the Nth Morass lake and Lake Bathurst**	▪ Reinstate natural flow regime	▪ Remove flow obstructions
*Pro soci cult	**Support sustainable agriculture**	▪ Determine sustainable stocking rates and suitable areas for grazing ▪ Reduce negative impacts of grazing ▪ Rehabilitate affected areas of dryland salinity	▪ Investigate appropriate areas for grazing within the wetland area and sustainable stocking rates ▪ Investigate incentive funding sources for landholders to install stock-proof fencing and alternative water sources, to improve grazing management of wetlands when flooded ▪ Identify affected areas of dryland salinity ▪ Fence off and plant salt-tolerant pasture grasses or grade the bank above the erosion areas to divert run-off and reduce erosion (CALM)
*Pro nati habi	**Understand the impact of catchment processes on water quality**	▪ Decrease the impact of groundwater discharge on wetland salinity ▪ Decrease the impact of poor quality runoff ▪ Minimise rates of erosion ▪ Decrease sedimentation	▪ Identify recharge zones in the upper catchment and plant with native vegetation ▪ Invest in programs to address major knowledge gaps ▪ Identify sedimentation sources and identify management responses
*Cor of n othe parti Tuss (*Nas	**Mitigate the impacts associated with drought, reduced water flow and climate change (temperature, evaporation and rainfall)**	▪ Develop process for adapting to the impact of drought ▪ Investigate the impacts of climate change (temperature, evaporation and rainfall) on the catchment ▪ Investigate the current water balance for the catchment ▪ Investigate impacts on current land use practices	▪ Investigate local climate change, drought and reduce water flow impacts ▪ Community education on climate change impacts ▪ Identify local action e.g. Investigate drought tolerant species, improve water use efficiency, provide more shade for livestock and develop best practice methods for land management (CSIRO 2007)
*Cor of p part (*Ory	**Increase community awareness of threats and values of Lake Bathurst and The Morass**	▪ Implementation of the Lake Bathurst and The Morass Wetland Management Plan ▪ Increase community awareness of the wetlands	▪ Develop site action plans for surrounding landholders ▪ Identify opportunities for highlighting the threats and values facing the Lake Bathurst and The Morass
	Implement a collaborative approach to wetland management	▪ Clear roles and responsibilities ▪ Access funding for NRM ▪ Bi-yearly forum/communication	▪ Clearly define the roles and responsibilities of land managers ▪ Identify opportunities for funding ▪ Establish a forum for communicating between key stakeholders

3.12 Groundwater

Objective

To protect and enhance the water quality of groundwater systems.

The objective is to identify and protect vulnerable groundwater resources from contamination as a result of inappropriate development.

Controls

Information is available from Council on potential groundwater areas (limestone).

Applicants must consider the extent to which the development would affect the groundwater resources in terms of the:

1. potential for ongoing impacts through the operation of the development.
2. adequacy of the measures proposed to avoid, mitigate or remedy any adverse effects of the proposed development.

3. Development consent must not be granted to development unless the applicant has submitted a report with the development application that addresses, to the satisfaction of the consent authority, the following matters:

    (a) characteristics of the groundwater present in the area,

    (b) any potential risk of groundwater, contamination from on-site storage or disposal of solid or liquid waste and chemicals,

    (c) any potential adverse cumulative impacts on groundwater including the impacts on groundwater extraction for potable water supply or stock water supply,

    (d) a description of any proposed measures to be undertaken to avoid or ameliorate any potential adverse impact.

    (e) that the extraction is environmentally sustainable, ie does not exceed re-charge

    Note: Groundwater extraction also requires consent from the Department of Primary Industries - Water.

3.13 Basic landholder riparian rights for subdivision

Objective

1. To achieve rural living water use that is consistent with water management principles.
2. To ensure compliance with section 5(2) of the *Water Management Act 2000.*

Controls

Lots created by subdivision for a dwelling where a town water supply is not available shall not have direct frontage to the Wollondilly, Mulwaree and Shoalhaven rivers.

The dwelling shall not be sited on land that overlaps an aquifer.

The development application must demonstrate how an adequate potable water supply and non-potable water supply will be sourced for each lot to be created (minimum supply is 0.7Ml/year).

3.14 Biodiversity management

Note: Reference Clause 7.2 – LEP 2009

3.14.1 Wollondilly, Mulwaree, Shoalhaven and Tarlo Rivers

Objectives

1. To provide bed and bank stability
2. To protect water quality
3. To maintain viability of riparian vegetation
4. To provide continuity and connectivity

Controls

Major development proposals including subdivision, residential accommodation, tourist and visitor accommodation, are to provide buffer corridors adjacent to nominated rivers including a 40 metre wide core riparian zone, 10 metre wide vegetated buffer and a bushfire asset protection zone between the outer edge of the vegetated buffer and the development each side of the river where appropriate.

Development is to be excluded from the 50 metre wide zone and the zone is to be fenced off with limited access points to the river.

Bushfire asset protection zone area can be utilised for stormwater infrastructure, walkways, cycleways, perimeter road and building set back area.

Stormwater is to be captured and treated outside of the 50 metre buffer area prior to discharge to the Rivers.

3.14.2 Riparian corridors

Objectives

1. Protect and manage existing good condition vegetation remnants in riparian corridors.
2. Restore degraded vegetation in riparian corridors.
3. Regenerate vegetation in cleared areas along riparian corridors.
4. Protect and restore buffer areas to vegetation along riparian corridors.
5. Identify, protect and manage the aquatic ecological values including bed and bank stability, water quality and natural flow regimes.
6. Protect the linkages provided by riparian corridors.
7. Have a neutral or beneficial effect on water quality.

Reference: Goulburn Mulwaree Biodiversity Strategy 2007.

Riparian corridors are identified in **Figure 3-6.**

Controls

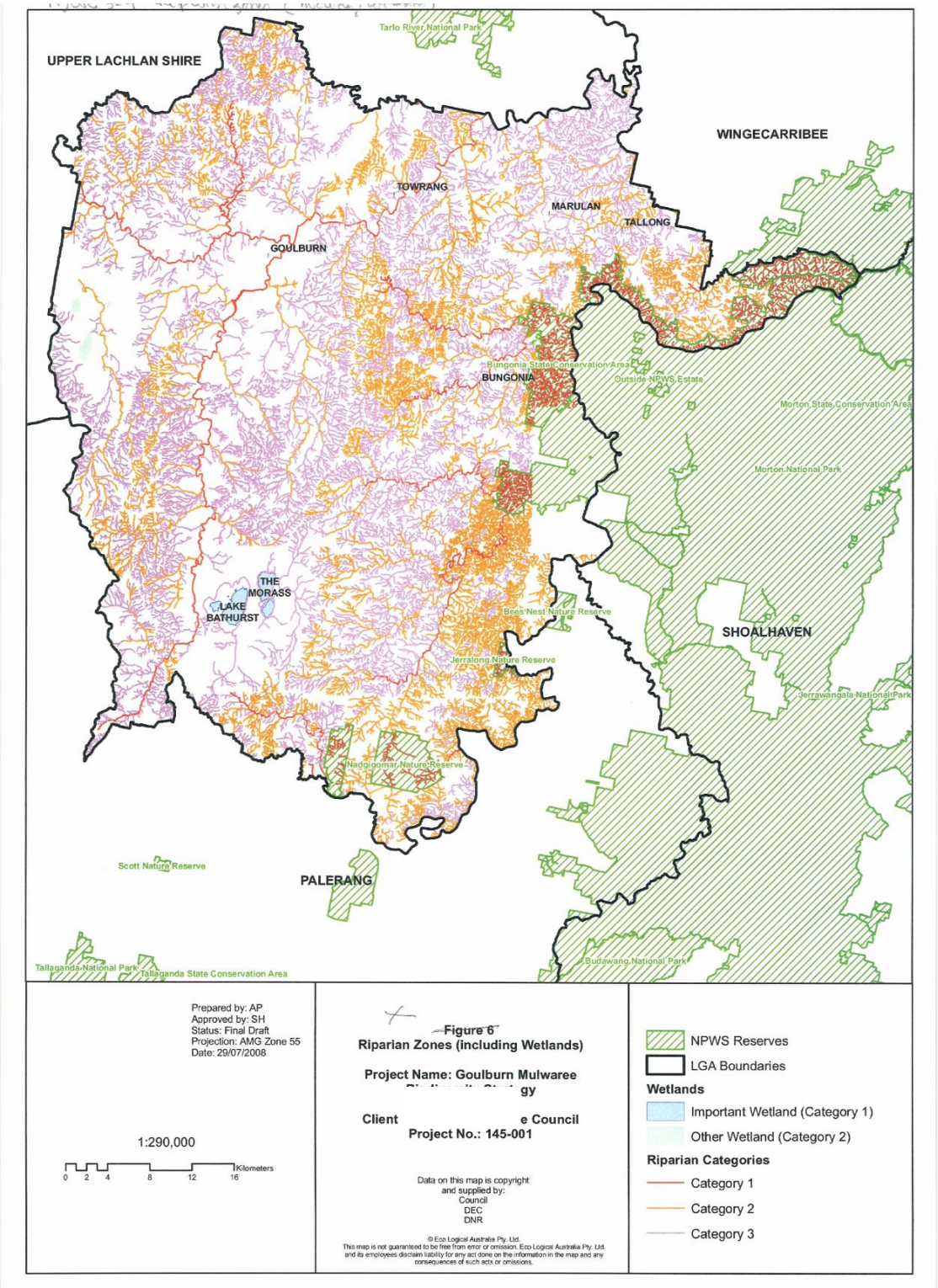
Category 1

A person must not take an action in or adjacent to lands mapped as Category 1 (40m from top of bank) where that action:

- is within 10 metres of the 40m buffer, or
- leads to an adverse effect on the condition of native vegetation within the riparian corridors, or
- fragments an occurrence of vegetation within the riparian corridors, or
- modifies or destroys abiotic factors (such as water, nutrients or soil) necessary for the survival of vegetation within riparian corridors, or
- results in invasive species that are harmful to riparian corridors becoming established in an occurrence of these lands, or

- diminishes the capacity of a buffer area adjacent to riparian corridors, or
- adversely affects the capacity of a regional connectivity area or a riparian corridor, or
- adversely affects water quality

Figure 3-6: Riparian Corridors (including wetlands)



Category 2

A person must not take an action in or adjacent to lands mapped as Category 2 (20 metres from top of bank) where that action:

- is within 10 metres of the 20m buffer, or
- leads to a long-term adverse affect on good or moderate condition native vegetation within riparian corridors, or
- reduces the overall extent of vegetation within the riparian corridors, or
- fragments an occurrence of vegetation within the riparian corridors, or
- modifies or destroys abiotic factors (such as water, nutrients or soil) necessary for the survival of vegetation within the riparian corridors, or
- results in invasive species that are harmful to riparian corridors becoming established in occurrence of these lands, or
- adversely affects the capacity of the riparian corridor, or
- adversely affects water quality.

Category 3

A person must not take an action in or adjacent to lands mapped as Category 3 (10 metres from top of bank) where that action:

- leads to a long-term adverse affect on good condition native vegetation within the riparian corridors, or
- fragments an occurrence of vegetation within the corridor, or
- destroys abiotic factors (such as water, nutrients or soil), or
- results in invasive species that are harmful to riparian corridors becoming established in an occurrence of these lands, or
- adversely affects the capacity of the riparian corridor, or
- adversely affects water quality.

Note: A person must not take an action in or adjacent to riparian corridors where the requirements under the Threatened Species Conservation Act, Fisheries Management Act and Rivers and Foreshore Improvement Act (or Water Management Act when it repeals the Rivers and Foreshores Improvement Act) have not been met.

3.14.3 Regional corridors

Corridors are linear landscape features that connect two or more, larger habitat patches, allowing either movement of individuals, or gene – flow among native fauna and flora.

Objectives

1. Protect and manage existing vegetation remnants in regional corridors.
2. Protect the linkages provided by regional corridors.
3. Restore degraded vegetation.
4. Regenerate vegetation in cleared areas.

Reference

Regional Corridors are identified in **Figure 3-7**

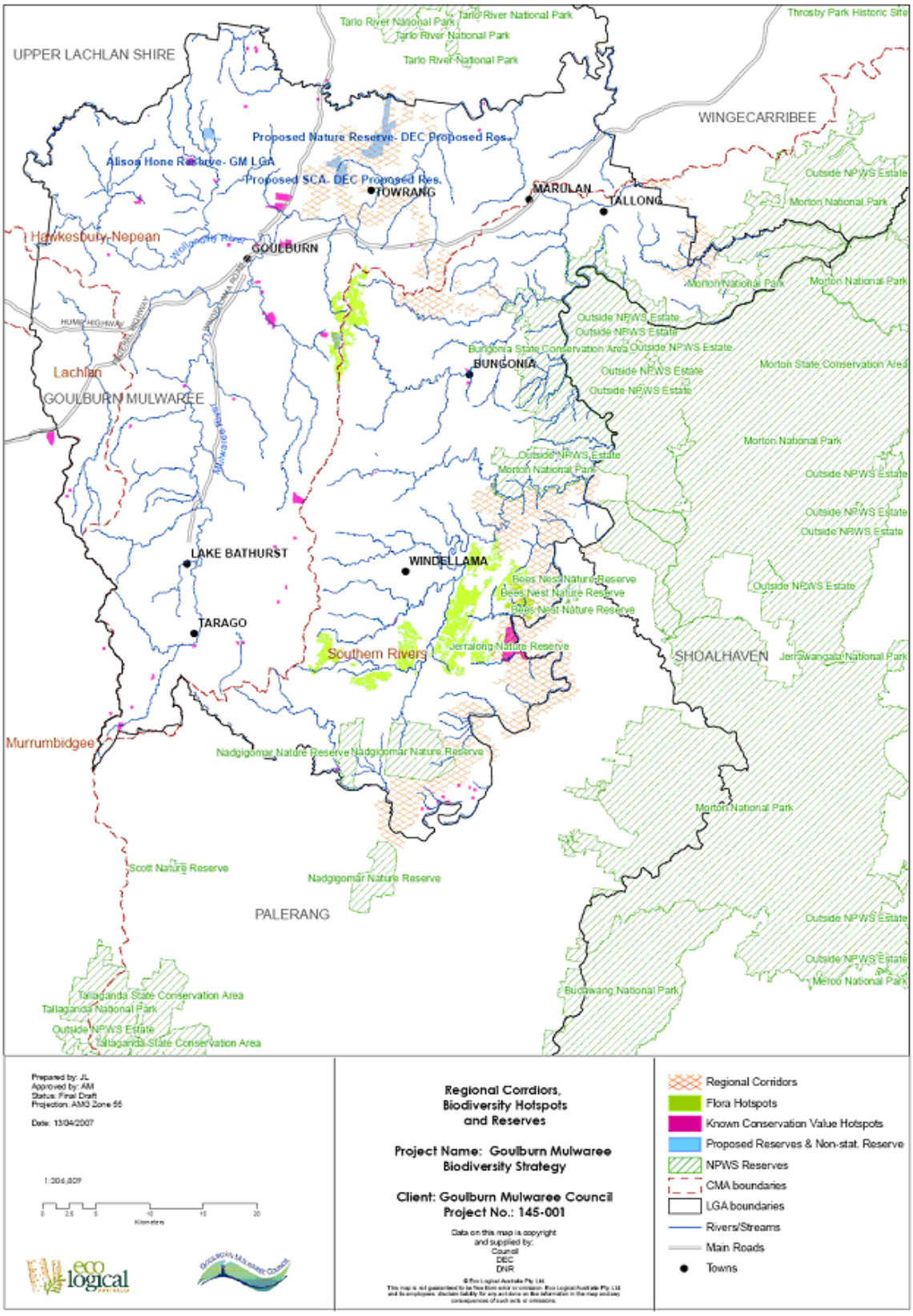
Controls

A person must not undertake an action in or adjacent to lands mapped as regional corridors where that action:

- leads to a long-term adverse effect on native vegetation within the regional corridor
- reduces the extent of vegetation within the regional corridors
- adversely affects the capacity of a regional corridor or riparian corridor

A person must not undertake an action in or adjacent to vegetation within regional corridors where the requirements under the *Threatened Species Conservation Act and Native Vegetation Act 2003* have not been met.

Figure 3-7: Regional corridors, biodiversity hotspots and reserves



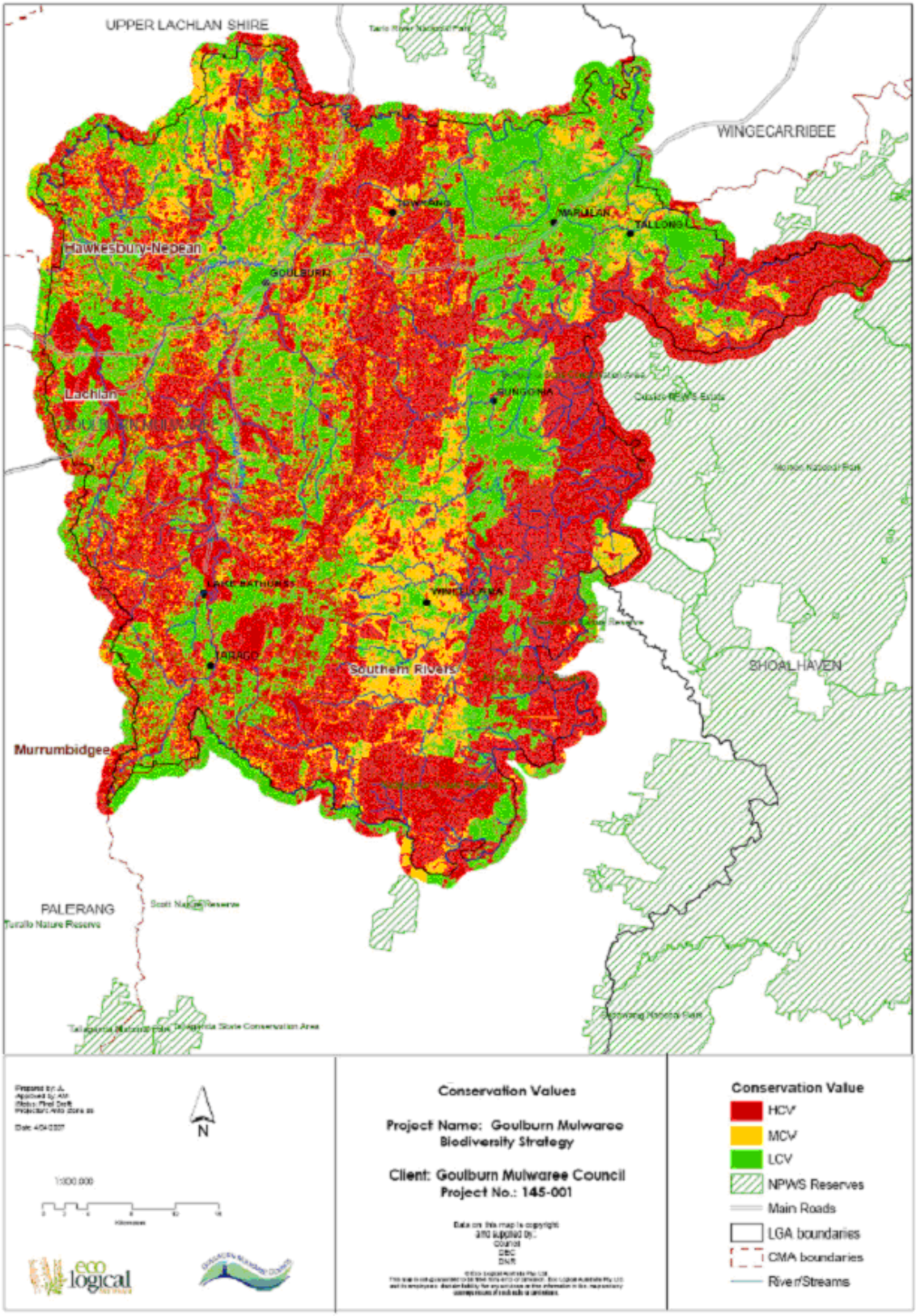
3.15 High Environmental Conservation Value areas

Reference: Vegetation conservation values are identified in **Figure 3-8**.

Objectives

1. Protect remaining high conservation value vegetation.
2. To prevent trading unless considered to be a social and economic benefit of State significance.
3. Protect and restore buffer areas to high conservation value vegetation.
4. Protect the contribution high conservation value vegetation has to regional connectivity areas and riparian corridors.

Figure 3-8: High Environmental Conservation Value map



Controls

A person must not undertake an action in or adjacent to high conservation lands where that action:

- will not meet the 'maintaining and improve' biodiversity outcomes
- leads to a long-term adverse effect on high conservation value vegetation
- reduces the extent of high conservation value vegetation
- fragments an occurrence of high conservation value vegetation
- adversely affects habitat critical to the survival of high conservation value vegetation
- modifies or destroys abiotic factors (such as water, nutrients or soil) necessary for the survival of high conservation value vegetation
- results in invasive species that are harmful to high conservation value vegetation becoming established in an occurrence of these lands
- diminishes the capacity of a buffer area adjacent to high conservation value vegetation
- adversely affects the capacity of a regional connectivity area or riparian corridor

3.15.1 Medium conservation valued areas

Objectives

1. No net loss of medium conservation value vegetation.
2. Some flexibility for trading and offsets.
3. Protect the viable remnants of medium conservation value.
4. Restore medium conservation value when low conservation value native vegetation is to be cleared.
5. Protect the contribution medium conservation value lands have to regional and riparian corridors.

Controls

A person must not undertake an action in or adjacent to medium conservation value lands where that action:

- leads to a long-term adverse effect on medium conservation value vegetation
- reduces the extent of a medium conservation value vegetation
- fragments an occurrence of the medium conservation value vegetation
- adversely affects the capacity of a regional connectivity area or riparian corridor

Note: A person must not undertake an action in or adjacent to medium conservation value vegetation where the requirements under the Threatened Species Conservation Act and an applicable Property Vegetation Plan certified by the relevant Catchment Management Authority have not been met.

3.15.2 Key fish habitat

Objectives

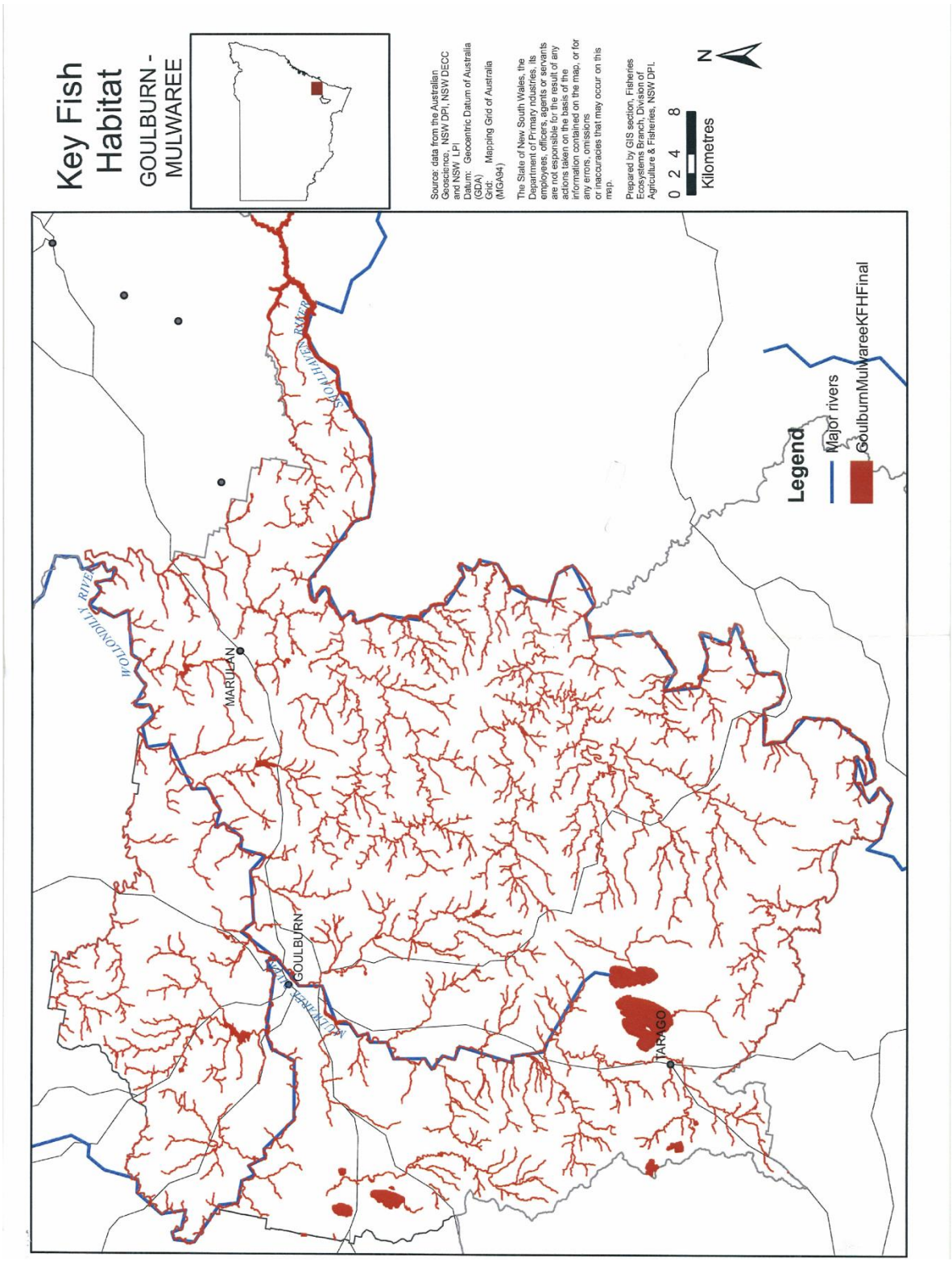
Protect and restore fish habitat.

Restore degraded vegetation in riparian corridors.

Controls

- **NSW Department of Primary Industries:**
  - Many developments within or adjacent to waterways (Refer to Key Fish Habitat Map Figure 3.11) are subject to the provisions of the Fisheries Management Act 1994. The Act may apply regardless of whether or not development consent from Council is requested or has been granted.
  - Proponents are strongly advised to contact the Department of Primary Industries for advice before undertaking any development work in the Key Fish Habitat areas.
- **Key threatening processes:**
  - "Installation of instream structures that modify flow regimes" is listed as a Key Threatening Process under the provisions of the Fisheries Management Act 1994." Careful consideration of the appropriateness of a development proposal that will involve the installation of a dam, weir, causeway or culvert is required.
  - Removal of large woody debris (snags) is listed as a Key Threatening Process under the provisions of the Fisheries Management Act 1994." Careful consideration of the appropriateness of a development proposal that will involve or contribute to the removal of large woody debris is required.
  - "Degradation of Native Riparian Vegetation" is listed as a Key Threatening Process under the provisions of the Fisheries Management Act 1994. Careful consideration of the appropriateness of a development proposal that will contribute to a loss or decline in riparian vegetation is required.

Figure 3-9: Key Fish Habitat



Approvals or concurrence required from NSW Department of Primary Industries include:

- Any dredging or reclamation in any waters (permanent or intermittent, man-made or natural, public or private) will require a permit from NSW DPI, whether carried out by a developer or the Council itself (unless approved by another NSW Public Authority). The definitions of dredging or reclamation under (s198-203) of the *Fisheries Management Act 1994* are very broad and essentially can be interpreted as any works within a waterway or "water land". This potentially includes:
- Waterway crossings, culverts, weirs, bridges or similar structures;
- Water recreation structures (eg wharf, jetty, boat ramps);
- Earthworks and drainage works (in "water land");
- Stormwater control devices;
- Environmental protection work (e.g. erosion control devices, wetland restoration, riverbank erosion protection);
- Extractive industries;
- Flood mitigation work;
- Maintenance dredging;
- Irrigation works (pipelines, pumping stations);
- Any blockages or obstructions to fish passage under (s218-220) of the Fisheries Management Act 1994;
- Any release or importation of "fish" under (s216-217) of the Fisheries Management Act 1994 into any waters will require a permit from NSW DPI Fisheries;
- Removal or movement of in-stream snags including large woody debris or boulders (i.e. Fish Habitat Protection Plan No. 1);
- Use of explosives or electrical devices within a waterway under (s111-114) of the Fisheries Management (General) Regulations 1995; and
- Any damage to gravel beds in waters where trout are likely to spawn under (s206-207) of the Fisheries Management Act 1994.

Subdivision – Consent Requirements

NSW DPI recommends that the consent authority, before granting consent for subdivision, must consider the following matters:

1. Roads or subdivision access across watercourses are potential blockages to fish passage. Single access points across a watercourse should be incorporated into planning (e.g. a single road easement across a watercourse to subdivisions). All such structures should require development consent and a minimum requirement to grant

consent should be compliance with NSW DPI's Policy and Guidelines for Waterway Crossings (Why do fish need to cross the road?) which is available from the Department's website.

2. Rural subdivision adjacent to waterways needs to be minimised or controlled so that there is no net increase in basic riparian water rights and extraction levels of surface water from natural watercourses. Subdivision of water front land can result in a proliferation of Basic Landholder Rights (formerly Riparian Rights) administered by the Water Management Act 2000. Increased extraction has a severe cumulative negative impact on the protection of downstream aquatic habitats.

   Advisory Note: (1) Excavation of material from the bed or banks of a waterbody, (2) depositing any sand, soil, rock, rubble or other material on the bed of a waterbody, (3) constructing a structure (weir, dam, causeway etc) within a waterbody such that the flow of water or the free passage of fish may be obstructed, or (4) extracting water from the waterway may require a permit in accordance with the provisions of the Water Management Act, Rivers and Foreshores Improvement Act or the Fisheries Management Act 1994. Please check with the Department Primary Industries - Water.

   Advisory Note: "Degradation of native riparian vegetation along NSW waterways", "Removal of large woody debris (snags)" and "Installation and operation of instream structures and other mechanisms that alter natural flow regimes of rivers and streams" are listed as Key Threatening Processes under the provisions of the Fisheries Management Act 1994. Careful consideration of the appropriateness of a development proposal that will contribute to a loss or decline in native riparian vegetation, involve the removal of snags or involve the installation or change in operation of an instream structure is required. If the area is habitat for a threatened species, population or community of fish, then a "significant impact" is likely to be the conclusion of the 7 part test and a Species Impact Statement will be required.

   Advisory Note: Any removal of native vegetation including trees, shrubs and other vegetation that occurs in an area zoned non-urban and non-industrial may require consent under the Native Vegetation Act unless an exemption applies. Applicants should contact the NSW Local Land Services – South East for details.

3.16 Stormwater pollution

3.16.1 Long term pollution control

Objective

Limit the amount of pollution entering waterways via stormwater

Controls

Stormwater pollution is caused by litter, debris and dust which are washed off the streets and other surfaces during rainfall. Pollution is increased by chemicals and products that are poured or leak into drains and also by sewer overflows. The management of urban stormwater volumes has relied upon engineering hard pipe and channel systems. These systems are effective at removing stormwater quickly and therefore minimise the social and economic costs of flooding, however do not address stormwater quality issues.

To limit the amount of pollution entering waterways via stormwater, new development should implement such measures as:

- Incorporate pervious portions into otherwise sealed areas, to allow water to infiltrate into the ground
- Attempt to 'fit' development into the hydrology of the natural system
- Reduce the possibility of pollutants entering the stormwater by implementing erosion and sedimentation controls
- Provide on-site detention to control peak stormwater flows. On-site detention, especially when used on unpaved or grass surfaces, can trap and remove contaminants from stormwater and increase infiltration into the ground.
- Where an open space is a part of a development, investigate its dual use for site drainage by means of infiltration and/or delayed release to the stormwater system.

Reference should also be made to State Environmental Planning Policy (Sydney Drinking Water Catchment) 2022 and the Water NSW website, which outline the requirements for developments in the drinking water catchment and current recommended practices and performance standards endorsed or published by Water NSW that relate to the protection of water quality.

3.16.2 Short term pollution control

Objective

Minimise water pollution caused by development construction.

Controls

During construction the potential to pollute is high. To reduce this risk Council may require:

- On-site wheel and vehicle base cleaning facilities to reduce soil and contaminated material leaving the site
- Protection of as much existing vegetation as possible to reduce erosion
- Storage of building materials on-site to minimise stormwater contamination

To ensure all potential water pollutants are controlled and dealt with on-site, Council may require devices such as:

- Effective bunding
- Retention pits
- Grease traps
- Booms and trash racks
- Silt ant litter arrester pits
- Situation ponds

These lists are not exclusive and may vary as innovative products and methods are developed.

The pollution of any water is prohibited. Discharges from premises of any matter, whether solid, liquid or gaseous into any waters is required to conform with the Protection of the Environment Operations Act 1997 and the Regulations, or an environment protection licence issued by the Environment Protection Authority for Scheduled Premises.

3.17 Bushfire risk management

All development on land that is classified as bush fire prone land identified on Council's bushfire prone land map must be developed in accordance with the Rural Fire Service *Planning for Bush Fire Protection Guidelines (2006)*.

Objectives

1. Provide for the protection of human life (including firefighters).
2. Minimise impacts on property from the threat of bush fire, while having due regard to development potential, on-site amenity and protection of the environment.
3. Afford occupants of any building adequate protection from exposure to a bush fire.
4. Provide appropriate separation between a hazard and buildings which, in combination with other measures, prevent direct flame contact and material ignition.
5. Ensure that safe operational access and egress for emergency service personnel and residents is available.
6. Provide for ongoing management and maintenance of bush fire protection measures, including fuel loads in the asset protection zone (APZ).
7. Ensure that utility services are adequate to meet the needs of firefighters (and others assisting in bush firefighting).

Controls

"The Rural Fire Service advises that any development on bush fire prone land will be subject to the requirements of Section 79BA of the *Environmental Planning and Assessment Act 1979* and Section 100B of the *Rural Fires Act 1997*."

Additionally, the following bushfire matters should be provided for in the planning stages of any development:

- The future management regimes for any areas of hazard remaining within the subject area. This should focus on the level of hazard posed to future development by the land or adjacent land and how the hazard may change as a result of development.
- Minimising the impact of radiant heat and direct flame contact by separating the development from the bush fire hazard by identifying the extent to which future development can provide for asset protection zones in accordance with *Planning for*

Bush Fire Protection 2006. Setbacks will depend on proximity to vegetation, vegetation type and slope.

- Substantial revegetation of a property, a riparian or wildlife corridor may increase bush fire risk to proposed or existing development. Any proposed revegetation should be undertaken in such a way that limits the spread and occurrence of fire.
- A plan of management will need to include fuel management within the development and maintenance of asset protection zones in accordance with *Planning for Bush Fire Protection 2006* and the Service's document 'Standards for asset protection zones'.
- Roads within new development areas are designed to comply with section 4.1.3 of *Planning for Bush Fire Protection 2006."*

Note: RFS has made getting additional information easier. For general information on *Planning for Bush Fire Protection 2006*, visit the RFS web page at www.rfs.nsw.gov.au and search under *Planning for Bush Fire Protection 2006*

4 Principal development controls – urban

4.1 Residential development

This Section applies to residential development, residential development in business zones and miscellaneous development in residential zones.

4.1.1 Site planning, bulk, scale and density

Objective

Achieve a coherent site layout that provides a pleasant, attractive, manageable, resource efficient and sustainable living environment.

Ensure bulk and scale does not have an unacceptable impact on the streetscape and the character of the locality.

Higher density developments are located close to public transport shopping and community facilities.

Controls

Ensure the site layout integrates with the surrounding environment through:

- adequate pedestrian, cycle and vehicle links to street and open space networks;
- buildings facing streets and public open spaces;
- building, streetscape and landscape design relating to the site topography and the surrounding neighbourhood character.

(i) Percentage of residential development allowed in Business zones:

- B1 Neighbourhood Centre and B3 Commercial Core – Nil (except for shop top housing);
- B2 Local Centre– 40% of gross floor area;
- B4 Mixed Business – 100% of gross floor area;

The minimum gross floor area for dwelling units all Business zones is 150m².

Figure 4-1: Example of the calculation of maximum number of dwellings allowed in the Business B2 Local Centre zone

- Subject lot area – 1,000m²;
- Gross floor area (GFA) is calculated by multiplying FSR (1.2) by site area (1,000) which is 1,200m²;
- Minimum GFA for a single dwelling unit is 150m²;
- Allowable residential percentage is 40%;
- Number of dwellings is calculated by dividing 40% of the FSR (1,200) by minimum GFA for a single dwelling (150) which is 3.2.
- Maximum theoretical number of dwellings for this site is 3.

Developments with higher floor space ratios are to be located:

- within walking distance of good public transport; or
- within reasonable walking distance of shopping and community facilities; or
- where favourable physical conditions exist such as an outlook onto public open space, a wide road, corner position, a north-facing slope, rear lanes or multiple access opportunities; or on sites larger than normal infill sites (eg. greater than 1000m²).

(ii) Places of public worship in R2 Low Density Residential zones.

Gross floor area of places of public worship shall not exceed 150m².

(iii) Multi dwelling housing density.

The minimum average amount of site area required for each dwelling in dual occupancy and multi dwelling housing development is:

- R1 General Residential and R2 Low Density Residential – 350m² per dwelling unit.
- R5 Large Lot Residential (sewered land) – 1000m² per dwelling unit.
- R5 Large Lot Residential (unsewered land) – 1 hectare per dwelling unit.
- RU5 Village – 750m² per dwelling unit.

Note: To ascertain minimum allowable lot sizes for individual sites reference should be made to the lot size maps (LEP 2009).

Figure 4-2: Example of the calculation of maximum number of dwellings allowed in residential zones

- Zone R1 General Residential;
- Subject lot area – 1,500m²;
- Average site area required for each proposed dwelling unit – 350m²;
- Number of dwellings is calculated by dividing lot area (1,500) by dwelling site area required (350);
- Maximum number of dwellings allowed (rounded) is 4.
- Note: this theoretical calculation is based on full reticulated services being available to the site.

4.1.2 Number of storeys

Objective

Minimise the impact of building heights on neighbours of proposed residential development.

Controls

Dwellings and multi dwellings are recommended to have a maximum of 2 storeys outside the statutory height mapped areas

(Refer also to height of buildings maps in the LEP 2009).

4.1.3 Solar access

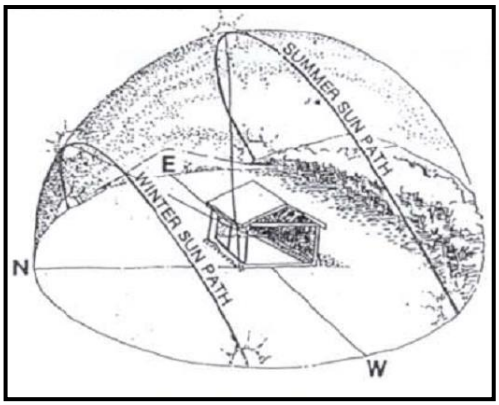
Objective

Achieve energy efficient urban housing, using passive solar design that provides residents with year round comfort and reduces energy consumption.

Controls

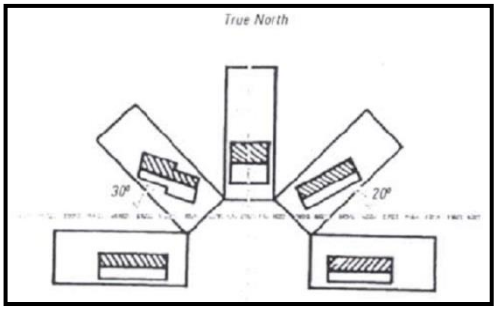
Residential buildings shall be designed to ensure that the proposed dwelling, adjoining residential buildings, and the major part of their landscaped open space, have at least four hours of sunlight between 9.00am and 3.00pm on 21 June (winter solstice). **Figure 4-3** identifies the variation of the sun's path in winter and summer.

Figure 4-3: Variation of the sun's path



The dwelling should be designed and positioned so that the greatest potential for adequate shade in summer and exposure to sunlight in winter occurs (where windows to living areas of dwellings have an orientation within an angle of 20 degrees east and 30 degrees west from the north).

Figure 4-4: Best orientation of buildings



Shaded areas in **Figure 4-4** identify the preferred location of habitable rooms relative to True North to maximise energy efficiency. Where possible, buildings are orientated on a north-south or east-west access to maximise solar access.

Figure 4-5: Shading of north facing windows

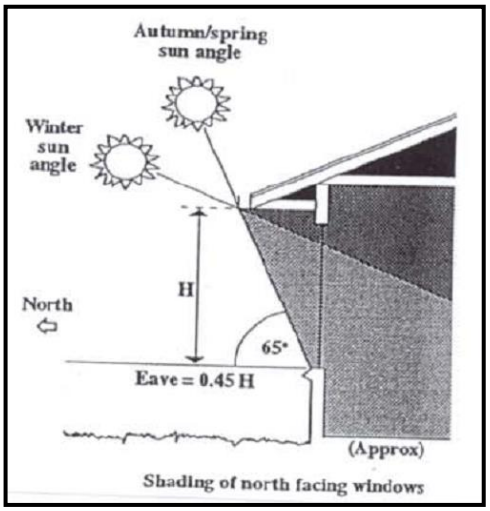


Figure 4-5 demonstrates the shading of north facing windows in buildings with optimum orientations. Eaves on north facing walls should be designed to completely shade windows in summer but allow the sun to shine through in winter. To calculate the distance the eaves should overhang, from the base of the window on an elevated plan, draw a line at 65°. Methods for shading the glass with awnings or vegetation should be considered.

4.1.4 Privacy

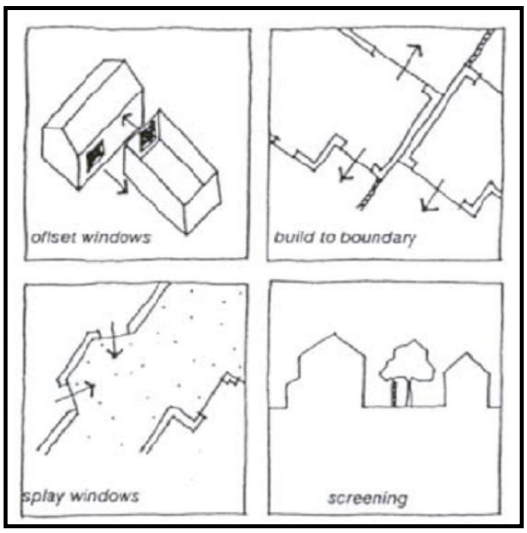
Objectives

Ensure privacy between dwellings.

Avoid overlooking of living spaces in buildings and private open spaces.

Controls

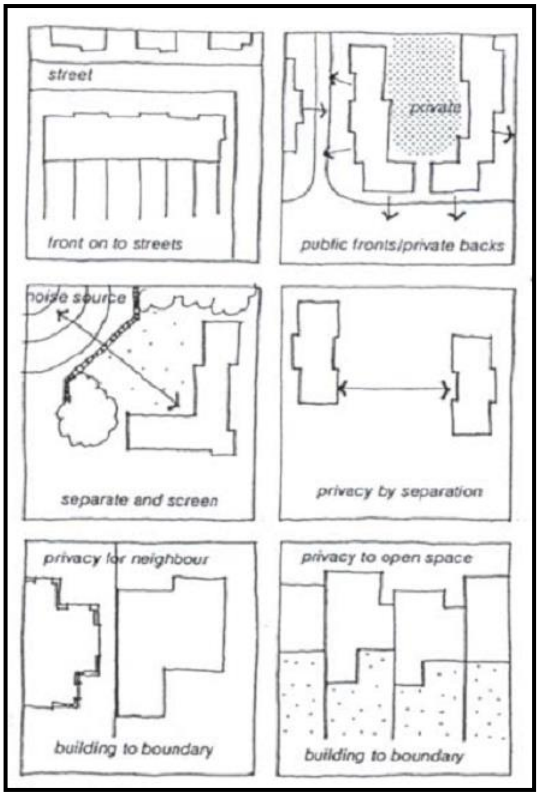
Figure 4-6: Locating windows to reduce overlooking



Visual privacy for adjoining properties and within development projects can be achieved by:

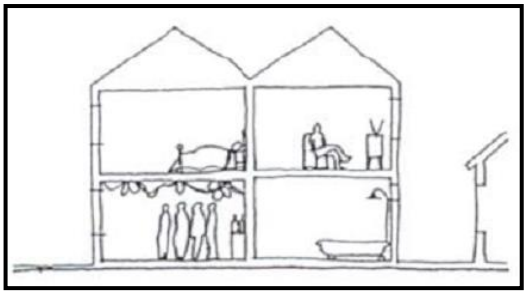
- using windows which are narrow, translucent, or obscured
- ensuring that windows do not face directly onto the windows, balconies, or courtyards of adjoining dwellings (refer to **Figure 4-6**)

Figure 4-7: Designing for privacy



- screening devices and landscaping opposing windows, balconies and courtyards
- windows and balconies of dwellings to be separated or screened from commercial areas so as to avoid overlooking of private open space (refer to **Figure 4-7**)

Figure 4-8: Designing for acoustic privacy



Noise generating areas of a development (e.g. driveway entrances to car parks, air conditioning plant and swimming pool areas) should be adequately screened or located away from the bedroom areas to minimise their impact on neighbouring areas (refer to **Figure 4-8**).

Bedrooms of one dwelling must not share walls with living rooms or garages of adjacent dwellings; and

Bedroom windows are to be at least 3 metres from shared streets, driveways and parking areas of other dwellings.

4.1.5 Private open space

Objective

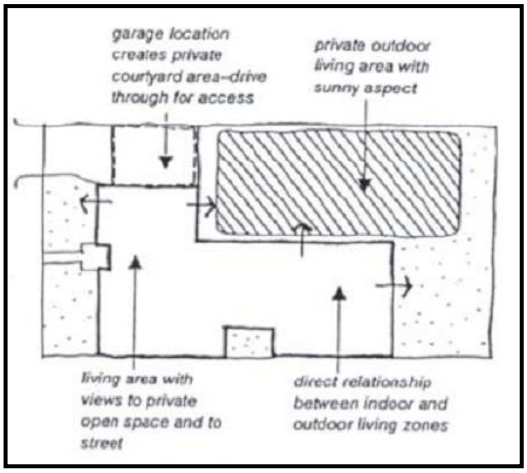
Provide open space for recreation within the site.

Maintain and enhance the existing streetscape and landscape character.

Provide for privacy and shade.

Controls

Figure 4-9: Optimising private open space



Whenever possible, open space is to be orientated to have a north easterly aspect and living areas are to open out thereon, whenever possible (refer to **Figure 4-9**).

Areas used for driveways, car parking, drying yards and service yards shall not be included as landscaped open space.

Recommended amount of private open space per dwelling is 75 m².

4.1.6 Setbacks

Objective

Setbacks should relate to the traffic function of the street and to setbacks of adjacent development. The objective of a setback is to:

- maintain, as a minimum, the following setbacks for both privacy and amenity
- set back buildings from roads so as to enable landscaping to provide for attractive streetscapes
- permit flexibility in the siting of buildings
- minimise adverse impact on adjacent and adjoining properties

In established areas, the objective is to blend new development into the public streetscape. The setback of buildings contributes to existing or proposed streetscape character, assists the integration of new development into the public streetscape, makes efficient use of the site and provides amenity for residents.

Controls

4.1.6.1 Side and rear setback

Council will generally consider setback applications on their merits provided that dwelling structures are adequately separated for privacy and overshadowing does not result

(including private open space and dwelling structures on adjoining land not in the same ownership). In addition, the wall proposed to be constructed adjacent to the allotment boundary must comply with the Building Code of Australia fire rating requirements and where the site can be viewed from a public place side and rear set backs shall be a minimum of 3 metres.

4.1.6.2 Front setback (building line)

Generally, Council will consider flexibility in front setbacks, however the following development standards are recommended.

In areas being newly-developed areas, setbacks (inclusive of verandah, porch etc) from the street boundary should be a minimum of 6 metres, however Council will consider setbacks in accordance with **Table 4-1** where it can be demonstrated that the setback is appropriate.

Table 4-1: Minimum front setbacks in new areas

Street Type	Minimum frontage setback (m)	Minimum side setback to corner street (m)
Local access street	3	3
Classified road	6	3

The setback may be averaged, providing no part of the building is setback less than 2 metres.

In established areas where the setback of an adjacent building is greater than 3m, infill development is to be setback:

- the same distance as one of the other adjoining buildings, provided the difference between the setbacks of the two adjoining buildings is less than or equal to 2 metres
- the average of the setbacks of the adjoining dwellings if the difference between the setbacks of the adjoining building is greater than 2 metres

The setback of buildings in the Heritage Conservation Area or near heritage items shall match that of adjacent development.

In establishing areas where the setbacks of adjacent buildings are 0-3 metres, infill development is to be set back the same distance as one or the other of the adjoining dwellings.

Garages are to be setback a minimum of 5.5 metres from the front property boundary to allow vehicles to stand on site.

4.1.7 Views

Objectives

1. To minimise, where possible, the obstruction of views from adjoining buildings or public places.
2. To maximise views from living areas within the allotment.

Controls

Step buildings to follow the slope of the land.

Minimise the height of buildings and planting on the highest part of the site.

Council may require an applicant to provide a survey showing the position of the proposal on its site, the location of adjoining buildings and the degree of view lost.

Retain and protect existing vegetation where possible.

4.1.8 Traffic safety and management

Objectives

Reduce the visual impact of garages, carports and parking areas on the streetscape and improve dwelling presentation.

Provide sufficient and convenient parking for residents, visitors and service vehicles.

Ensure vehicular and pedestrian safety.

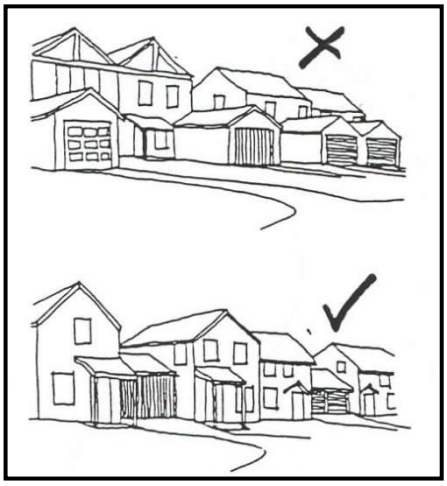
Encourage access design to form part of the overall landscape design.

Provide acceptable levels of access, safety and convenience for all road users.

Controls

Car parking and driveways

Figure 4-10: Preferred garage treatment



The visual impact of garages is to be minimised, as illustrated on **Figure 4-10.**

All garage and carport entries are to be set back from the front facade of the dwelling by a minimum of 1 metre, and a minimum of 5.5 metres from the front property boundary.

For residential development, the minimum standard of provision is detailed at **clause 3.4** of this plan.

Parking areas and driveways shall be designed in accordance with the current version of Council's Standards for Engineering Works. All driveways, paths, car parking areas are to be paved in brick pavers, bitumen, concrete or another approved manner. Use of decorative paving is encouraged.

Long, straight driveways are to be avoided, eliminated or appropriately screened to Council's satisfaction.

Paved area is to be minimised.

Access for one dwelling via right of carriageways is to be a minimum of 3.5 metres in width (excludes traffic control devices), except when it is more than 40 metres long where the minimum width increases to 5 metres.

4.1.9 Site facilities

Objectives

Design to integrate adequate and convenient site facilities such as storage, recycling and collection areas into the overall development.

Ensure site facilities are practical and easily maintained.

Controls

Garbage bins, waste recycling areas, mailboxes and external storage facilities should be adequate in size, durable, waterproof, blend in with the development, avoid visual clutter and be accessible to the users of the building and service vehicles.

Ensure garbage storage and waste recycling areas are not located adjacent to any residential habitable rooms.

Provide adequate internal storage and design internal layouts to allow the building to be re-used for other purposes in the future.

4.1.10 Energy efficient siting and layout

Objective

Achieve improved energy efficiency through the siting and design of all buildings.

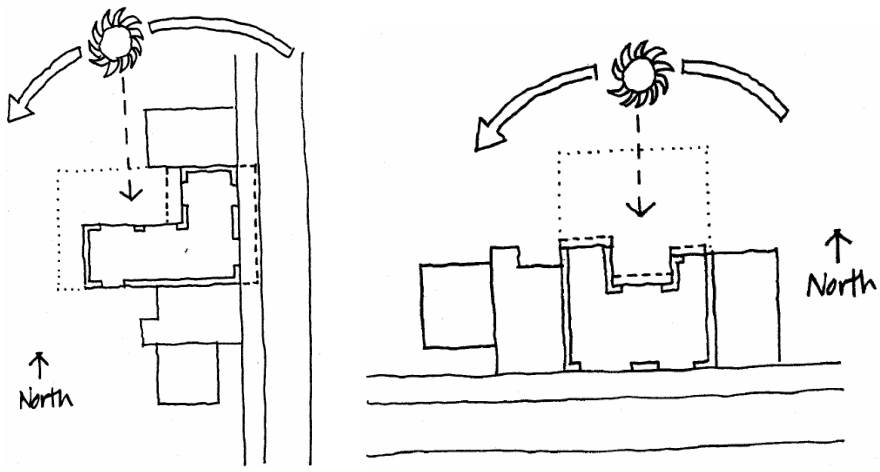
Building shape and orientation have a high impact on the energy performance of a building. A well designed building has the potential to reduce energy costs by up to 50%. The improved performance does not have to add to the project cost or change the appearance of a building.

Controls

Building shape and orientation are major influences that affect energy consumption. The most critical element of a building's form is the size and orientation of its windows. The shape of a building influences the amount of floor area that can benefit from daylight through windows. Daylight is generally useful to a depth of 4-6 metres from a window.

Buildings should be designed to ensure that much of the floor area is within a 4-6 metre distance of an external window. An elongated plan shape produces this characteristic, as will the use of an atrium or courtyard. Maximise north and south facades, whilst minimising east and west facades (refer to **Figure 4-3 & 4-11**).

Figure 4-11: Examples of building orientations to maximise energy efficiency



4.1.11 External window shading and internal and external lighting

Objectives

Integrate external window shading into the design of buildings to improve energy efficiency and comfort.

Maximise natural light to buildings and reduce the use of non-renewable energy resources.

Controls

Ideally, shading devices should be external.

North facing windows can provide valuable heat gain and light in winter but should be shaded from direct sunlight in summer.

East and west facing windows are difficult to shade in summer and should be minimised. South facing windows require no shading but can cause substantial heat loss in winter.

Maximise north and south windows and minimise those facing east and west.

For north facing walls provide horizontal shading devices such as awnings, upper floor balconies, pergolas, verandas, eaves and overhangs.

Where windows face east or west, vertical shading devices such as blinds, shutters, adjustable awnings and landscaping should be used.

Consider the location, shape, type and height of fully grown trees when using landscaping as a shading device.

Shading materials are to comply with C1.10 of the Building Code of Australia.

The choice of glass depends upon whether you want to maximise the sunlight or heat loss, or minimise heat gain into the building.

The use of skylights, light wells, and atriums can let additional daylight into a building although provision of shading in summer and possible heat loss in winter will need to be considered.

The need for artificial lighting can be reduced by the correct orientation and design of the building and the size and placement of windows and service areas which require high lighting levels (e.g. desks or workstations, by individual task lights).

Lighting costs can be reduced by selecting low energy lamps, ballasts and fittings which provide the desired level of illumination but consume 75% less energy. Lighting controls can be fitted to ensure that lights are not left on when not required. For instance, switches should be provided for separate zones within a large room and for task lights. Time switches or movement sensors should be employed for areas with sporadic use.

Lighting systems should be designed to supplement daylight in order to provide appropriate lighting levels for specific tasks.

4.1.12 Insulation

Objectives

Improve the energy efficiency and comfort of buildings by designing to make the best use of natural ventilation.

Controls

Windows should be oriented to take advantage of the cooling summer breezes. The position of internal walls and partitions should allow the passage of air through the building although, in some cases, ceiling fans may be required.

In cases where mechanical ventilation is necessary (e.g. kitchens, some computer rooms or areas where external noise levels are high), ensure that the system installed has appropriate controls which can cater for the particular use of the building whilst maximising the conservation of non-renewable energy.

Significant factors affecting natural air movement are:

- building form and the location of windows
- site and landscaping features
- internal planning and design

Ventilation can be achieved in the following ways:

- cross ventilation, where air enters a building from one side passing out on the other, replacing warm inside air with cooler outside air
- stack effect, where warm air rises through the height of the building, and is replaced by cool air at the base of the building
- artificial ventilation, where fans are used to extract warm air allowing it to be replaced by cool air

For effective ventilation:

- locate openings on opposite sides of rooms
- locate windows and openings in line with each other, and where possible, in line with prevailing breezes - a low level inlet and high level outlet is preferable
- use water features such as fountains in strategic positions to cool breezes
- consider strategic positioning of vegetation to modify wind direction
- use ceiling fans to provide a high level comfort on most hot days, at low running costs

Use window types that provide security while allowing for good ventilation.

Design buildings with a maximum internal dimension between openings of 14m to maximise natural ventilation without compromising other design elements.

Ensure ventilation can be achieved by permanent openings, windows, doors or other devices, which have an aggregate opening or openable size of not less than 5% of the floor area of the room.

In restaurants or buildings with kitchens where mechanical ventilation is needed, use those which operate directly above cookers, rather than designing high ventilation rates through the whole kitchen.

4.1.13 Space heating and cooling

Objectives

Where thermal comfort cannot be achieved through building design elements choose energy-efficient and environmentally-friendly space heating and cooling systems.

Controls

If air conditioning is necessary, install a unit with sufficient controls to ensure that it is used only when required. Consider partial air-conditioning directed to areas, rooms where it is needed, whilst the rest of the building remains naturally ventilated.

When choosing heating, consider which type is most suited to your particular needs, i.e usage patterns, location of staff etc. As with other equipment select heating devices that have appropriate controls to cater for the particular use of the building whilst maximising the conservation of non-renewable energy.

Use passive methods of minimising heat gain.

Design buildings with window shading, appropriate insulation, and sealed against hot air infiltration during the day, incorporating ventilation and natural cooling.

4.1.14 Working hours – residential and business

Objectives

Ensure the operations of the proposed development will not cause nuisance to residents by way of working hours.

Controls

Council seeks to ensure that the hours of operation of businesses, commercial premises and places of work are compatible with the type of activities carried out on the premises and the relationship with neighbouring residential occupiers.

Where residential buildings are physically attached to non-residential buildings, hours of operation should not normally fall outside the hours of 7.30am and 6.00pm Monday to Friday and 7.30am and 1pm on Saturday.

Hours of operation will depend on the type of use proposed, its location in relation to residential properties and the impact of extended hours on the occupiers of those properties.

Where development sites are within a residential area, hours of work during site preparation and construction should not normally fall outside the hours of 7.30am and 6.00pm Monday to Friday and either 8.00am to 2.00pm on Saturday or 8.00am to 2.00pm on Sunday.

4.1.15 Subdivision

Note: Reference chapter 7 of this Plan. – All roads etc, are to be designed and constructed in accordance with the current version of Council's Standards for Engineering.

Objectives

- Control the density of development in order to manage population growth and maintain the character of urban areas.
- Promote lot sizes of appropriate size to accommodate residential dwellings and related private open space.

To encourage subdivision layouts that:

- allow integration of neighbourhoods between "natural" boundaries or barriers and connections between the neighbourhoods

- minimise environmental impact by ensuring subdivision into residential lots only occurs on land free of development constraints
- are based on a hierarchy of roads for the efficient movement of vehicle traffic
- focus open space on the drainage constraints and network
- incorporate water sensitive urban design principles into subdivision design
- encourage northern orientation of future dwellings for energy efficiency benefits and passive solar access
- ensure residential lots have a sufficient area to allow for the siting of a dwelling and ancillary buildings (including private open space, vehicle access and parking)
- ensure residential lots face public areas (including open space areas) for passive surveillance
- provide for protection/enhancement of visually prominent sites/locations
- protect riparian areas and native vegetation areas

Qualifications for servicing

(i) Minimum lot sizes quoted by the LEP for zones R1, R2 and R5 (equal to or less than 2,000m^2) are for serviced land where each lot created will be connected to reticulated water and sewerage services.

(ii) The minimum lot size quoted for zones R5 (with lot areas greater than 2,000^2) and RU5 are for unserviced land.

(iii) For unserviced land the lot size quoted depends on a satisfactory detailed investigation on:

- Accumulative water quality issues associated with wastewater management of effluent disposal and stormwater disposal for the subdivision proposal and
- The provision of an adequate water supply to each lot for drinking (potable supply), ablutions and firefighting purposes. (Chapter 5.3 discusses development standards for individual rural dwellings and should be noted for the purpose of these investigations).

Controls

Site area

Battle-axe lots are generally not supported. In calculating the area of a battle-axe allotment, the access ways which includes any rights-of-carriageway/access, are to be excluded.

Building envelopes

Allotments should be able to accommodate a building envelope of 150m^2 with the minimum dimensions of 10m by 15m, within a 6m front building setback and a 1m side and rear setback and clear of any easements.

Lot orientation

The following design techniques are to be adopted to maximise opportunities for solar access to allotments and to allow for the consequent design and siting of energy efficient houses:

- align streets east-west and north-south. Aim for north-south streets within 20^o west and 30^o east of true north and east-west streets within 30^o south and 20^o north.
- allotments on east-west orientated streets need to have greater depth and width to make best use of solar access.
- allotments on south side of street should be sufficient depth so buildings can be set well back to allow north facing rooms to look onto larger front yards.
- allotments on north-south streets to be of sufficient width to allow for private open space on the north side and for houses to be built on the south boundary.
- taking into account views and topography, lot orientation and layout should enable the majority of dwellings to be designed so that the main living area receives not less than 4 hours of sunlight per day between 9am and 3pm.
- regular rectangular shaped allotments maximises siting opportunities and increases potential lot yield.
- on sloping sites, north-facing sites improve opportunities for solar access.

Lots shall face toward public open space areas, vegetation conservation areas and public roads to encourage passive surveillance from dwellings over these public spaces to assist with safety and security.

Bicycle and pedestrian movements

Provision for bicycle and pedestrian movements are to be provided throughout the subdivided area.

Cyclists can be integrated into the road network through a combination of on and off road measures together with bike parking at clusters of community and commercial facilities (refer Council's Bicycle Strategy 2007).

To encourage cycling as an easy transport alternative, on-road and off-road cycle networks will be clearly highlighted with signposting and pavement logos. Engineering works, including signposting and line marking must comply with the appropriate engineering standards.

Paved footpaths are to be provided in accordance with the current version of Council's Standards for Engineering, and the hierarchy of roads (e.g. both sides for higher order roads, single side only on lower order roads).

Retention of significant environmental features

Where significant environmental features such as natural landforms, remnant native vegetation, wetlands or natural drainage lines or water courses occur on a development site, they shall be conserved and or enhanced. Subdivision design shall incorporate these elements as much as can practicably be achieved. This may necessitate larger lot sizes in order to maintain these features.

Road reserves

Should remnant vegetation be located in either existing or proposed road reserves it shall be conserved in the design and construction process. Access to new lots should be located in an alternate position or to take advantage of existing road reservations where they exist. Council will require that access to lots (driveways) be nominated in Section 88B instruments in order to protect existing vegetation and to reduce their visual impact.

Service infrastructure is also to be located in such a way as to ensure minimal environmental disturbance.

Landscape embellishment

A condition of Council's subdivision approval will be to carry out landscape treatment of lots and public road reserves with the objective of enhancing vegetation and specifically native vegetation in the locality. The landscape treatment shall be designed to mitigate the:

- environmental impact of the development;
- visual obtrusiveness of new development and enhance the visual connection of the newly created landscape with any remnant native vegetation in the locality.

Street trees

Street tree planting is required where new or existing lots are developed in order to create a consistent theme. Street trees add to the areas character and reduce the visual impact of new development. They have environmental benefits of reducing the impacts of sun in the summer months; reducing global warming and when natives are used providing possible habitat for native fauna.

Important Street Tree principles are:

- Preserve vistas to and from significant heritage buildings and to rural areas;
- Reinforce traditional exotic planting themes and prominent gardens where they exist;
- Retain and enhance significant existing trees and remnant native areas;
- Reinforce the planting themes of the central town or village area.

4.2 Non-residential development – retail, commercial and industrial

Note: **Clause 4.2** of this plan applies to new business, industrial and other non specified residential development irrespective of the zoning of the land.

Floor Space Ratio (FSR) controls on bulk and scale are found in the LEP 2009 clauses 4.4 and 4.5 for zones B2, B3, B4 and B6.

Heritage controls are found in **chapter 3.1** of this plan.

Separate controls for the business zones of Goulburn's CBD are found in **Appendix I**, "Good Design Statement" 2005.

4.2.1 Retail and commercial (general)

Chapter 8 contains site specific provisions for:

- The Marulan Local Business Centre – George Street Marulan, Chapter 8.4 and
- The Goulburn City Business District – Chapter 8.6.

These chapters relate to Council's main retail and commercial areas.

Retail and commercial development outside of these areas should refer to the general principles outlined in these sub-chapters.

Heritage principles are also found in Chapter 3.1. Previous design principles which are still worth referencing are contained in "Goulburn Mulwaree Good Design Statement", September 2005 – Appendix I.

4.2.2 Design principles – industrial

Objectives

Encourage a high standard of architectural design which contributes to a visually cohesive character.

Encourage building design which allows energy efficient development and good solar access.

Controls:

Large blank wall surfaces visible from a public place (eg road) shall be articulated by structural variations and/or blend of external finishes.

Prominent elevations and 'areas of visual importance' are to have a building form of significant architectural and design merit, with special attention to scale, form, external finishes, setbacks, height limits and landscaping.

Areas of visual importance include:

- gateway entries to the City, township or village
- developments than can be viewed from residential and public areas
- Heritage Conservation Area and heritage items

Prominent elevations include:

- arterial road frontage
- public reserve exposure.
- Visual

4.2.3 Visual quality – industrial

Objectives

Identify areas of visual importance.

Limit external storage of goods.

Controls

External storage areas shall not be visible from a public place.

External storage areas are to be:

- located behind a building, or
- suitably screened (with dense landscaping and/or solid fencing);

In assessing development applications involving external storage of goods, Council shall take into consideration:

- height and arrangement of stored goods
- safety issues
- access arrangements
- aesthetics and ease of maintenance

4.2.4 Building setbacks – industrial

Objective

Provide an open streetscape which will enhance visual quality of development and the urban landscape.

Controls

All setback areas are to be landscaped (refer to **Figure 4-11**).

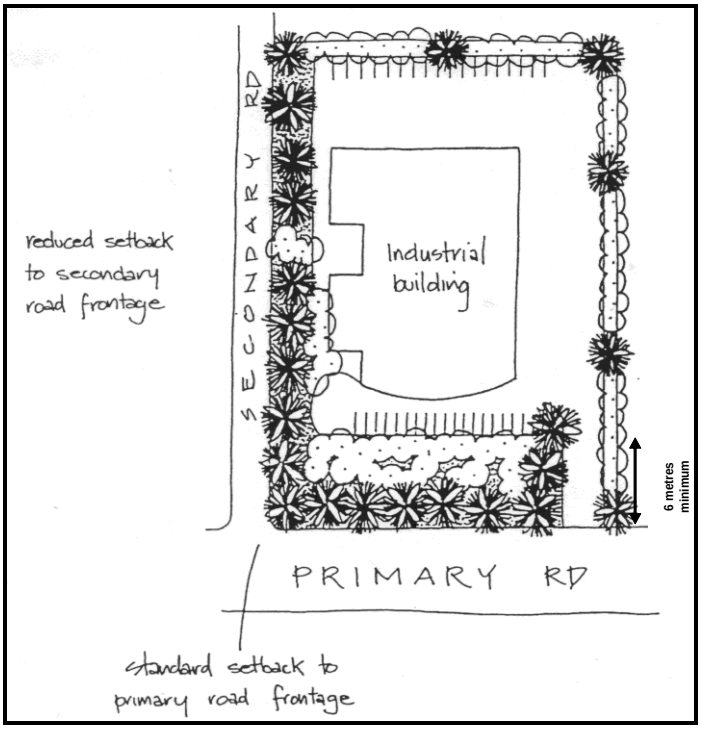
No parking will be permitted within setback areas.

Minimum requirements:

- frontage – 6 metres;
- side and rear – setbacks required for corner allotments (secondary road frontage) and in areas of visual importance.

Note: Setback distances are proportionally related to required building materials so as to satisfy wall fire ratings – refer to Building Code of Australia for details.

Figure 4-11: Preferred industrial setbacks



4.2.5 Height – industrial

Objectives

Encourage building forms to respond to topography and the site's relative position to other allotments and the streetscape.

Maintain the visual quality of the locality.

Controls

On land within a residential Zone, a maximum 8 metre height limit is recommended (distance measured vertically from any point on the roof of the building to the ground level immediately below that point).

Variations on land within such zones will only be considered where it can be demonstrated that:

- the proposed height is in keeping with the character of the locality

- it is not visually obtrusive
- the additional height is required due to the nature of the proposal
- the overall design, including landscaping and building materials, reduces the impact of height and bulk

On land not affected by the height of building maps, no height limit is specified, however the height (as defined above), shall take into account and address the following matters in the development application's, statement of environmental effects:

- the proposed height is in keeping with the character of the locality
- it is not visually obtrusive
- the height is required due to the nature of the proposal
- the overall design, including landscaping and building materials, reduces the impact of height and bulk

4.2.6 External materials and finishes - industrial

Objectives

Promote the use of appropriate external finishes and innovative use of materials.

Ensure that industrial development contributes to the streetscape and visual aesthetics of the area.

Controls

The external walls of industrial buildings shall be profiled colour treated cladding or masonry materials, or a combination of both and incorporate visual relief elements.

Particular consideration shall be given to the design and use of materials for the street elevation of industrial buildings.

Where the side or rear elevation of an industrial building is visible from residential or public areas, colours and wall profiles should be selected to minimise their visual impact.

4.2.7 Noise and vibration – general requirements

Objectives

Minimise the impact of noise and vibration by proposed operations and on proposed developments of existing and projected future sources of noise and vibration.

Controls

Council is the appropriate regulatory authority for noise related activities, such a heavy industries, mining, extractive industry, motor racing tracks and the like under the *Protection of the Environment Operations Act 1997*. If development sensitive to noise were to be approved on adjacent properties to the noise source, Council will be responsible for regulating any resulting noise impacts.

Council recommends applicants utilise the following documents to assist them in making decisions relating to acceptable noise levels for noise generating and noise sensitive developments:

- NSW Industrial Noise Policy
- Environmental Criteria for Road Traffic Noise
- Noise Guide for Local Government

The above documents are available from the NSW Environment Protection Authority website: www.environment.nsw.gov.au/noise

The impact of noise generated by a proposal can be minimised to comply with the statutory requirements in different ways. The following guidelines address means of achieving the standards.

Incorporate sound proofing for machinery or activities considered likely to create a noise nuisance during design development.

Locate noisy operational equipment within a noise insulated building away from residential areas.

Design logistically efficient business practises to minimise the use of equipment, movements per site, and number of vehicle movements per site per day.

Where sites adjoin a residential area, limit the number of hours and times at which mechanical plant and equipment is used in conjunction with the measures described above.

Ameliorate the noise and vibration impact of transport operations by using appropriate paving or track mounting and installing acoustic barriers as required to meet standards on neighbouring uses.

Incorporate appropriate noise and vibration mitigation measures into the site layout, building materials, design, orientation and location of sleeping recreation/work areas of all developments proposed in areas adversely impacted upon by road or rail related noise and vibration.

4.2.8 Air pollution - industrial

Objectives

Minimise air pollution caused by new development.

Controls

The operation of any new premises and any machinery or plant to be installed or any process to be used must not cause emissions contrary to the *Protection of the Environment Operations Act 1997* and Regulations. Applicants will need to demonstrate that these standards are met. Approvals may also be required from the NSW Environment Protection Authority for some types of development.

Machinery and operations should be designed to minimise the emission of air impurities. This includes minimising vehicular movements to and from the site.

Restricting the hours of operation may reduce any emissions to an acceptable level.

4.2.9 Mixed use development – industrial and residential

Objectives

Ensure that industrial development does not have an unacceptable impact on existing residential development within the same zone or at the interface between industrial and residential development.

Controls

Building setbacks between residential (existing) and proposed industrial development shall be 9m.

Height of industrial buildings in a mixed use situation are to be consistent with nearby housing development.

Traffic management and calming measures are to be recommended on roads shared by both industrial and residential traffic.

Change of use in mixed use situations are to detail and include amenity protection measures for existing residential development.

These measures may include (but not limited to):

- additional landscaping provisions (reference chapter 3.3);

- additional amenity considerations and actions;
- additional privacy provisions built into the proposal (reference chapter 4.1.4);
- traffic safety and management provisions (reference chapter 4.1.8);
- industrial design to 'fit' with residential streetscape and character (reference chapter 4.1.9);
- noise and vibration generation mitigation measures (reference chapter 4.2.15);
- reduce hours of operation (reference chapter 4.2.18);
- use of hard (solid barriers) and soft (vegetation) buffers at the interface between residential and industrial developments (principles of the use of buffers are contained in chapter 5.8).

5 Principal development controls – rural

5.1 Intensive agriculture

Objective

To ensure the following forms of intensive agriculture are conducted in a sustainable manner: horticulture, intensive livestock agriculture, turf farming and aquaculture.

Controls

Sustainable agriculture is defined as the use of farming practices and systems which maintain or enhance:

- the economic viability of production;
- the natural resource base; and
- other ecosystems which are influenced by agricultural activities.

The principles of sustainable agriculture are:

- farm productivity is sustained or enhanced over the long term.
- adverse impacts on the natural resource base of agriculture and associated ecosystems are ameliorated, minimised or avoided.
- residues resulting from the use of chemical in agriculture are minimised.
- the net social benefit derived from agriculture is maximised.
- farming systems are sufficiently flexible to manage risks associated with the vagaries of climate and markets (Standing Committee on Agriculture 1993).

Applications for intensive agriculture should be accompanied by a plan of management which addresses the principles of sustainable agriculture. The application may be referred to Department of Primary Industries or a consultant for advice.

Property owners should contact NSW Workcover for the requirements for the storage and use of chemicals.

To reduce environmental impact of agricultural activities, an assessment of the capability of the land should be undertaken. Consideration should be given to the sustainability of different soil landscapes and the suitability of steep slopes for agricultural activities.

Dwellings should be sited to maintain the continuity, and minimise the disturbance, of agriculturally productive land. For further relevant advice refer to the following:

- Goulburn Mulwaree Council (December 2006) The Rural Living Handbook 2007-2009, A guide for rural residential landholders
- Department of Primary Industries' Sustainable Agriculture Policy

5.2 Subdivision

Objective

Control the density of development in order to limit population growth and maintain the rural character of the area.

Promote lots of sufficient size to conduct agriculture and other rural pursuits.

Controls

Minimum lot sizes are specified in the lot size maps to the LEP 2009.

Lots should be designed to maximise useable areas of the site and have regard for the topography.

Subdivision design should provide opportunity for the retention of significant landscape features including remnant vegetation, rock outcrops, water elements, appropriate location of boundary lines and building envelopes.

Each lot shall contain a development site that can accommodate a dwelling house, private open space, effluent disposal area and vehicle access in a way that is consistent with the constraints identified on site (eg. bushfire, flood hazard, steep slopes and significant vegetation).

Areas for on-site sewerage disposal need to be a minimum of 150 metres from the Wollondilly and Shoalhaven Rivers or a major water storage dam (Sooley Dam & Lake Ross), 250 Metres from a licenced well, 100 metres from other rivers, creeks and perennial watercourses, 100 metres from an intermittent watercourse, defined as having banks and beds or ponds or remaining wet for considerable periods between rainfall events and which may be characterised by supporting moisture tolerant vegetation or 40 metres of a dam or drainage depression, defined as low points that carry water during rainfall events but dry out quickly once rainfall has ceased.

Note: Reference the GM LEP 2009, clause 7.3 and chapter 7 of this Plan.

Specific provisions – Battle axe allotments and right of carriageways:

Battle axe allotments and right of carriageways must have a minimum road frontage of 20 metres. The minimum width must continue along the length of the access handle/way to accommodate a driveway and public utility services. The area of a right of carriageway forms part of the minimum lot area required for the servant/burdened allotment.

Right of carriageways and access handles shall be provided with a driveway (minimum 4m wide gravel surface) complying with state agency requirements for intersection treatment, sedimentation control, bushfire protection and the like. All works shall be completed by the developer prior to release of any Subdivision Certificate.

Electricity provisions shall service each new lot via a satisfactory inter-allotment arrangement. The extension of services along the battle axe handle or right of carriageway is only permitted where alternative arrangements cannot be provided. All works shall be completed by the developer prior to release of any Subdivision Certificate.

All road, access ways etc. shall be designed and constructed in accordance with the current version of Council's 'Standards for Engineering.

5.3 Rural dwellings

Note: Reference Goulburn Mulwaree LEP 2009, clause 4.2A.

Objective

To ensure the appropriate form of residential development in the rural zones within the Goulburn Mulwaree local government area.

Controls

5.3.1.1 General controls

The general standards for dwelling houses proposed in Rural zones are detailed below:

- orientate living areas to the north
- maintain front setback requirements of:
  - 5 metres in RU5 Village Zone and 20 metres in R5 Large Lot Residential Zone; and
  - 50 metres in the RU1 Primary Production Zone,RU2 Rural Landscape Zone and RU6 Transition Zone.
- and colours are to be consistent with the rural character of your local area:

- respect your neighbours and your own future amenity by careful siting of your dwelling:
    - build well back from the public roads, especially gravel roads;
    - build below ridgelines to respect the rural views;
    - build well away from nearby intensive rural developments (eg poultry sheds).
- Notwithstanding the bushfire requirements you can and should screen your building site by vegetation. It will help reduce the visual impacts of your buildings, provide shade from the summer sun, assist global warming and where natives are used, provide habitat for native fauna.

- Where significant environmental features, such as natural forms, remnant native vegetation, wetlands or natural watercourses and drainage lines occur on your land, they shall be avoided for building purposes, conserved and or enhanced.

Additional dwelling design principles are detailed in Chapter 4.

Note:

1. Free copy of the "Rural Living Handbook 2007-2009", a guide for rural residential landholders is available from Council.
2. Do not bring on site illegal temporary structures to live in, for example containers.
3. Remove any existing illegal structures.

Site access

All dwellings must have legal and properly constructed access by way of a public road. Where a new road is to be constructed it shall be constructed in accordance with Chapter 7. Where an existing road or right-of-carriageway is substandard, it shall be improved to provide an all weather pavement to the satisfaction of Council.

Each dwelling is to be provided with an adequate all weather access to enable satisfactory vehicular passage from the public road into the allotment. Where kerb and guttering does not exist, this will generally require bitumen sealing from the road shoulder to the boundary and in most cases will require the provision of a piped gutter crossing to the satisfaction of Council.

A right-of-carriageway may be used to provide access only where the right-of-carriageway traverses only one allotment of land and does not serve any other allotment of land other than that on which the dwelling is erected.

5.3.1.2 Water supply

Every dwelling erected on land to which this Plan applies will be required to have not less than 46,000 litres of roof water storage for domestic purposes if a reticulated, disinfected water supply is not available.

5.3.1.3 Effluent disposal

If a reticulated sewerage or effluent disposal scheme is not available to the land, all effluent and wastewater shall be disposed of on-site. Each allotment must have adequate area available for an on-site sewage management facility.

A wastewater management assessment report will be required, to confirm acceptability of proposed effluent disposal sites. The Wastewater Management Assessment Report need not be a major undertaking but should consider factors such as soil profile to one and a half metres, climate (mean monthly rainfall and evaporation rates), terrain, aspect, maximum potential effluent generation, the impact of any existing wastewater management system and the sizing of a sustainable effluent management area (EMA).

Reference should be made to the principles contained in the guidelines entitled 'On-site Sewage Management for Single Households' (Department of Local Government, 1998) and AS/NZS 1547-2000 'On-site Domestic Wastewater Management' (Standards Australia, 2000) in this regard. Properties located in the Sydney Drinking Water Hydrological Catchment Area will be subject to the provisions of the *State Environmental Planning policy (Sydney Drinking Water Catchment) 2011.*

The following are the recommended buffer distances (overland flow path) for effluent management areas:

- 150 metres from the two major rivers in the local government area – the Wollondilly and Shoalhaven, for full length of each river as defined on topographic maps;
- 100 metres from other rivers, creeks and perennial watercourses;
- 100 metres from intermittent watercourses, defined as having banks and beds or ponds or remaining wet for considerable periods between rainfall events and which may be characterised by supporting moisture tolerant vegetation;
- 40 metres from drainage depressions, defined as low points that carry water during rainfall events but dry out quickly once rainfall has ceased;

- 150 metres from Sooley Dam and Lake Ross;
- 250 metres from a licenced bore (well).

Applicants should be aware that depending upon the abovementioned factors, the area of an existing single allotment within a Village may not be adequate for the on-site disposal of effluent. All on site wastewater systems are to operate in accordance with conditions of approval.

5.3.1.4 Electricity supply

An electricity supply must be provided to the dwelling in accordance with the requirements of Country Energy. If power is currently not available to the allotment, building plans will only be released when notice is received from Country Energy that satisfactory arrangements have been entered into for the provision of power to the site.

Proposed alternative methods of power supply may be considered by Council. The approval of alternative methods of power supply are at the discretion of Council.

5.3.1.5 Vegetation retention

Site development away from vegetation to avoid conflict and need for removal to provide asset protection zones.

5.3.1.6 Fencing

Fences shall be of a design that is sympathetic to the rural character of the locality.

5.3.1.7 Rural workers dwellings

Objectives

The provision of sound parameters to facilitate the orderly development and construction of rural workers dwellings

Controls

Rural workers dwelling proposals must demonstrate at the development application stage that:

- It is required to support the main activity of agricultural or a rural industry on the land subject land holding;

- It is and ancillary to the principle dwelling and is on the same lot of land as the principle dwelling;
- The intended occupiers will be employed for the purpose of agricultural or a rural industry on the subject land holding.

5.4 Rural dual occupancy

Objective

Preserve the amenity of rural areas where dual occupancies are permissible.

Controls

A dual occupancy (attached or detached) shall only be erected if it can be demonstrated that adequate arrangements have been made for the provision of a potable water supply and the disposal of sewerage and stormwater from each dwelling.

5.5 Rural sheds

Objective

To ensure the appropriate use of sheds within the rural zone within the Goulburn Mulwaree local government area.

Controls

Sheds are controlled to ensure they are not used for human habitation, except where approval has been given through Development Consent. Temporary accommodation shall be limited to a period of 12 months whilst a dwelling is being built. These sheds will need to be reverted back to non-habitable status when the dwelling is suitable for occupation.

A toilet, shower, hand basin and fireplace may be constructed for amenity purposes in rural sheds provided the shed is not used for human habitation (these facilities will require the lodgement of a Section 68 Application under the Local Government Act 1993)

5.6 Rural industries

Objective

To provide for business activities including the processing of primary products produced in the area or the servicing of agricultural equipment.

Controls

Measures that protect the amenity of surrounding residents should be incorporated into designs. These include landscaping, sound attenuation and buffers.

The following should be considered in selecting a site for a rural industry:

- sites with less exposure to neighbouring dwellings and noise sensitive areas
- sites with good vehicular access
- sites which can accommodate landscaping to screen the rural industry
- sites with suitable land capability
- sites with sufficient area for expansion
- refer also to Chapter 6.

5.7 Boarding and/or breeding kennels for dogs and cats in rural areas

Objectives

To ensure new kennel development implements best practice design and that applicants undertake all necessary measures to minimise the impacts on adjoining land users.

Controls

5.7.1.1 Floor materials of kennels

The floor of the kennels is to be constructed of concrete and to be property drained to Council's satisfaction.

5.7.1.2 Distance of kennels from residences and occupancies

No kennels are to be erected within 100m of any adjoining residences or occupancy.

5.7.1.3 Exercising of dogs

Dogs are to be exercised under supervision

5.7.1.4 Acoustical compliance

Any building used for the housing of animals is to be soundly constructed and soundproofed to prevent any noise nuisance. Noise levels emitted from the premises are not to exceed 5dB(A) above the existing background levels.

The occupation of the kennels will not be permitted until Council is furnished with a certificate from an Acoustic Engineer to this effect.

5.7.1.5 Storage and preparation of food

All feed is to be stored and prepared in a properly constructed building capable of being easily cleaned, maintained and kept free of vermin.

5.7.1.6 Animal confinement

Dogs and cats shall at all times be kept within the confines of the kennels and exercise yards except during their receipt or release.

5.7.1.7 Storage and disposal of excrement

All excremental waste and loose hair, if not removed immediately, is to be collected in an impervious fly-proof container which is to be emptied and cleansed at least once in every seven consecutive days. All such wastes shall be deposited at a Council agreed waste disposal depot and shall not be incinerated or buried on the premises

5.7.1.8 Drainage

The kennel drainage system shall be constructed so as to ensure the collection of all waste water which shall then be transported through earthenware or plastic pipe to a suitable arrestor pit thence to a properly constructed absorption drain. Details of all proposed drainage is to be submitted and approved by Council.

5.7.1.9 Landscaping

The proposal shall use natural screening and trees and provide landscaping of sufficient height and density adequate to screen the development. The landscaping is to be established within 6 months of commencement of the development. A landscape plan is to be submitted with the development application.

5.7.1.10 Environmental management plan

An environmental management plan which addresses, but is not limited to the following matters:

- treatment and disposal of litter and effluent
- odour management
- noise management
- food storage and vermin control

- erosion control measures
- water and drainage management
- chemicals and fuel storage
- complaints register
- landscape plan

5.8 Hazardous chemicals

Objective

Chemicals such as fuel, fertiliser and pesticide are commonly used to help run rural properties. These chemicals are often dangerous, some are flammable, most are poisonous, and all can be harmful to the environment if used incorrectly.

This plan aims to minimise the environmental impacts of hazardous chemical use on rural properties within the Goulburn Mulwaree local government area.

5.8.1.1 Chemical Storage

All chemicals used on site should be stored in an area specially designed for chemical storage. Any proposed chemical store must incorporate the following features:

- a separate, well-ventilated cupboard or building used only for this purpose, located away from houses, pumps, tanks, waterways and animals.
- contains an inventory, copies of labels and Material Safety Data Sheets (MSDS).
- allows storage in a cool dry place.
- some form of spillage containment or bunding.
- shelving made of impervious materials – for small quantities of chemicals, place containers in drip trays.
- liquids should not be stored above solids.
- a locked storage area.
- clearly sign-posted storage area (e.g. ‘Chemical Store – Keep Out’) and install a no smoking sign.

5.8.1.2 Chemical transport

Everyone transporting chemicals has a duty of care and a responsibility to carry out tasks in a manner that will not cause harm or injury to themselves, other people, their property, animals and the environment.

Before moving chemicals, information on the transport requirements of individual chemicals included on container labels or Material Safety Data Sheet should be consulted and followed.

Make sure the vehicle is roadworthy and can safely transport chemicals. Chemicals should be placed inside a tray of some kind to contain any spillage. Chemicals must not be included in the same compartment as the driver and passengers, food or drinks, or animals.

Items classified as 'Dangerous Goods' must not be transported in large quantities. Private vehicles should transport less than 100 kilograms or 100 litres of farm chemicals at a time. Chemicals should be loaded securely so items cannot move or fall over time. Different classes of chemicals should be stored separately.

5.8.1.3 Disposal of chemicals and containers

After chemicals have been applied according to the supplier's instructions, any chemical containers and any unused chemicals must be disposed of in an environmentally responsible manner. The disposal of chemical concentrate on-site or on farm is prohibited.

DrumMUSTER – to solve the problem of what to do with used non-returnable chemical containers Avcare, the National Farmers Federation, the Veterinary Manufacturers and Distributors Association and local government have developed the drumMUSTER scheme. A levy has been applied to non-returnable chemical containers to fund the collection and recycling scheme. Contact Council to find out more details about this program.

Used chemical containers should be rinsed on fallow ground away from drains and waterways. When rinsing chemical containers, personal protective equipment, as specified by the supplier, should be worn. Containers must be triple-rinsed before being available for drumMUSTER collection.

5.9 Rural land use conflict

Objectives

To ensure that rural development occurs in such a way as to minimise land use conflict.

5.9.1.1 Buffer distances

Rural dwellings and proposed dwelling envelopes are to be separated from other rural landuses in accordance with **Table 5-1** below. This is to minimise negative impacts on rural dwellings from agriculture and rural industry by way of dust, fumes, odour, spray drift, light and noise. Failure to ensure adequate setbacks can lead to landuse conflict, which has the potential to significantly impact on rural production, with resultant adverse effects on local employment and economic activity. As a general principle, all required buffers are to be provided on the land subject of the development proposal.

Agriculture, forestry and associated rural industry are significant sources of economic activity and employment. Because of this, rural dwelling development is a secondary, or ancillary, use of rural land and should not adversely impact on the continuing viability of these industries, including their ability to adapt to changing market and environmental circumstances, through new techniques, approaches and crops. On this basis, Council will not accept the imposition of restrictions on the use of adjoining rural lots in lieu of appropriate buffers within the designated large lot residential areas.

Where new dwellings are proposed on existing vacant lots, which have dwelling entitlements, the buffers indicated in **Table 5-1** will not necessarily apply. In such cases, Council will nonetheless require the maximum practical buffer possible and the provision of a suitable vegetated buffer where necessary.

In the case of major recreation facilities (eg. motor racing tracks), dwellings proposed closer than the recommended buffer distance, at a minimum should comply with industry best noise insulation standards.

5.9.1.2 Variations to buffers

The buffers indicated in **Table 5-1** are only provided as a guide. Council has the discretion to either reduce or increase the required buffer, depending on the specific circumstances of the proposal.

The required buffers may be reduced if, in the opinion of Council, the development will not be adversely affected by the use of adjoining land. In assessing whether reduced buffers are acceptable in a particular case, Council will consider the following variation criteria:

- the extent, nature and intensity of the adjoining land use
- the operational characteristics of the adjoining land use

- the external effects likely to be generated by the adjoining land use (ie dust, fumes, odour, spray drift, light and noise) and their potential to cause conflict
- the potential of adjoining land to be used for various commercial activities including agriculture, quarries, rural industries etc
- any topographical features or vegetation which may act to reduce the likely impacts of an adjoining land use
- prevailing wind conditions and any other climatic characteristics
- any other mitigating circumstances

Where a variation is proposed, the applicant must provide a written statement to Council addressing the variation criteria, with an explanation as to how potential conflicts can be addressed. In keeping with ecologically sustainable development principles, a precautionary approach will be taken when assessing buffer variations.

Council may also consider relaxation of the buffer requirements in **Table 5-1** where it can be demonstrated that the adjoining land is extremely unlikely to be used for agriculture, forestry, rural industry or other such user. In such cases, the adjoining land will need to comprise of remnant vegetation either with high conservation value or located on land with limited development potential, such as extremely steep slopes, narrow gullies or wetlands.

5.9.1.3 Vegetation buffers

Vegetation buffers may be used to reduce the total buffer distance required between dwellings and adjoining land uses. However, caution must be exercised when considering the appropriateness of a vegetation buffer. Vegetation buffers take time to establish, require on-going maintenance and are subject to storm and insect damage. Trees only have a limited life span. Therefore, vegetation buffers will not be appropriate in all circumstances.

Where vegetation buffers are proposed to satisfy the requirements of **Table 5-1**, the vegetation needs to be established along the relevant boundaries prior to release of the Subdivision Certificate (in the case of subdivision) or prior to commencement of other uses. The minimum width of a vegetation buffer is that of the canopy at maturity. Particular care must be made to ensure that vegetation buffers do not compromise the bushfire safety of existing and future dwellings on either the subject or adjoining land. Vegetation buffers are therefore to be located such that they will not comprise Asset Protection Zones.

Where a vegetation buffer is proposed, a detailed landscape plan is to be submitted with the development application. The plan should include a variety of species with a variety of heights at maturity, including ground cover, shrubs, and small and large trees. Vegetated buffers are to include trees at least 10 metres in height at maturity

Tree rows should be planted at a maximum spacing of 10 metres, with rows of smaller plants between. Species with long, thin and rough foliage should be included where the adjoining land use may involve chemical spraying, as these facilitate capture of spray droplets. A mixture of fast growing pioneer species and slower-growing, longer lived species should be used. The pioneer species will ensure that the buffer is effective as soon as possible. The longer lived species will over time replace the pioneer species. Preferred species are included in **Appendix B**.

Table 5-1: Buffers between rural activities and rural dwellings

Land use	Separation distance	Vegetation buffer
Abattoirs	1,000 metres	N/A
Cattle dip	200 metres	N/A
Cattle feedlot (less than 500 head)	300 metres	N/A
Cattle feedlot (500 head or more)	500 metres	N/A
Extractive industry or mines	1,000 metres	N/A
Grazing lands	60 metres 80 metres	20 metres none
High voltage power lines	20 metres	N/A
Horticulture	80 metres 150 metres	40 metres none
Intensive dairies (less than 500 head)	300 metres	N/A
Intensive dairies (500 head or more)	500 metres	N/A
Other intensive livestock keeping (less than 500 head)	300 metres	N/A

Other intensive livestock keeping (500 head or more)	500 metres	N/A
Piggeries (less than 500 head)	300 metres	N/A
Piggeries (500 head or more)	500 metres	N/A
Poultry farms (less than 500 head)	300 metres	N/A
Poultry farms (500 head or more)	500 metres	N/A
Recreational Facilities (Major)	1,000 metres	N/A
Rural industry	80 metres 150 metres	40 metres none
Sawmills	300 metres	N/A
Sewerage treatment plants	400 metres	N/A
Waste management facilities	500 metres	N/A

5.10 Public entertainment in rural zones

Objectives

To ensure that 'public entertainment' festivals in rural areas do not have unacceptable environmental and amenity impacts on existing rural communities.

To ensure that adequate public safety, health and security contingencies are in place for the patrons.

5.10.1.1 Required pre festival consultation

Consultation is required with the following service providers:

- Rural fire service's zone office;
- NSW Goulburn Police;
- NSW Ambulance Service Goulburn;
- Medical services;

- Goulburn Mulwaree Council;
- Country Energy.

(a) Matters to be addressed in development applications

Notwithstanding, other provisions of this plan the following additional issues are to be addressed and included as part of the development application process:

- evidence of consultation with the service providers and the actions taken as recommended by those service providers;
- Traffic safety and management provisions to be detailed in a traffic management plan including but not limited to:
    - parking and road access for conventional two wheel drive vehicles;
    - dust suppression measures on public roads and at the venue;
    - emergency escape access routes (e.g. in a bushfire situation).
- Noise level mitigation measures proposed for the nearest residence;
- Festival duration time and performance times;
- Bushfire requirements including notification to the rural fire service, any required permits, identified emergency escape access routes and on site fire suppression measures and fire fighting water availability;
- Public safety and security protocols to be put in place for the festival venue and for surrounding rural properties;
- Emergency contingency plans in case of:
    - illegal drug use and alcohol abuse;
    - removal of festival patrons for whatever reason;
    - emergency medical attention for injuries received on site, e.g snake bite, serious falls, camping incidents, drug and alcohol overdose, heat exhaustion etc.;
    - unruly social behaviour.
- Public health arrangements and facilities to be provided for:
    - food and potable water supply;
    - power supply;

- sanitary fixtures;
- toilet arrangements;
- accommodation, including temporary structures and camping arrangements;
- waste disposal, during and after the festival;
- evacuation contingencies;

- Insurance arrangements, including public liability and duty of care to those attending the venue;
- Transport arrangements to and from venue.
- Often rural locations are remote from public transport. Detail measures to be used if the need arises to remove patrons for whatever reason. (eg festival bus);
- Environmental considerations to be addressed are detailed in Chapter 3, 3.7 to 3.16.
- Number of events per property shall be limited to a maximum period of 30 days in any period of 12 months.

6 Special development types

6.1 Poultry farms

Objectives

To cater for the inherent land use conflicts associated with the operation of poultry farming, this plan seeks to avoid such conflicts related to small farm operations, the encroachment of urban sprawl, older shed design and poor farm management.

To ensure new poultry development implements best practice design and that applicants undertake all necessary measures to minimise the impacts on adjoining land users.

Controls

a) Minimum Site Area

Minimum lot size shall be 80 hectares. Square shaped lot sizes are preferable. They allow maximum farm layout, design options and recommended separation distances from the boundaries.

b) Separation distances

The proposal should meet the following minimum separation distances to:

- another broiler farm of 3 kilometres
- another breeder farm of 5 kilometres
- a crown reserve road of 200 metres
- front setback from a public road of 300 metres
- a major water storage area (domestic water supply or dam of greater than 300 megalitres) of 800 metres
- drainage depression (low points that carry water during rainfall events but dry out quickly once rainfall has ceased) of 40 metres
- intermittent watercourse (having banks and beds or ponds or remaining wet for considerable periods between rainfall events and which may be characterised by supporting moisture tolerant vegetation) of 100 metres
- ephemeral or perennial creek or river of 150 metres
- land zoned Residential of 5 kilometres;

- a dwelling on the same property, of 50 metres;
- the property boundary, of 200 metres; and
- an existing dwelling on other land, of 500 metres.

c) Landscaping

The proposal shall use natural screening and trees and provide advanced landscaping of sufficient height and density adequate to screen the development. The landscaping is to be established within 6 months of commencement of the development. A landscape plan is to be submitted with the development application.

d) Water management

The development site must be a zero discharge site hydrologically isolated from surrounding land surface waters and all drainage directed to a dedicated catchment dam designed along the following parameters:

- total storm capture for the catchment;
- run off coefficient of one (1);
- 20 days rainfall capture; and
- up to 100th percentile event; (In accordance with Managing Urban Stormwater: Soils and Construction, August 1998, Department of Housing).

Applicants are to comply with Landcom's Soils and Construction Managing Urban Stormwater 2004 Manual.

The applicant shall provide a detailed plan of how the dedicated catchment dam is to be adequately managed to ensure that the sufficient storage capacity is maintained.

A minimal quality of potable water (about 45,000 litres/1000 chickens shed capacity/year) is essential. This is based on 8 litres per chicken, which is the absolute minimum.

Water consumption can go as high as 25 litres per chicken in a hot dry period. Consequently if 8 litre standard is used then a reserve water supply will also be required to be provided (minimum of two days maximum usage).

Additional water is also needed for cleaning, cooling, landscaping, fire protection and domestic use.

Details of the source and quantity of water shall be provided (Note: Guidelines relate to meat chickens and may not be suitable for other forms of poultry).

An integrated water management plan prepared by a suitability qualified person shall be developed for the site, which addresses all aspects of the water cycle. The aim of the plan should be to maximise the potential for reuse and minimise water demand and the risk of water pollution. The management plan should evaluate reuse, demand management and pollution prevention options such as:

- using rainwater tanks to utilise the significant catchment area on the roofs of the sheds to substitute water supplied from other sources and reduce stormwater impacts (any roof water collected for drinking or domestic use on-site should be monitored for bacteriological and chemical quality);
- collecting, treating and storing stormwater and using it for dust control;
- designing and locating poultry sheds to maximise water efficiently, and minimise the need for water for evaporative cooling;
- the separation of clean and dirty stormwater and appropriate management arrangements for each; and
- procedures to ensure adequate capacity in the catchment dam for stormwater management.

Potential impacts on groundwater quality, caused by the operation of the proposed facility, the proposed extraction of groundwater or contaminated recharge to the aquifer, should be identified and addressed. This should be discussed with reference to Water Quality Objectives by identifying beneficial and human uses and assessing the impacts against numerical criteria for indicators provided in the ANZECC (2000) Guidelines.

e) Ground water

A hydrogeological assessment and a program of test drilling is recommended to evaluate the groundwater resource protection measures for the proposed development.

With regard to requirements for the environmental impact statement, the following information should be included:

- any information with respect to the local groundwater resource, including:
  - water table position and known aquifer zones
  - hydraulic flow data;
  - water quality data, such as chemical and biological analyses
  - results of any drilling and hydraulic tests
  - standing water levels of bores and any bore monitoring data collected
  - other relevant geological and hydrogeological information
- discussion of the proposal's possible impacts on the local groundwater resource
- discussion of the potential for groundwater contamination from the development, and any preventative measures. This includes construction and implementation of the poultry farm operations, and other issues such as the on-site effluent management
- outline any proposed additional drilling and describe groundwater monitoring programs to be undertaken, including parameters to be tested, sampling intervals, and review period
- discussion of any environmental impacts on nearby ecosystems, such as groundwater dependent wetlands, nearby lakes, watercourses, or neighbouring properties etc
- where groundwater is proposed as a source of water supply all proposed water supply bores should be pump tested to obtain the long term sustainable yield of the resource, and the results of the drilling and testing be evaluated by a hydrogeological professional
- All bores, including any monitoring or investigation bores, sunk as part of the development, should be licensed with the appropriate Department.

f) Access

The proposal must front a bitumen sealed two lane road. In circumstances where a proposal does not comply with this requirement the proponent will be required

to contribute the full cost for the upgrading to Roads and Maritime Services standards and bitumen sealing of any road to ensure compliance.

The internal access road within the development site is to be constructed to a minimum width of 4 metres. All car parking and turning areas as well as the internal access road are to be constructed providing, at least a gravel pavement incorporating adequate drainage and soil erosions control measures at the applicants full cost and to the requirements of Council.

g) Dead stock

This relates to disposal of dead birds that die as part of normal mortality. Applicants shall identify how they intend to dispose of these expected mortalities.

This may include options such as composting onsite or offsite in a system such as a 'Vertical Composting Unit' or 'Hotrot' and operational procedures of such units are to be provided with the application; and

The applicant shall clearly identify how they intend to dispose of mass bird mortalities in an emergency situation, including location and details of waste disposal methods.

The applicant shall report to Council (in the event of a mortality rate of 1% of total bird numbers or more on a particular day) identifying the disposal method and location.

h) Power

The site must have reliable access to three phase power.

i) Shed construction

Sheds shall be constructed and designed to provide:

- dust emission free operation
- orientation so that the long axis of the sheds is aligned east-west is the preferred option. However shed orientation needs to be balanced with topographic and meteorological constraints (e.g. fans of tunnel ventilated sheds should be oriented to have minimal impact on the neighbours and an elevated site is preferred for natural ventilation and drainage)
- concrete floors and aprons on a reasonable level site to minimise contamination and erosion potential are considered best practice

- bunded water catchment areas around sheds or the shed complex
- sheds that are wildbird, vermin and rodent proof

j) Transportation

Transportation of litter, feed and birds shall be covered to ensure no escape of litter and feathers. Trucks entering the site should be washed down and disinfected, however as a rule, entry of people and equipment should be controlled and supervised in accordance with the Broiler Industry Biosecurity Code.

k) Litter

Sheds are to be cleaned and disinfected after every batch. Used litter may be completely cleaned out at the end of each batch or cleaned out after several batches. The increased frequency of cleanouts is good practice and should be considered, utilising methods to minimise windblown litter during clearance and transport.

The reuse of poultry litter may require development consent and if onsite shall form part of the submitted application.

Litter reuse on pastures, offsite within the Goulburn Mulwaree local government area may require a separate development application. Details of proposed offsite disposal shall be provided with the application.

Litter reuse on pastures outside of Goulburn Mulwaree Council's area may require a licence from the NSW Environment Protection Authority.

Where the land application of litter is proposed, the application should be guided by a nutrient balance that meets crop requirements, protects and/or enhances soil properties and prevents the movement of pollutants from the application site. Typically, litter is spread at the rate of approximately 15m3/ha/year.

Litter shall not be disposed of in the following areas:

- 150 metres to the major rivers in the catchment — the Wollondilly and Shoalhaven, for the full length of each river as defined on topographic maps;
- 100 metres from other rivers, creeks and perennial watercourses;

- 100 metres from intermittent watercourses, defined as having banks and beds or ponds or remaining wet for considerable periods between rainfall events and which may be characterised by supporting moisture tolerant vegetation;
- 40 metres from drainage depressions, defined as low points that carry water during rainfall events but dry out quickly once rainfall has ceased; and
- 50 metres maximum from all property boundaries (note: width of the buffer will depend on slope and ground cover and any litter stored on site or offsite shall be in a covered bunded area with appropriate erosion control measures in place e.g. sediment fencing).

l) Fauna and Flora

At a minimum this will require the submission of the 7-part test pursuant to section 5A of the *Environmental Planning & Assessment Act 1979* in the form of a flora and fauna assessment. A species impact statement (SIS) may also be required. The preparation of a species impact statement will also require consultation with the NSW Office of Environment and Heritage.

m) Odour

No offensive odour shall occur beyond the boundary of the premises.

n) Dust

An air quality impact assessment shall be undertaken in accordance with best practice.

o) Noise

A noise impact assessment shall be undertaken in accordance with best practice.

p) Waste Management

Waste must be assessed, classified and managed in accordance with best practice.

q) Bushfire

A bush fire assessment shall be undertaken in accordance with “Bushfire Protection Guidelines 2006”.

r) Chemical usage

All agricultural chemicals are to be stored, mixed, applied and disposed of in accordance with instruments on the relevant label or permit and NSW WorkCover Authority's code of practice for the safe use and storage of chemicals (including pesticides and herbicides) in agriculture (1998).

6.2 Service centres

Objective

The objective of this plan is to provide environmental controls and guidelines to facilitate the proper development of direct access service centres on the Hume Highway.

Controls

a) Visual impacts

The visual impact of the development of the service centres is a product of many factors including building design, height and landscaping.

Service centres shall be generally screened from view from adjoining land uses such as dwellings. Screening shall be achieved through the appropriate use of landscaping.

The land between the entry and exit ramps of each service centre shall be landscaped to provide general screening of the service centres.

No roof should have a highly reflective surface, any metal roof should have a colourbond or equivalent finish in a colour approved by Council.

No advertising structures shall be higher than the parapets or ridges of buildings to which they are attached.

Flagpoles or other similar structures shall be considered on their merits.

b) Acoustic impacts

Development shall comply with relevant noise management guidelines published by the NSW Environment Protection Authority.

Noise mitigation measures shall be provided to ensure compliance with adopted guidelines.

Any proposed noise barriers shall be designed and constructed in a manner that minimises their visual impact. This may involve a combination of different materials, the use of earth mounding and extensive screen landscaping.

c) Lighting

Lighting of the service centres shall be provided in a manner so as to:

- minimise impacts on the amenity of existing and future residences in the locality
- not affect traffic safety on the Highway

Matters that should be addressed in the design of lighting are the:

- intensity of lights
- mounting height of lamps
- use of shields on lamps
- reduction in the extent of lighting of the site during night time non-peak periods

d) Traffic arrangements

Access ramps to the service centres are to comply with the requirements of the Roads and Traffic Authority.

The minimum distance between the access ramps of the service centres and the ramps to the nearest interchange shall be no less than two kilometres.

Vehicular access to the sites shall be restricted to access from the Highway only.

The design of internal circulation roads should discourage excessive speed. It is suggested that on-site speeds in excess of 15 kilometres per hour be discouraged.

Vehicle types shall be separated as soon as possible after leaving the entry ramp. Separate refuelling and parking areas shall be provided for cars and trucks/buses.

The location of service centres shall be adequately advertised through the use of advanced warning signs on the Highway in accordance with Roads and Traffic Authority guidelines.

Council shall determine the level of provision of on-site parking having consideration to the following:

- Council's requirements under clause 3.4 of this plan
- the requirements of the Roads and Traffic Authority and their guidelines published in Policy Guidelines and Procedures for Traffic Generating Developments
- the projected increase in traffic using the Highway
- the policy or intentions of the Roads and Traffic Authority in permitting other direct access service centres on the Freeway in the future

Overflow parking areas shall be provided to cater for peak parking demand.

Adequate land shall be available on-site to allow for an increase in parking provision if required in future. Future parking requirements shall be assessed on the increase in traffic flows and the likelihood of additional service centres being provided to cater for increased demand.

Staff and customer parking shall be separated with customer parking provided as close as possible to proposed facilities.

Pedestrian access to the service centres shall be prohibited by the use of appropriate fencing along the Highway boundaries of the sites.

e) Design Guidelines

The design of all buildings shall be generally consistent or complementary architecture, building materials and colours.

Advertising signs shall only display the corporate names of facilities provided within the service centres and the services provided therein. Advertising signs displaying the following will not be permitted:

- product names of retail items whether sold within the service centres or not
- services, goods or any other information not directly associated with the service centres

Advertising signs shall be of a consistent design and shall be consolidated onto as few advertising structures as is practical.

All buildings shall be setback a minimum distance of 25 metres from the Highway reservation.

Advertising structures shall generally be prohibited from being placed within the required 25 metre setback. Exceptions to this will only occur if the applicant can satisfy Council that such structures are necessary to the operation of the Service Centres.

f) Services

Development shall not be permitted unless adequate means for the disposal of effluent are provided to the satisfaction of Council. Land application of treated effluent will not be permitted.

6.3 Wind farms

Objective

To minimise the impacts of wind farm development on the environment of the Goulburn Mulwaree local government area.

Controls

a) Locational guidelines and constraints

The locational attractiveness of the Goulburn Mulwaree local government area for wind energy facilities is acknowledged. However, within the Goulburn Mulwaree local government area there are localities sensitive to the form of infrastructure associated with wind energy facilities.

Wind turbines can usually co-exist with many types of land uses. Exceptions are urban development (particularly residential areas), forestry areas and sensitive activities such as airports and some communication facilities.

While the locational requirements of wind farms are sensitive to specific wind speed, at specific localities, these requirements need to be balanced with the landscape values of the area and settlement patterns.

To assist with finding this balance the following locational guidelines and constraints for wind energy facilities are made:

- proposals must be permissible under the LEP, compatible with the existing uses of the subject land and surrounding land and avoid areas identified for future urban development.
- proposals should avoid areas of high environmental value such as:
    - Lands protected under the *National Parks and Wildlife Act 1974* including National Parks, reserves and other areas covered by a Conservation Agreement or Aboriginal place declaration
- World Heritage Areas, other historic/heritage areas, buildings or sites.
    - Wilderness areas identified or declared under the Wilderness Act 1987
    - Areas of National environmental significance as identified under the *Environmental Protection and Biodiversity Conservation Act 1999*
    - Areas affected by *State Environmental Planning Policy No 44 – Koala Habitat*
- Developers will:
    - investigate bird and bat habitat and flight paths. Advice should be sought from past studies, literature reviews, field investigations, local wildlife groups and NSW Office of Environment and Heritage and other NRM Agencies and then undertake the necessary assessments and document the impact and appropriate mitigation measures in the statement of environmental effects, environmental impact statement or supporting the development application
    - have regard to chapters 3.1 (European Heritage) and 3.2 (Indigenous Heritage and archaeology) of this plan.
    - have regard to the recommendations of the Goulburn Mulwaree Biodiversity Strategy 2007.
- Noise amenity impact upon nearest existing or proposed dwelling is not to exceed 5dBA above ambient background noise or an absolute level of 35 dBA, whichever is greater. Notwithstanding, the minimum setback of towers from residential development shall be 350m.
- To minimise visual impact, avoid locations where turbines are seen by many people. To this end towers are not to protrude beyond ridgelines

within view of land visible from areas of existing and future closer settlement such as residential land, large lot residential land, the range of rural lifestyle blocks and the villages of Bungonia, Lake Bathurst, Tallong and Tarago. Similarly, the visual impact of new transmission lines must be evaluated.

- Avoid landing strips and airport facilities especially aircraft flight paths. The Civil Aviation Safety Authority is to be consulted about the need for warning lights on any proposed towers (this is a mandatory requirement for development over 110m in height).
- Site access and road construction will lead to noise, dust and interference with watercourses and vegetation. A total management plan including water management (neutral or beneficial test), road design and management of ecologically sensitive areas needs to be properly addressed and presented to Council as part of the development application and finalised as part of the Construction Certificate application.
- Essential guidelines for reference are the SEDA NSW Wind Energy Handbook 2002 and the former DIPNR EIA Guidelines for Wind Farms, June 2002.

6.4 Advertising and signage

Objectives

The aims of advertising and signage requirements are to:

Control the size and number of advertising structures or signs displayed on premises to improve the streetscape and amenity of the locality.

Provide information and guidance to building owners and occupiers and Council to enable appropriate design and placement of advertising.

Ensure desired urban or rural character of surrounding land uses is not compromised.

Encourage innovation in the design and construction of signs, within the parameters of this plan.

Encourage a co-ordinated and cooperative approach to advertising signs.

Reduction in the number of signs.

Encourage the use of simple, clear and uncluttered signs.

Discourage the use of neon signs for heritage buildings.

Ensure that any sign fits the streetscape and architecture of the building or location in terms of colour, illumination, wording and visual interest.

Eliminate all signs above awning level except where the architecture of the building provides for such signs.

Controls

The following design practices and strategies are to be adhered to when making applications for advertising and signage proposals:

6.4.1 Amenity

Materials, colours and placement of signs to be compatible with the existing building and streetscape – where available and suitable use existing materials, colours and placements.

Advertisements above awning level are not permitted except where the design of the building incorporates an advertising panel.

Designers will need to compromise on matters of corporate design where it is unsuitable in a particularly sensitive area, ie Heritage Conservation Area. The compromise may include lighter/softer shades, reduced signs different manufacturing techniques or the like.

Retain any significant (including previous) signs that are fixed to and or part of the building and recognisable as part of an historic building.

6.4.2 Design

a) Bulk, scale, shape and size

Signs in commercial zones should aim to attract pedestrians (across the road or into an arcade) by the use of below awning level signs. In assessing a development application for an advertising sign, it is necessary that the proposal:

- conforms to the desired future character of the area and does not dominate the streetscape or view
- complements the character, architectural design and period of construction of the building and surrounding buildings. For example signs should either be placed on

windows, near entrance doors to the retail facility on panels defined using the grid analysis or on an appropriate architectural element such as a podium, pier or pole

- signs shall not extend beyond the dimensions of the building (or features they are mounted on in terms of width or length, e.g. awning fascia)
- be simple, clear and efficient and to a professional standard to inspire confidence in the business or product advertised
- not be visually spoiled by the method of providing electrical services to the sign

b) Number of signs

Fewer signs are encouraged in the interests of reducing clutter, improving amenity and improving sign efficiency – as with too many signs the message is lost in the clutter.

c) Colour, lettering and illumination for heritage buildings

Colour of signs

Sign colour shall be compatible with and complementary to the colour of the period of the construction of the building or locality.

Subdued colours rather than vivid are preferred in the Heritage Conservation Area. Fluorescent and iridescent colours are not acceptable in the Heritage Conservation Area, and a white background is also not acceptable.

Corporate colours are acceptable only if the colours, number of signs and sizes are compatible and complementary to the architecture and streetscape.

Council encourages the use of traditional colours as produced by Pascol, Berger, Dulux, Haymes, Porters, Taubmans and Wattyl.

Colour schemes, particularly for intact buildings shall be continuous above and below the awning so as to enhance the appearance of the whole building.

Lettering

The advertisement is to be designed to be uncluttered and clear with the wording being bold enough for easy reading and understanding.

Lettering style and size shall be compatible with and complementary to the architectural style of the building and streetscape, e.g. on historic buildings and streetscapes (pre-1950), signs must be professionally hand painted, not machine cut.

Buildings are encouraged to display street numbers in locations, size and colours, which complement the architecture and streetscape.

Illumination of signs

Illumination of signs is not appropriate when businesses are not trading.

Illumination shall be continuous only. Flashing or chasing lights are not acceptable.

Neon signs are not appropriate on buildings identified as heritage significant in a Heritage Study or in a Heritage Conservation Area under the LEP, buildings predating neon signs (c1922) or on buildings within the heritage streetscape of the CBD.

Internal illumination is only permitted for under awning signs on modern buildings.

d) Contemporary buildings and corporate signs

Modern signs are appropriate for modern buildings, however the objectives outlined are applicable. Signs on modern buildings must consider their impact on adjacent properties and the streetscape.

e) Traffic safety

Advertisements shall be designed so that they will not:

- obscure or interfere with road traffic signs
- obscure or interfere with vehicle vision
- distract drivers at intersections, level crossings or bends
- vary or move the intensity of the illumination
- issue traffic instructions, e.g. use of the words halt, stop or imitate traffic signs
- project over the boundaries of a classified road
- a sign must not be nailed or similarly fixed to a tree or street light pole

6.4.3 Highway promotional signs

All highway promotional sign proposals should refer to the NSW Department of Planning and Environment Transport Corridor Outdoor Advertising and Signage Guidelines requirements.

a) Assessment criteria

Each proposal shall undertake a design analysis for the specific locality that identifies:

- existing character of the locality

- key scenic qualities and features of the locality
- desired future character of the locality

b) Locality criteria

Rural areas

Tourism promotional signs may be established in rural zones where advertising is permissible adjacent to a highway or regional road on the approach to a locality (eg. town, village). One such sign per approach is permitted to maintain uninterrupted views to the rural landscape, avoid clutter and repetition. On the departure side of the sign the advertisement may be of a general promotional nature subject to complying with other assessment requirements. The maximum sign area is 40m^2 per side.

Urban areas

Third party advertisements (i.e. general and tourism promotional signs) may be established in an urban zone where advertising is permissible adjacent to a highway or regional road.

The signs should not:

- project over the carriageway
- be prejudicial to the safety of the public
- flash, move or cause glare
- be located in or adjacent to a residential zone

There is a limit of one third party advertisement per property.

The sign should be incorporated with any other business identification signs at the site.

Maximum site sign area is 40m^2 per side.

c) General design criteria

Third party advertisements are not to:

- impact on traffic safety
- adversely impact on the environmental character and quality of the classified road and views from classified roads
- interfere with traffic advisory and traffic control signs

6.5 Sex services premises

Objectives

The general objectives of this plan are to ensure that:

Sex services premises are discreet, sensitively located and are not prominent within the community.

Appropriate guidelines are established so that sex services premises are located at a reasonable distance from where people live and other sensitive land uses.

Appropriate guidelines are established which discourage a concentration of sex services premises in close proximity to one another.

Appropriate health and building standards are maintained.

6.5.1 Development applications

The following details are required to be submitted with a completed development application form:

- sex services premises are prohibited in all zones except IN1 General Industrial and home occupation (sex services) are prohibited in all zones. Are sex services premises prohibited in the zone applicable to the proposed site? If so, proceed no further as the proposal is prohibited and must be refused. (Refer applicable LEP – Land Use Table).
- number of persons working on the premises
- hours of operation
- number of rooms in the premises to be used for prostitution
- name of the operator of the proposed sex services premises
- location plan (showing proximity to all places of worship, schools, community facilities, child care centres, hospitals, rail stations, bus stops, all properties used for residential purposes, and any other place regularly frequented by children for recreational or cultural pursuits, within 250 metres of the site)
- site plan and floor plan (including the use of each room)
- all entrances to and exits from the site
- all windows of the proposed sex services premises and all windows on adjoining buildings
- location, number and layout of parking
- advertising sign (location, size, colour, illumination and content)

- details of the existing and proposed external lighting
- external colour scheme of the premises

When considering an application for a sex services premises, Council will carefully consider the following additional issues:

- the distance between the proposed sex services premises and places of worship, schools, community facilities, child care centres, hospitals, rail stations, bus stops, taxi stand, all properties used for residential purposes, and any place regularly frequented by children for recreational or cultural pursuits.
- whether the operation of the sex services premises could cause a disturbance in the neighbourhood when taking into account other sex services premises operating in the neighbourhood.
- whether sufficient car parking has been provided.
- whether suitable access has been provided to the sex services premises.
- whether the operation of the sex services premises could cause a disturbance in the neighbourhood because of its size, operating hours, and the number of employees and/or clients.
- whether the operation of the sex services premises could interfere with the amenity of the neighbourhood.
- types of advertising signs.
- whether the appearance of the sex services premises will be prominent in the neighbourhood.
- whether the sex services premises provides suitable access and facilities, including car parking, for disabled persons.
- whether adequate security measures are proposed to be implemented by sex services premises operators to ensure the safety of staff and clients and to prevent any disturbance to surrounding premises.

6.5.2 Advertising/notification

Applications for Sex services premises are required to be notified and advertised (refer to Section 1.7) Before determining a development application for Sex services premises representations from the NSW Police Service and owners and occupiers of properties in the vicinity of the proposed development will be sought and taken into consideration.

6.5.3 Access and location requirements

A sex services premises must not be located adjoining or within 100 metres walking distance of any residentially zoned site.

A sex services premises shall not be located adjoining or within 250 metres walking distance of any place of worship, school, community facility, child care centre, hospital, rail station, bus stop, taxi stand, or any place regularly frequented by children for recreational or cultural pursuits.

Note: If there are circumstances where the applicant considers that it is not relevant to comply with the above standard, applicants must provide a written submission detailing the reasons why this standard should be varied. The submission must also detail how the objectives of this plan will be satisfied.

The preferred location for a sex services premises is above ground floor level, however access may be provided from the street. If the sex services premises is at street level it should not be in a shopfront location or at the front of premises.

Access to sex services premises is to be discreet, particularly if provided from street level. Council will not approve sex services premises applications where access to the sex services premises is common to other commercial uses or to dwellings.

No patron access is to be provided from a laneway.

The operation of a sex services premises must not cause a disturbance in the neighbourhood taking into account adjacent land uses including any other sex services premises which may be operating in the neighbourhood.

A sex services premises must not be located within the vicinity of a licensed premises i.e. hotel, club, restaurant.

Sex services premises must not contain more than six separate rooms for the purpose of prostitution and associated activities, including office and reception room. Rooms having an area exceeding 18 square metres will be considered as two rooms for the purpose of this plan.

A sex services premises should not be located in proximity to another sex services premises so as to create concentration of this type of use in an area.

6.5.4 Car parking

Sex services premises must provide one car parking space per person working on the site at any time.

In addition to the above standards, applicants must provide written details and evidence of where patrons are likely to park.

Note: Applications that are likely to result in patron parking in residential streets will not be favoured by Council.

6.5.5 Health and building requirements

All sex services premises must comply with the necessary services and facilities required for Class 6 buildings under the Building Code of Australia.

All sex services premises must comply with the requirements of the *Public Health Act 1991* and the requirements of the NSW Health.

All bars and food preparation areas must comply with the requirements of the *Food Act 2003* and Council's Food Premises policy.

The use of the premises must not give rise to:

- A sound level at any point on the boundary of a site greater than the background levels specified in AS1055 – Acoustic Description and Measurement of Environmental Noise.
- An 'offensive noise' as defined in the *Protection of the Environment Operation Act 1997*.

The sex services premises must be ventilated in accordance with the requirements of Part F of the Building Code of Australia.

6.5.6 Signage

Only one discreet sign per premise, having a maximum size of 0.5 square metres.

Sign wording must be limited to the trade name of the business operated and the address of the premises.

The content, illumination, size, shape and location of the sign must not interfere with the amenity of the neighbourhood.

6.5.7 Standard conditions

Where consent is granted, a specified sex services premises operator will be nominated on the consent. Should the operator change, Council must be notified prior to the new operator commencing. A condition will be imposed on all consents granted for sex services premises prohibiting the provision or consumption of liquor on the premises.

In the public interest, approval will be limited for a period of twelve (12) months after which Council will review effects of the use on the amenity of the area and the desirability of issuing a further limited approval and the length of time of any such approval.

Council may apply to the Land and Environmental Court under section 17 of the *Disorderly Houses Amendment Act 1995* for premises not to be used as a sex services premises. Council can also initiate proceedings under the *Environmental Planning and Assessment Act 1979* to ensure that sex services premises comply with the requirements of that Act.

6.6 Outdoor dining

Objectives

Encourage outdoor dining in the City Centre and create opportunities for outdoor eating.

Balance the needs of pedestrians with outdoor diners without creating a safety hazard.

Establish the requirements for the operation of outdoor dining areas in public areas.

Controls

2 metre wide clear passage area to be maintained at all times.

Tables and chairs to be located with a designated area adjacent to the business premises responsible for their operation.

Outdoor dining area to operate in conjunction with an exiting business premises.

Maintenance of a public risk insurance policy (minimum sum insured against - $10 million.

The consumption of alcohol is prohibited and licences under the Liquor Act will not be supported due to their incompatibility with the alcohol free area objectives.

Site to operate in accordance with the requirements of the Food Act 1989 and associated Regulation.

All tables and chairs to be kept clean and free of food scraps and litter.

Toilet and wash basin facilities within the existing premises to comply with the BCA.

Furniture to be sympathetic to the character of the surrounding buildings Details to be submitted for approval prior to purchase and placement within the public area.

Furniture to be suitable for outdoor use. Details to be submitted for approval prior to purchase and placement within the public area.

Furniture to be stored within the business premises when the outdoor dining area is not in operation.

Furniture to be maintained in a physically sound condition.

6.7 Telecommunications

Objectives

The purpose of this plan is to:

Provide controls for the design and siting of telecommunication and radiocommunication facilities that require development consent;

Provide guidance to service providers about Council's requirements for site selection, design, lodging an application, and conducting community consultation.

Controls

This clause applies to telecommunication and radiocommunications facilities, its supporting infrastructure and ancillary development under the *Telecommunications Act 1997*, *Telecommunications Code of Practice 1997*, *Radiocommunications Act 1992*, and *Telecommunications (Low-impact Facilities) Determination 1997*.

Development consent is required for facilities under the terms of the *Environmental Planning and Assessment Act 1979*. These facilities are referred to as 'non-low impact facilities'.

Goulburn Mulwaree Council does not however have regulatory control over 'low impact facilities'. These are facilities described in *the Commonwealth Telecommunications (Low Impact Facilities) Determination 1997* (LIF Determination) which exempts low impact facilities from State and Territory planning and environmental laws.

However, carriers must comply with the Australian Communication industry forum (ACIF) code with respect to notification and consultation for low – impact facilities.

This clause does not apply to a number of temporary facilities including but not limited to those for use by, or on behalf of, a defence organisation for defence purposes as described under the *Telecommunications Act 1997*. In addition, other facilities may also

be exempt, in accordance with Division 4 of Part 1.4 of the *Radiocommunications Act 1992*.

The following relate to all facilities defined as Non-Low Impact facilities and which require a development application to be lodged with Council.

6.7.1 Design controls

Council shall refer all applications involving towers and the like over 30 meters to the Australian Government Department of Communications and the Arts and the Civil Aviation Safety Authority for comment.

Facilities including all associated infrastructure should be designed and installed having regard to the requirements of all relevant Australian Standards.

Facilities should be designed and installed in compliance with the requirements of the ACMA guide – Accessing and Installing Telecommunications Facilities – A Guide October 1999.

6.7.2 Visual amenity

Service providers are to design antennas and supporting infrastructure in such a way as to minimise the visual impact from the public domain and adjacent areas.

Where possible the facility must be integrated with the design and appearance of the building or infrastructure on which it is located. Where this is not possible this must be justified in writing. The following design features must be taken into account: colour, texture, form, and bulk and scale.

Facilities and all associated infrastructure must:

- be well-designed
- be painted in colours selected to match the colour scheme of the building unless otherwise justified in writing to Council
- be integrated with the existing building structure unless otherwise justified in writing to Council
- have concealed cables where practical and appropriate
- be unobtrusive where possible
- be consistent with the character of the surrounding area

Facilities including associated infrastructure must be removed when no longer being used.

Facilities including associated infrastructure must be suitably proportioned in size in relation to the building to which they are attached or adjoin.

The site must be restored following construction of the facility and its associated infrastructure.

6.7.3 Co-location

Co-location is the practice of locating a number of different telecommunication facilities, often owned by different service provider's, on one facility or structure.

Where possible and practicable, telecommunication lines should be located within any existing underground conduit or duct.

Antennae and similar structures should be attached to existing utility poles, towers, structures, buildings or other telecommunication facilities, so as to minimise visual impact.

Co-location may not always be a desirable option where:

- cumulative emissions are a consideration
- it may be visually unacceptable
- there are physical and technical limits to the amount of infrastructure that structures are able to support
- the required coverage cannot be achieved from the location

6.7.4 Siting

The applicant is to demonstrate that, in selecting a site, it has adopted a precautionary approach in regards to minimising EMR exposure consistent with clause 5.1 of the ACIF Code.

Preferred land uses for location (as determined by Council) include: industrial areas and commercial centres.

Where possible, facilities are to be located away from the street frontage or any public or private property adjacent to the site to reduce visual impact and adequately setback from the perimeter wall or roof edge of buildings.

Facilities should be installed so that they do not encroach upon any easements, right-of-ways, vehicular access or parking spaces required for the property.

Noise caused by the facility must not result in the transmission of "offensive noise" as defined in the *Protection of the Environment Operations Act 1997* to any place of habitable use.

6.7.5 Heritage and environment

Facilities proposed for areas of environmental significance (as defined in the LIF Determination) require that:

- a development application to be lodged, demonstrating compliance with the *Goulburn Mulwaree LEP* and the provisions of this plan
- the applicant is to avoid or minimise the visual impact of any proposed facility on the heritage significance of adjacent/adjoining/surrounding heritage items and conservation areas;
- the applicant is to provide a heritage report/impact statement in accordance with the *Goulburn Mulwaree LEP*
- the applicant is to avoid or minimise the physical impact of any proposed facility on threatened entities listed under *Threatened Species Conservation Act 1995* and the *Commonwealth Environment Protection and Biodiversity Conservation Act*, including threatened fauna and flora species, their habitat and endangered ecological communities;
- if the service provider is required to notify the Environment Secretary of the Commonwealth Department of Environment and Heritage in accordance with clause 4.18(4) of the *Telecommunications Code of Practice 1997*, Council should be provided with a copy of this document along with any supporting studies accompanying this notification
- the applicant is to employ their utmost care to protect and conserve any possible archaeological relics, places and sites in the path of their activities

6.7.6 Facility physical design controls

The facility and all related infrastructure must be of high quality design and construction.

Proposals should consider the range of available alternate infrastructure including new technologies, to minimise unnecessary or incidental EMR emissions and exposures, as required under clause 5.2.3 of the ACIF Code.

The plan for the facility must include measures to restrict public access to the antenna(s). Approaches to the antenna(s) must contain appropriate signs warning of EMR and providing contact details for the facility(ies) owner/manager.

Where relevant, applicant shall adhere to the minimum BCA requirements for facility structural and construction elements and the relevant exposure levels as directed by ACMA.

The applicant must provide Council with certification about the relevant building code standards with which the facility will comply.

6.7.7 Facility health controls

The applicant is to demonstrate the precautions it has taken to minimise EMR exposures to the public.

The applicant is to provide documentation to show that the proposed facility complies with the relevant Australian exposure standard as specified by the ACMA.

The applicant is to provide a mapped analysis of cumulative EMR effect of the proposal.

Telecommunication and radio communication facilities are to be designed, installed and operated to comply with current standards relating to human exposure to electromagnetic energy appearing in any applicable code or standard made.

6.8 Large lot residential – zone R5

Objectives

Development is to reflect the objectives of this zone, as described in the land use tables of the LEP 2009.

Ensure the orderly and progressive development of identified rural land for large lot residential development within the identified clusters and preferred sequence.

Minimise the fragmentation of productive agricultural land and impacts to these lands by subdividing and developing for large lot residential within the identified clusters.

Ensure the provision of constructed and safe road access to each lot.

Ensure any environmentally sensitive location is preserved from destruction.

Controls

6.8.1 Special provisions

- *LEP* – clauses 4.2A and 7.3.
- Clause 4.2 of this plan.

6.8.2 General

Large lot residential subdivision pattern is to consider the following matters:

- any proposal must demonstrate that any environmentally sensitive land is protected.
- the site is of suitable size and proportions to minimise exposure and amenity impacts to neighbouring dwellings
- the site and each proposed lot and dwelling has suitable, convenient and safe vehicular access, or such access can be upgraded at no cost to Council
- the site has suitable land capability and suitability and is not productive agricultural land or part of a holding which is productive agricultural land
- the site is able to incorporate buffers internally within the site to adjoining rural properties which have the land capability and suitability for agricultural activities
- the proposed lots and dwellings would not detrimentally affect a listed heritage item or Indigenous cultural heritage
- the location of proposed dwellings would not require excessive cut and fill (i.e. the site has a slope of less than 20%) and is not on top of a ridgeline
- the location of proposed dwellings, including an Asset Protection Zone and other requirements to comply with the Planning for Bushfire protection Guidelines 2006, would not require excessive clearing of native vegetation
- the location of proposed dwellings would not compromise the 40 metre setback to creeks and waterways
- the proposed lots are able to provide suitable and sufficient area for on-site effluent treatment that would not detrimentally affect sensitive receiving environments, if the proposed are located in an unserviced cluster

6.8.3 Subdivision

a) Site area

Minimum lot size (Reference: Minimum lot size maps LEP 2009):

- generally – 2000m²
- Run-O-Waters locality – 2hectares.

Unserviced land may not be able to achieve the quoted minimum lot size.

Battleaxe lots are generally not supported. In calculating the area of a battleaxe allotment, the accessway, which includes any rights-of-carriageway/access, are to be excluded;

Allotments should be able to accommodate a building envelope of 150m^2 with the minimum dimensions of 10m by 15m, within a 6m front building setback and a 1m side and rear setback and clear of any easements.

b) Lot orientation

The following design techniques are to be adopted to maximise opportunities for solar access to allotments and to allow for the consequent design and siting of energy efficient houses:

- align streets east-west and north-south. Aim for north-south streets within 20^o west and 30^o east of true north and east-west streets within 30^o south and 20^o north.
- allotments on east-west orientated streets need to have greater depth and width to make best use of solar access.
- allotments on south side of street should be sufficient depth so buildings can be set well back to allow north facing rooms to look onto larger front yards.
- allotments on north-south streets to be of sufficient width to allow for private open space on the north side and for houses to be built on the south boundary.
- taking into account views and topography, lot orientation and layout should enable the majority of dwellings to be designed so that the main living area receives not less than 4 hours of sunlight per day between 9am and 3pm.
- regular rectangular shaped allotments maximises siting opportunities and increases potential lot yield.
- on sloping sites, north-facing sites improve opportunities for solar access.

Lots shall face toward public open space areas, vegetation conservation areas and public roads to encourage passive surveillance from dwellings over these public spaces to assist with safety and security.

Where this cannot be achieved open style fencing is required to promote passive surveillance of public open space and public road area with some landscape screening to provide privacy.

c) Bicycle and pedestrian movements

Provision for bicycle and pedestrian movements are to be provided throughout the area.

Cyclists can be integrated into the road network through a combination of on and off road measures together with bike parking at clusters of community and commercial facilities (refer Council's Bicycle Strategy 2007).

To encourage cycling as an easy transport alternative, on-road and off-road cycle networks will be clearly highlighted with signposting and pavement logos. Engineering works, including signposting and line marking must comply with the appropriate engineering standards.

Footpaths are to be provided in accordance with the current version of Council's Standards for Engineering Works, and the hierarchy of roads (e.g. both sides for higher order roads, single side only on lower order roads).

6.8.4 Residential development

a) Streetscape

Dwellings are to face public spaces (roads and open space areas).

Dwellings are not to be hidden by high fences.

Garages are to be located behind the building facade so that they do not dominate the streetscape.

Fences shall be of a design that is sympathetic to the existing semi-rural character of the locality.

b) Height

Maximum recommended height is two storeys.

c) Energy efficiency

To maximise energy efficiency the internal and external living areas should be located to the north side of the dwelling. Further requirements are specified in **clause 4.1.3** of this plan.

d) Privacy

Private open spaces and living rooms of adjacent dwellings should be protected from direct overlooking, by:

- appropriate dwelling layout
- use of distance or slope

- screening devices like screen vegetation and courtyard walls

First floor decks, balconies and the like, are not supported where they overlook or have the potential to directly overlook habitable rooms or private open space of adjoining properties

Windows of one dwelling should not be located opposite the windows of another dwelling unless direct views are restricted

Use of narrow, translucent or obscured windows is encouraged, which are offset.

Provide sufficient distance between dwellings.

e) Acoustic privacy

Noise generating area of a development (e.g. driveway, air conditioning units, swimming pool areas) should be adequately screened or located away from the bedroom areas to minimise impact on neighbours.

Bedroom windows to be a minimum 3m from shared streets, driveways and parking areas of other dwellings

Transmission of noise between adjoining properties should be minimised.

Locate active recreation areas (swimming pools, spas, tennis courts, BBQs), driveways, carports, garages and garbage collection areas, pumps and air conditioners, away from bedrooms of adjacent dwellings.

Dwellings adjoining and other noise generating land uses should be designed and sited to minimise noise impacts.

Locate bedrooms and other noise sensitive rooms away from the road.

f) Parking

Provision for at least one covered parking space (e.g. carport or garage) and one tandem vehicle space (e.g. driveway area in front of garage or carport).

g) Rainwater tanks

A rainwater tank is to be provided to supplement water supply and control stormwater runoff.

The tank shall have a minimum capacity of 10,000 litres.

The rainwater tank supply may be connected to the hot water service (at the applicants risk), laundry and toilet facilities with a top up connection into the tank.

h) Water sensitive urban design

House design should include water sensitive urban design features such as porous paving, infiltration devices and landscaping.

6.9 Relocatable homes

Objectives

Ensure the appropriate placement of relocatable homes.

Controls

a) General requirements

External finishes are required to be compatible or complementary to surrounding development and the established character of the area. All external surfaces are to be repainted in the case of relocated homes.

All sub-floor areas must be enclosed using masonry or other materials approved by Council.

Colorbond or painted finishes are preferred for buildings with a metal roof.

b) Relocatable dwellings

The building is to be clad with either hardiplank, hardiflex sheeting, aluminium cladding or timber cladding acceptable to Council.

Prior to the building being relocated all materials containing unstable asbestos are to be removed and disposed of in accordance with the requirements of the NSW Workcover Authority.

Flat fibre cement sheeting is to be removed and replaced with an approved external cladding.

Any damaged or rusted gutters or downpipes are to be replaced with new materials to match existing.

If more than 10% of roofing sheets, gutters, ridgecaps or flashings are affected by rust then those sheets or materials must be replaced with new roofing materials to match existing.

All damaged sections of external wall cladding and roof sheeting with new material to match existing.

Any defective, deteriorated or otherwise damaged materials, structural components or cladding are to be replaced.

Where there is an existing concrete floor within the building the slab is to be demolished or structural engineer's details of the method of support are to be submitted.

Any damaged tiles to be replaced with new tiles of the same colour and design as the existing tiles.

All external items (architraves, fascias, barge boards etc) are to be replaced with new material where necessary due to damage incurred in transit, splitting, rot or other reason, to match existing.

Cement tiled roofs shall be replaced with new material being either clay tiles or Colorbond sheeting.

Clay tiled roofs shall be cleaned to the satisfaction of Council.

c) Acceptable design

The design of the building must be compatible with the existing character of the area and surrounding development and must have an aesthetically pleasing and professionally finished appearance. It may be necessary to add to the building or change the design of the proposed relocated dwelling. For example, a flat roof may have to be replaced with a pitched roof or a veranda/awning may be attached to enhance or add character to the relocated dwelling so that it is compatible with the existing streetscape or the character of an area.

The following minimum requirements are to be met:

- the minimum internal floor area is to be not less than 60 square metres
- the building is to be a minimum width of 6 metres

d) Existing water supply or drainage systems

In the case of relocatable dwellings, existing water supply pipes, house drainage pipes and fittings may be reused provided that:

- the system complies with Council engineering standards
- a pressure test is carried out by a licensed plumber and any defective pipes and fittings are repaired or replaced prior to connection to the water supply or sewerage system

e) Siting

The dwelling is to be sited in accordance with Councils setback requirements for residential development. Applicants are required to contact Council Officers to determine the building line and setback requirements for each property.

f) Bond/bank guarantee

The exterior of the building is to be completely restored with all damaged and defective material being repaired or replaced, in accordance with approved building plans, including the painting of the exterior of the building being given to Council to a standard satisfactory to the Council. The applicant is to lodge a bank guarantee or bond of $10,000 prior to the issue of the Construction Certificate to ensure that work is completed within the prescribed period of time.

6.10 Development in the enterprise corridor –zone B6

Notes: 1. Floor Space Ratio (FSR) controls on bulk and scale are found in the LEP 2009, clause 4.4 and 4.5 and the floor space ratio maps.

2. Also Reference chapters 4 and 7 of this Plan.

Objectives

To encourage development which:

- can operate in a functional and safe manner
- is visually attractive in form, design, scale and landscaping
- assists with positive economic, social and environmental outcomes
- minimises conflict with nearby land uses
- buildings face public spaces for passive surveillance
- on site vehicle parking is provided to minimise congestion within the streets
- roof harvesting/rainwater tanks are provided to supplement water supply and control stormwater runoff

Controls

a) Streetscape

Buildings are to face public spaces (roads and open space areas).

Buildings are not to be hidden by high fences.

Front security fencing is to be integrated with landscaping areas and not visually detract from the streetscape.

Open storage areas are to be located behind the front building line and appropriately screened.

b) Height

Maximum recommended height of 8 metres. It is acknowledged that for the functional operation of industrial processes and complexes, parts of the development may exceed 8m in height.

Entrances/front office areas are to of a single storey scale at the site frontage.

c) Building setback

Minimum requirements:

- Frontage – 6 metres
- Secondary road frontage – 4 metres
- Side and rear – setback distances are proportionally related to required building materials to satisfy wall fire ratings (refer to Building Code of Australia for details).
- Special rear landscape setback applies to Common Street (Refer to 8.2.4(g)).

No parking will be permitted within setback areas.

d) External building materials

External walls shall be profiled colour treated cladding or masonry materials, or a combination of both.

Include a variety of external finishes (colour and type of material used) and visual relief elements in large wall surfaces/elevations.

Colours and profiles of side or rear elevations visible from residential or public areas should be selected to minimise their visual impact.

Reflective finishes and colours are to be avoided.

e) Advertising signs

Signs should be integrated advertising panels into wall surfaces and/or elevations.

Single occupant industrial sites:

- one free standing advertising structure within the front setback area
- one advertising sign placed on the facade of the building, but not higher than the building roofline

Multiple unit industrial sites:

- one index board constructed within the front setback area, detailing the unit number, tenant and product of each occupant of the site
- one advertising sign placed on the facade of each unit, but not be higher than the building roofline

f) Parking

Refer to **clause 3.4** of this plan.

g) Rainwater tanks

A rainwater tank is to be provided to supplement water supply and control stormwater runoff.

The rainwater tank supply may be connected to the hot water service (at the applicants risk), laundry and toilet facilities with a top up connection into the tank. Rainwater tank supply may also be used for landscape irrigation.

h) Chemical substances

Chemicals to be stored in accordance with WorkCover requirements and appropriate Australian Standards.

Transportation of chemicals in accordance with WorkCover requirements and appropriate Australian Standards.

Preliminary hazard analysis is required for hazardous industry or activity (refer to *State Environmental Planning Policy No. 33 – Hazardous and Offensive Development*).

i) Waste disposal

On site provision for waste storage with appropriate screening from a public place.

Trade waste approval may be required for the proposed industrial activity.

j) Subdivision

Streetscape

Buildings are to face public spaces (roads and open space areas).

Buildings are not to be hidden by high fences.

Garages are to be located behind the building facade so that they do not dominate the streetscape.

Fences shall be of a design that is sympathetic to the existing character of the locality.

Acoustic privacy

Noise generating area of a development (e.g. driveway, air conditioning units, swimming pool areas) should be adequately screened or located away from noise sensitive areas to minimise impact on neighbours.

Transmission of noise between adjoining properties should be minimised.

Water sensitive urban design

Subdivision design should include water sensitive urban design features such as porous paving, infiltration devices and landscaping.

6.11 Extractive industries

Objectives

Consider the social, economic and environmental issues in the assessment and management of extractive industries.

Encourage community participation in all phases of extractive industry development.

Provide sound technical parameters to facilitate the orderly development of extractive resources within environmentally sensitive areas.

Controls

a) Community consultation

Applicants are encouraged to interact with local residents and local community groups during the full lifecycle of the development and in particular the following phases:

- project planning and pre-lodgement
- development assessment
- operation and management
- rehabilitation
- post extraction land uses

Proponents should ensure that community views, values and concerns are identified, classified, assessed and evaluated, responded to, and effectively monitored and managed. This may form the foundation of a social impact assessment and annual management plan.

Proponents are encouraged to engage in local community groups to assist in the planning, operation and management of the mining project.

Proponents may be required to establish a Management Committee including at least three permanent residents not associated with the operation.

This Management Committee may provide input into the proponent company's environmental management system and details of which may be recorded in the annual Environmental Management Plan.

b) Setbacks

Extraction operations should be setback no less than:

- 10 metres from adjoining property boundaries;
- 30 metres from a public road
- 40 metres from any boundary to a National Park or State Forest or unalienated Crown Lands
- 40 metres from any site or relic of heritage, archaeological, geological, cultural significance
- 150 metres from the Wollondilly, Shoalhaven and Mulwaree Rivers
- 150 metres from major water storage areas
- 250 metres from a well
- 100 metres from intermittent watercourse
- 40 metres from the top bank of a watercourse
- 100 metres from a community facility
- 1,000 metres from a residence not associated with extractive operations

The above setbacks may vary depending upon the nature and location of extractive industries.

Extraction operations should be setback from electricity transmission lines in accordance with the requirements of the controlling electricity authority/transmission corporation. Alternatively, proponents may submit details of re-routing transmission lines including the concurrence to do so from the relevant transmission corporation.

Development shall comply with the requirements of *State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007*.

6.12 Stables in residential and recreation zones

Objective

Detail the requirements for stable location and design in areas where permissible which is generally as an ancillary development to racecourses and showgrounds. ("recreation facility (major)").

Controls

a) Siting

To protect residential amenity, residential accommodation shall not be located within 9 metres of an existing stable or proposed stable on an adjoining site.

Likewise stables must be located 9 metres or more from residential accommodation on and adjoining site.

Residential accommodation and stables on the same lot must have a minimum separation distance of 9m unless it can be demonstrated that sufficient measures are proposed to negate any impact from the stables on the residential accommodation by way of the emission of noise, vibration, smell, dust, waste water, waste products, traffic generation or otherwise.

If there is no dwelling on the adjoining site the stables must be located 9 metres from the standard building envelope on this site.

Number

Every horse is to be provided with a stable and have access to a securely fenced and shaded day yard or paddock.

The number of stables must meet or exceed the NSW Racing requirements for a trainers licence i.e.

Licence Type	Number
Metropolitan trainer	10 Horses (Minimum)
Provincial trainer	3 Horses (Minimum)
Provincial owner/trainer	1 Horse (Minimum)

The following design requirements are applicable:

1. Stable design must be in accordance with NSW Agriculture (1996) Animal Welfare Code of Practice – The Care and Management of Horses in Riding Centres and Boarding Stables (Refer Appendix 2).

2. In accordance with the *Local Government Act (Orders) Regulation 1999* the:

   Stable floor must be paved with concrete or mineral asphalt or other equally impervious material
   Stable floors must be properly graded to drain
   Horse yards must be enclosed to prevent the escape of horses.

3. The design of the stable should blend aesthetically with any residential accommodation on the site.

4. A section 68 *Local Government Act 1993* approval is required or the operation of any trade waste facilities associated with the stables and for the discharge of liquid waste to the sewerage system (refer Section 4 and Appendix 3).

5. No sleeping quarters are to be permitted with the stables.

6. Roofwater from the stables is to be collected an reused on site in landscaping and watering horses.

7. To supplement water supply and control stormwater runoff residential accommodation should be provided with a rainwater tank to the following requirements:

- The tank shall have a minimum capacity of 10,000 litres.
- The rainwater tank supply shall be connected to the hot water service, laundry and toilet facilities with a top up connection into the tank.

6.13 Manfred Park block – Goulburn

Objective

To provide a framework for site planning.

To detail development constraints.

Controls

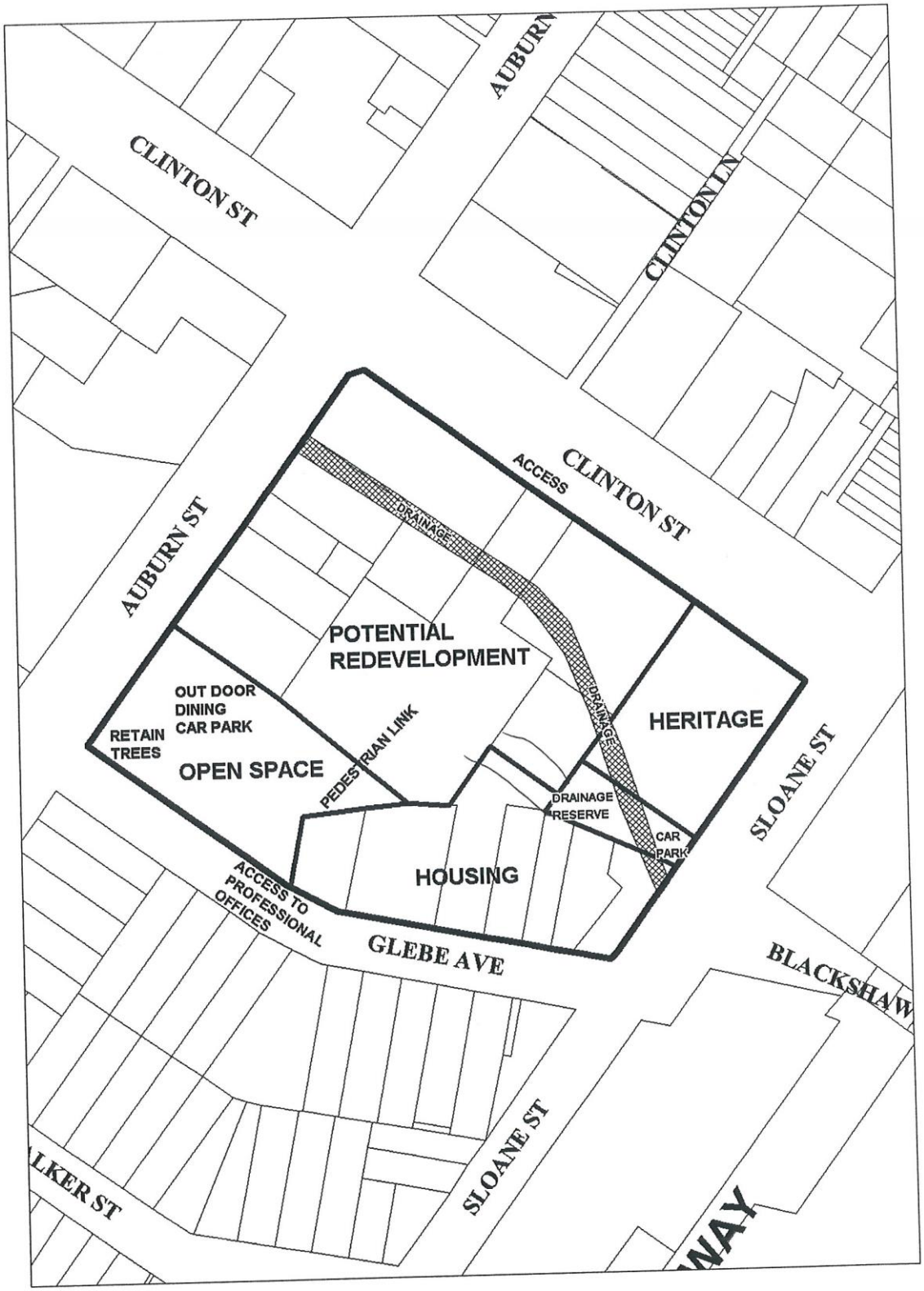
Development outcomes:

- Strategic location
  - Redevelopment of Manfred Park is undertaken in conjunction with adjoining land.
  - Landuse to reflect site / area's strategic location.
- Stormwater drainage
  - The stormwater function through the area is to be maintained. Current capacity of drainage channel is 2% AEP (Annual Event Probability).
  - The Neutral or Beneficial Effect on Water Quality Test is to be satisfied.
  - Reference: Stormwater Investigation, Bill Guy and Partners September 2005.
- Flood liability
  - Overland stormwater flows in an Extreme Flood Event are to be maintained. Auburn Street road reserve may require additional works to protect site against an extreme storm event.
- Existing uses
  - Proposed landuse complements existing uses.
- Landscaping
  - The detention facility is to be appropriately landscaped to reflect its urban context.
  - Existing trees are to be retained as part of any redevelopment proposal.
- Potential contamination
  - Part of the site was formerly used as a timber yard and therefore potential contamination may exist. Fill and differential settlement issues will require further investigation.
  - A preliminary assessment will be necessary to determine if any detailed investigation and remediation for the site is necessary.
- Infrastructure and Access
  - No major water or sewerage works are expected as a result of the redevelopment of this site.

- Access to the site is to be provided from the Clinton Street entrance.

- Provide for on-site parking sufficient for the intended use for:
  - On site loading / unloading
  - Appropriate access design on the existing road network, including the capacity for all vehicles using and servicing the redevelopment area to enter and leave in a forward direction.
- Provision for a walkway through the open space area to allow connectivity between the redeveloped area and existing residential dwellings suited to conversion to professional offices use.
- Overhead power lines
  - The location of existing high voltage powerlines will require consideration.
- Urban Design Outcomes
  - Housing stock is to be retained with additions to be sympathetic and at the rear of existing buildings.
  - Retention of the wool store (especially verandah façade)
  - New buildings to have a modern urban design statement as per the provision of this plan.

Figure 6-1: Development Objectives



7 Engineering requirements

Engineering requirements under part 7 of this plan apply to all development, including subdivision, where permissible within the Goulburn Mulwaree local government area.

7.1 Utility services

Objectives

To provide satisfactory utility services to the development site.

Controls

Applicants are to provide connections to the following services where available to the site – water, sewerage, gas, telephone and electricity, on site.

Applicants are advised to liaise with the AGL (gas), Telstra (telephone), Country Energy (electricity) and Council (water and sewer) or other accredited provider as to the availability of these services, prior to submission of development applications.

Sewerage and water supply design to be in accordance with the Standards for Engineering Works, July 1996. Rainwater tanks are to be provided in accordance with Council Policy.

Council is not averse to applicants supplying their own power supply, provided that Country Energy approve the alternate power source.

Council may require as a condition of its consent, prior to release of Certificates or plans, that satisfactory arrangements be made for the provision of a reticulated electricity supply, telephone services and a reticulated natural gas supply.

7.2 Roads

7.2.1 Urban

a) Roads

Objectives

To ensure all roads are designed and constructed in accordance with the current version of Council's Standards for Engineering Works.

Controls

Council's Standards for Engineering Works shall apply to new subdivisions and dual occupancy and multi dwelling housing developments.

Residential development shall be designed to:

- ensure satisfactory and safe operation within the adjacent road system
- take into account water sensitive road design practices
- have regard to contours and avoid large cuts and fills, steep slopes, prominent hilltops and creeks
- avoid long dead ends and cul-de-sac heads on the down slope end of roads
- ensure that drainage lines are not impeded
- stabilise, replant and/or top dress exposed batters and table drains and improve slope stability on all earthworks
- when using rear public and private laneways for vehicle access in dual occupancy and multi dwelling housing development the engineering design shall:
  - make provision for bitumen sealed laneway construction, the provision of passing bays, drainage, sediment control etc. from the development site to the closest public road. In the event that the above requirements cannot be achieved, for whatever reason the laneway is not to be used and access is to be provided from the public road frontage.

All proposed road, splay and road widening shall be dedicated to Council, free of cost as public roads.

Where the design of the access road involves realignment, provided the Council agrees to acquire any adjoining land, which may be necessary to effect such realignment, the applicant shall bear full cost of such acquisition.

The use of decorative paving such as brick, interlocking pavers or coloured concrete is encouraged as these materials can enhance the appearance of the street and signify to motorists its residential function and corresponding appropriate driver behaviour.

Where cul-de-sacs are included in road design, when all other options are considered, alternative cul-de-sac heads that may be considered are square offset, T-Heads and Y-Heads. Include appropriate traffic calming devices on the collector roads.

Roads should be placed between houses and open space areas/vegetation conservation areas to provide a buffer separation for fire management and vegetation preservation along with passive surveillance benefits.

7.2.2 Rural

Controls

All proposals are to be designed and constructed to comply with the current version of Council's Standards for Engineering Works for rural roads, drainage, erosion and sediment control and other special facilities covered in the standard.

Proposed road reserve width of 20 metres.

General road provisions

Subdivision proposals, including new roads and Crown roads to be transferred as public roads to Council, must front and connect to a bitumen sealed two lane road designed and constructed in accordance with the current version of Council's Standards for Engineering Works.

Access via a right of carriage way shall be limited to one lot and constructed to an all-weather pavement standard.

7.2.3 Heavy vehicle haulage development routes

Objectives

To set out the matters to be considered for selection of haulage routes for heavy vehicle haulage developments to address rural and village amenity and safety

To set out road standards for heavy vehicle haulage routes

To identify the road standard and haulage route information required to be submitted with an application for heavy vehicle haulage development.

Controls

Route selection for heavy vehicle haulage developments

Principal haulage routes needs to be nominated when submitting a development application for a heavy vehicle haulage development.

The applicant needs to justify selection of the haulage route based upon traffic engineering grounds, amenity considerations and availability of alternative options (i.e. rail). If the existing road network is unsatisfactory then upgrades will be required.

The following matters should be addressed in a development application:

1) Impact on the road network:

- Existing traffic movements along the haulage route.
- Estimated increase in traffic movements resulting from the proposed development. This includes detail of any staging proposal, truck / car ratio and the life of the project / development.
- Foreseeable increases in traffic movements resulting from other known development (i.e. subdivision of land etc).
- Heavy vehicle type and volume (i.e. rigid or articulated, covered or uncovered).
- Anticipated tonnage of material to be transported.
- Type of material transported.
- Hours of operation and frequency of movements.

2) Impact on amenity and the environment – Rural, Village Zones and generally:

- Proximity of haulage route to residence, community land etc.
- Community expectation including ambience and enjoyment of life.
- Community assets including accessibility to parks by residents and visitors.
- Noise generation.
- Vibration generation.
- Visual impact.
- Pedestrian safety and safety of other road uses.
- Impact on roadside habitat resulting from road upgrade works.
- Consistency with the objectives of all zones that the haulage route passes through.

An applicant may also wish to include details of voluntary measures that are proposed to be undertaken during the operational phase of the development to address any of the considerations outlined in this section. This could include a heavy vehicle code of practice whereby drivers of heavy vehicles agree not to exceed a particular speed limit on a haulage route for safety reasons. Selection of such measures can be informed through

discussion with Council staff and/or the responses generated from any consultation undertaken by the applicant prior to submitting an application.

Haulage Route standards for heavy vehicle haulage developments

The following road standard for haulage routes is required:

- 7m wide sealed carriageways in rural areas
- In addition to the carriageway, 1m wide shoulders on each side with a 500mm seal
- 80km/h design standard
- 9m wide culverts and bridges (i.e. from barrier to barrier).
- Minimum remaining pavement life of 10 years at the time of commencement of operations
- Asphaltic concrete surface in village areas.

Note: Intersection upgrades may also be required to accommodate turning paths for heavy vehicles.

Information to accompany an application for development involving heavy vehicle haulage should establish the existing road condition and include an assessment of the remaining pavement life. This assessment should be undertaken by an appropriately qualified professional and should factor in the estimated additional load to be generated by the heavy vehicle haulage development and the resulting impact on the existing road. Design traffic should be calculated in equivalent standard axles (ESAs).

The following information should be submitted with an application for heavy vehicle haulage development:

- Pavement testing results for the intended haulage route/s;
- An estimation of the remaining pavement life of all intended haulage routes given the anticipated additional load from the proposed development; and
- A plan and/or schedule identifying any upgrades required to the pavement to ensure that the road has a minimum pavement life of 10 years taking into account the additional load.

Council may vary the road standard and development application information requirements described above subject to consideration of the following:

- the number of proposed heavy vehicle movements
- the volume of material to be hauled
- the intended life of the development
- the condition of the road/s
- any arrangement proposed in a development application to address ongoing road repairs and maintenance whether by financial or in-kind contributions.

If such a variation is sought an applicant should:

- discuss the matter with Council staff prior to lodging a development application (pre-lodgement meetings are available on request); and
- include justification for the variation and any alternative arrangement in the Statement of Environmental Effects based on the matters for Council consideration outlined above.

Note: The arrangements for developer contributions to fund the ongoing maintenance of heavy vehicle haulage routes (once the upgrades required for the development are in place) is provided for in the Goulburn Mulwaree Section 94 Plan.

For heavy vehicle haulage developments involving a large volume of heavy vehicle movements, it may be appropriate that a Voluntary Planning Agreement is established in which the haulage routes are maintained by the developer to appropriate industry standards. This Agreement could be in lieu of a heavy vehicle contribution under the Goulburn Mulwaree Section 94 Plan.

7.3 Drainage and soil and water management

7.3.1 Drainage (urban)

Objectives

Prevent erosion and local flooding.

Ensure adequate drainage facilities are provided within the site to collect and carry stormwater to external systems.

Provide water quality management systems which ensure that disturbance to natural steam systems is minimised and stormwater discharge to service and underground receiving waters, both during construction and in developed catchments, does not degrade the quality of water in the Wollondilly River and Mulwaree Ponds.

Retain where possible roof water on-site.

Controls

Adequate measures designed in accordance with the current version of Council's Standards for Engineering Works, must be made during construction to ensure the land is stabilised and erosion is controlled, until the site is satisfactorily landscaped.

A plan identifying the location of stabilisation methods such as stacked hay bales and sedimentation fences or geotech fabric may be required by Council prior to the release of any plans.

Applicant shall have regard to the Stormwater Management Plan, April 2000. A copy is available for perusal at Council.

Relevant matters to be considered are:

- urban run-off
- interlot drainage
- design criteria
- erosion sedimentation
- floodways and retention basins
- stormwater runoff from roofs and paved areas is to be collected on-site and retained where appropriate or disposed of to the street drainage system, drainage easement, natural drainage course or infiltration trenches to the satisfaction of Council.

7.3.2 Water sensitive urban design (urban)

Principles of water sensitive urban design to be incorporated into subdivision design.

Development must comply with the neutral or beneficial effect on water quality test *State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011.*

Drainage lines are to focus on the "natural" or existing drainage lines and integrated into the open space network.

Drainage design is to minimise run off into vegetation conservation areas to assist with ongoing preservation.

Detentions basins are required upstream of development (eg. Marys Mount Road) to regulate and control the runoff back to rates equal with "natural" runoff. Detention basins may also be required to regulate and control runoff to rates equal with "natural" runoff.

Detention ponds and other stormwater treatment devices are to be "offline" and "at source" to ensure stormwater runoff is treated prior to entering these areas.

Use of rainwater tanks will assist with minimising runoff associated with minor rainfall events.

Stormwater drainage systems are to be designed in accordance with the current version of Council's Engineering Standards for Engineering Works.

The piped drainage system to be designed for a 1 in 5 year storm event. Higher order storms events to be based on overland flow systems along "natural" drainage lines.

7.3.3 Soil and water management

Objective

To minimise soil erosion and water pollution by minimising land disturbance and requiring control measures on-site.

To ensure the potential impacts of development on the water quality of the catchment can be quantified and evaluated in the context of Ecologically Sustainable Development.

Controls

Development proposals where the area of disturbance is less than 2500m² require an Erosion and Sediment Control Plan (ESCP) (written document and site diagrams) that indicates measures to minimise erosion and sedimentation.

Development proposals where the area of disturbance is 2500m² or greater should be accompanied by a Soil and Water Management Plan (SWMP) (written document and site diagrams), prepared by a suitably qualified person(s), that clearly identifies the constraints of soil erosion, sediment pollution and stormwater pollution.

The SWMP should contain appropriate Best Management Practices that recognise site constraints and support ESD principles. The plan should include:

- soil conservation and pollution/nutrient control measures to be installed prior to clearing and earthworks and maintained until landscaping measures are complete
- protection measures for site access and exits
- catchment drainage characteristics of existing and proposed drainage patterns
- protection of existing overland flow paths, watercourses, stormwater kerb inlets and drains.
- upslope clean surface runoff diversions around the disturbed areas
- staggered site works to minimise disturbance
- rehabilitation and stabilisation of the disturbed areas

- measures to minimise the impacts of agricultural practices (such as the use of fertilisers, cultivation practices, tree clearing and pasture management)

The SWMP should detail means to achieve no net increase in pollution of downstream waters through the use of Best Management Practices.

The Plan should balance the management of runoff between farm dam storage and the needs of the downstream environment.

Development of slopes greater then 20% should be avoided. Lands with slopes greater than 20% and having soil landscapes with a moderate to high soil erosion hazard are considered as sensitive areas. Development should minimise disturbance to these areas by minimising areas of cut and fill to depths of 1m. Development proposals within these areas should be accompanied by:

- an evaluation of the site stability (i.e. a geotechnical report)
- a schedule of earthworks
- details or appropriate construction techniques

Plant species which are non-invasive to bushland should be used in landscaping and soil and water management works.

All development proposals on potentially agricultural land should be accompanied by an assessment of the agricultural capability of soils on the property and the effect of the development on the agricultural capability of these soils on the property and the effect of the development on the agricultural capability of these soils.

7.4 Easements

a) Easements

Easements shall be required pursuant to section 88B of the *Conveyancing Act 1919*, as follows:

- sewerage and water supply easements shall be created over all existing and proposed sewer and water lines
- where applicable, easements for batter and support shall be created over lots in accordance with approved engineering plans
- all existing and proposed rights of carriageway shall be legalised
- easements for electricity purposes, if required, shall be created over existing and proposed electricity lines

- drainage reserves (or easements in exceptional circumstances) shall be created over proposed stormwater drainage lines (including floodways), in accordance with the Council's standards
- easements and reserves shall be dedicated to Council free of cost and appropriately indicated on the plan of subdivision

The final plan of survey and other associated instruments plus six copies, suitable for registration with the NSW Land and Property Information, shall be submitted to Council for endorsement prior to the development commencing operation.

7.5 Staging of development in urban release areas

The Section applies to development within the Common Street, Clyde Street, Long Street (Charles Valley) and Ducks Lane urban release areas.

a) Council will allow staged development in the subject urban release areas only if Council is satisfied that:

   i. adequate arrangements have been made by any developer with Council for the provision of infrastructure and services of sewerage, water, road, landscape and stormwater drainage; and
   ii. the developer will pay for all infrastructure costs generated by their development.

b) The areas identified in the table to this sub-clause must make provision for the specific infrastructure identified in the table in addition to other general matters specified under (a).

Area	Infrastructure
Clyde Street, Goulburn	Construction of a road connection between Clinton Street, opposite Rossiville Road, and Clyde Street generally parallel to River Street.
Common Street, North Goulburn	Construction of a roundabout at Sydney Road and Common Street. Landscape buffer along Long Street to: ▪ Separate residential and industrial uses, ▪ Provide as landscape and wildlife

	connection, ▪ Assist with stormwater management.
Long Street (Charles Valley), Goulburn	Provision of essential services of sewerage, water supply and stormwater drainage. Upgrade of Long Street.
Ducks Lane, South Goulburn	Provision of a landscape buffer along the western boundary to separate any industrial activity from the adjoining “Run-O-Waters” rural residential area. Upgrade of Ducks Lane.

8 Site specific provisions

8.1 Goulburn City Business District

Preliminary

Aim

- Develop a plan for Goulburn City's Business District that facilitates future management by balancing development and conservation in a sustainable way.

Objectives

- Develop standards, guidelines and principles to improve the image, attractiveness and functionality of the Business District of Goulburn City
- Attract business, tourism and residents to Goulburn Mulwaree.
- Maintain, protect, enhance and promote Goulburn City's built and natural heritage.

8.1.1 Land to which Plan applies

This Plan applies to the land identified on the map shown as **Figure 8-1-1**

Figure 8-1-1: **Land to which Plan applies – Goulburn City Business District**



8.1.2 Background context material

(a) Historic context

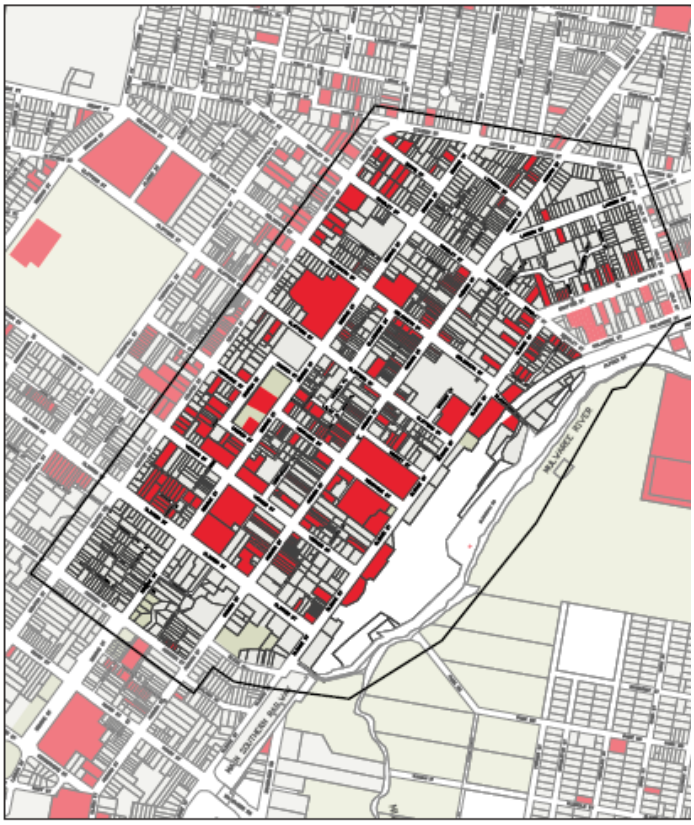
The CBD has developed around its original planned city centre incorporating a uniform grid subdivision pattern. The formal axis along Montague Street from Victoria Park through St. Saviours Church to Belmore Park was an important component of the original town plan.

1817-1820	Exploration by Hume, Thorsby, Meehan and Oxley alerted early colonists to good grazing potential of the southern highlands
1828	Governor Macquarie marked out the new town of Goulburn as a key service centre for the southern highlands – built at the confluence of the Wollondilly and Mulwaree Rivers
1833	Present city centre laid out on higher land to the south west to avoid repeated flooding
1841-1845	Town population increased from 655 to 1,200
1868	Construction of railway completed and physical connection of the City Centre with the river severed
1880s	Period of significant growth in the City (1881 Auburn Street Post Office opened);
1887	Court House opened
Early 20th C	Moderate expansion with only minor change. Rail as an employment focus diminished with growth in road transport
1950s>	Period of decline with many regional headquarters relocating to Sydney or other regional centres
1992	Hume Highway by-pass. Loss of highway traffic caused a change in business mix but not significant loss of business. Council began Main Street Improvement Program to capitalise on new opportunities for public domain improvement.

Reference: Goulburn CBD Plan, Interim Report 1, 29 August 2008 Edaw/AECOM.

b) Heritage Context





Scheduled Items of Heritage Significance (Draft LEP)



1882 Town plan of Goulburn

Reference: Heritage Report and Conservation Principles / Guidelines, City Plan Heritage July 2008.

A report on heritage matters as they pertain to planning for the CBD have been provided by City Plan Heritage. The results of this work are described in the report available on Council's website.

Items of Heritage Significance scheduled in the Goulburn Mulwaree Local Environmental Plan (LEP) 2009 are indicated in the heritage significance map.

"The City Plan report describes the following characteristics as being critical to the heritage significance of the CBD:

- The original grid form subdivision pattern dating from the establishment of Goulburn including nightsoil lanes, various rectangular allotment sizes addressing the street, and parks/open spaces.
- Predominately single-storey and uniform streetscapes with mostly intact Victorian and Federation housing stock.
- Relatively intact consistent main street commercial streetscape with two to three storey continuous historic character.
- Common residential architectural features such as street facing prominent gables, hipped or pitched corrugated iron or tile roofs, timber framed windows, front verandas, asymmetrical facades, face brick finished, and low fencing in keeping with the styles of the period.
- Common commercial architectural features including vertically proportioned above awning facades, decorative parapets with advertising evident in public and administrative buildings, two-storey continuous streetscape, verandas supported on posts over footpaths, dominant tower elements or splayed facades at the corner allotments, traditional shop windows and uncluttered above awning facades.
- Streetscapes that are dominated by mature trees creating a dense leafy setting generally concealing the houses in street-long views and frame views to houses close to the viewer.
- Maintained garden settings with generally low or no fencing to the street along residential zones of the CBD.
- Topography that is characterised by a number of small hills and ridges allowing the city to be experienced as a whole when approached from north whilst creating a distinctive view corridors and vistas towards north, south and particularly east from the ridge of the CBD (along Montague Street) in and out as well as within the study area.
- Well established public domain including roads with kerbed footpaths and grasses verges traffic management devices throughout, street trees and parks.

Conversely, the following elements are described as intrusive to the CBD's heritage values:

- Uncoordinated and unregulated advertising and business signs along consistent streetscape creating unpleasant presentation.
- Unsympathetic single-storey or oversized infill development within a consistent two to three storey streetscape.
- Corporate buildings with their respective designs, corporate colours and signs.
- Contemporary buildings with no regard to the established heritage streetscape.
- Vacant allotments, service stations, car parking or car repair workshops / car sales yards.
- Overhead wires and antennas in some residential areas."

Reference: Goulburn CBD Plan, Interim Report, 29 August 2008, EDAW/AECOM

(c) Street Character Statements

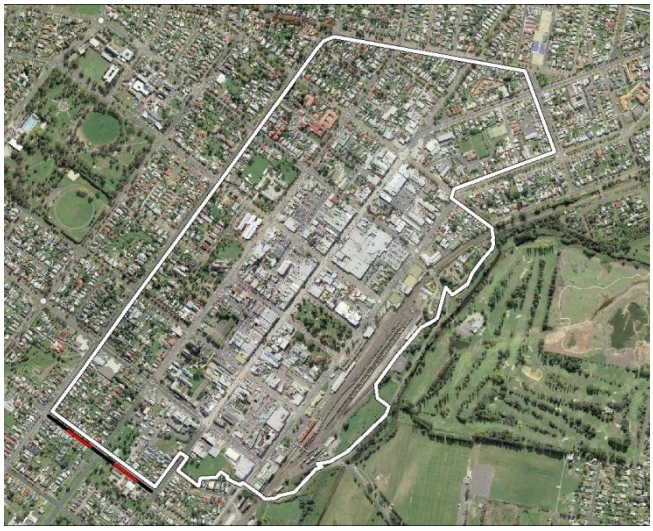
The character statements for each street that is located within the boundaries of the Goulburn Central Business District are provided in the form of dot points outlining the significant and dominant aspects of the street. The character statements also identified issues and negative aspects of the individual streets. The Statements are based on the Goulburn Mulwaree CBD Master Plan, Heritage Report and Conservation Principles / Guidelines, the Street Character Statements, July 2008, City Plan Heritage.

Note: The point of the statements and their accompanying photographs is to illustrate good and bad design elements.

It is the writers opinion and not necessarily the opinion of Council. It is not meant as a personal criticism and if taken that way please accept the writers apology.

(i) Addison Street

Good Elements:



- Consistent single storey residential streetscape (Photos 1 and 2)
- Wide footpath, street trees and small landscaped front garden (Photo 1)
- Setback building alignment (Photo 1)
- Pitched and multi gabled corrugated iron or tiled roofs (Photos 1 and 2)
- Low brick fence or no fence with open front gardens (Photo 2)
- Veranda with asymmetrical façade (Photo 3)
- Well established street trees (Photo 4)
- Significant dwelling cluster between Auburn Street and Addison Lane (Photo 5)

Intrusive Elements:

- TV antennas and street overhead wiring (Photo 6)
- Eastern block (north side is a disjointed character mix of open space, community, industrial and residential activities (Photo 7)


Photo 1


Photo 2


Photo 3


Photo 4

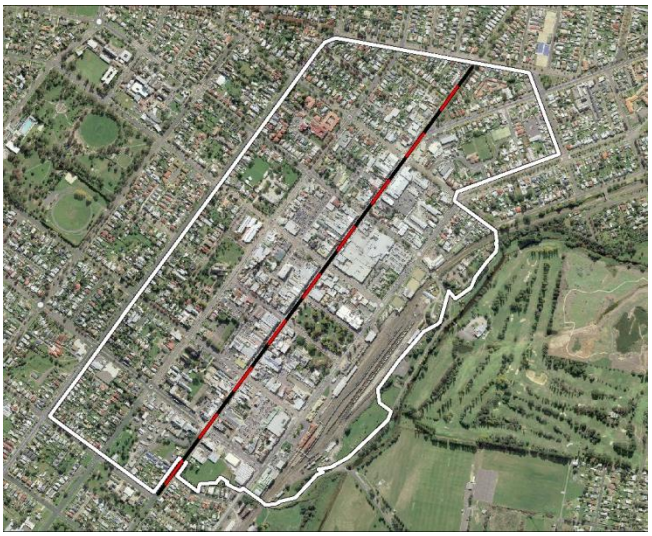

Photo 5


Photo 6


Photo 7

(ii) Auburn Street

Auburn Street is the main commercial street of the CBD since the establishment of the town featuring a high number of heritage items and consistent traditional commercial strips.



Good Elements:

- Two to three storey cohesive Victorian and Federation period. Shops with flats / offices above dominate the street particularly between Verner and Bradley Street (Photo 1).
- Important public and administrative domain buildings (Photo 2).
- Improvements to Belmore Park (Photo 3).
- Above awning façades (Photo 4).
- Well defined corner allotments with original buildings (Photo 5).
- Contemporary buildings reflecting some traditional design elements (Photo 6).



Intrusive Elements:

- Above awning signs (Photo 7).
- Infill buildings having no regard to the established character of the street (these include banks, government office, car yards, motels and shopping centre) (Photo 8).
- Loss of below awning and facia signs (Photo 9).
- Out of character corporate developments and signage (Photo 10).
- Service station development at the northern end of Auburn Street (Photo 11.1 & 11.2) – this is an important “gateway” entry.
- New building at the corner of Market Street complicates the simplicity of the traditional shops (Photo 12).






Photo 4
HIBERNIAN HO
Real Estate


Photo 5
nab


Photo 6
IAN'S AUTOSHOP
ARB


Photo 7
The Country Outfitters
AKUBRA
DRIZA-BONE
Goulburn Soap World
GOULBURN INSURANCE


Photo 8
MOTEL
Free Internet
50


Photo 9
TARMTARA


Photo 10
KFC


Photo 11.1


Photo 11.2


Photo 12

(iii) Beppo Street

A short, residential and no thoroughfare street that runs between Cowper and Bourke Streets.



Good Elements:

- Mainly federation period residential dwellings (Photo 1).
- Established streetscape with dwellings ranging from two to single storey with large allotments (Photos 2 and 3).
- Tree lined quiet neighbourhood friendly street (Photos 2 and 3).







(iv) Bourke Street

Bourke Street is typified by mixed developments and features a number of scattered heritage items, residential housing, motels, Conservatorium Technical College, a number of churches, St Saviours Cathedral at the highest point, Goulburn civic centre, Goulburn Public School, St John of God Hospital, fire station, and Apex Park. The residential developments are located at the northern and southern ends of the Street with consistent streetscape character.



Good Elements:

- Two storey form and mass (Photo 1).
- Institutional and religious buildings providing interesting and dominant streetscape elements (Photo 2).
- Mixed uses with residential developments at north and south ends (Photo 3).
- Significant dwelling cluster between Clinton and Verner Streets on western side (Photo 4)
- Significant Churches and associated ecclesiastical buildings; St Peter & Pauls, St Saviours, Uniting & Baptist Churches (Photos 5, 6 ,7 & 8)

Intrusive Elements:

- Lack of street trees in some sections (Photo 9).
- Lack of streetscape consistency (Photo 10).


Photo 1



Photo 2


Photo 3


Photo 4


Photo 5


Photo 6


Photo 7



Photo 8


Photo 9


Photo 10

(v) Bradley Street

Bradley Street forms the northern boundary of the original grid town layout extending between Cowper Street on the west and Sloane Street on the east.

Good Elements:

- Good streetscape at western end with dominant residential use and roundabout treatment at Bourke Street intersection (Photo 1).
- Consistent street facades at Bourke Street (Photo 2).
- Good example of Commercial buildings that make a positive contribution to the streetscape (Photo 3).
- Good tree line and streetscape (Photo 4.1, 4.2).

Intrusive Elements:

- Service station at Auburn Street corner (Photo 5).











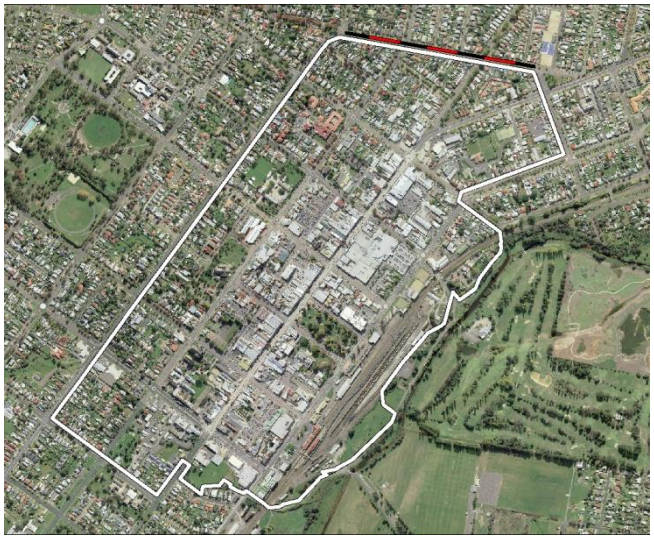




(vi) Citizen Street

Good Elements:

- Citizen Street has generally a leafy streetscape with a tree lined avenue at the eastern end where it meets Cole Street (Photo 1). The street trees lose their dominance between Bourke and Auburn Streets.
- It is characterised by single storey residential development dating from the Victorian, Federation and 20th Century. The northern side of the street contains a more cohesive and early building stock some of which are listed as heritage items. The southern side of the street also presents consistent but lesser early and intact building stock (Photo 2).



- Low height well maintained front fencing provides consistent and pleasant streetscape (Photo 3).
- Some good infill developments (Photo 4).
- Significant housing cluster (Photo 5).
- Towards the eastern end the street's character changes with the insertion of a corner shop and more established street trees creating a good tree lined streetscape (Photo 6).
- Roundabout treatment at the intersection of Citizen, Belmore, Cowper and Hurst Streets creates a good neighbourhood character (Photo 7).
- Garages are generally well setback to the rear of the allotments with concrete and grass strip driveways (Photo 8).

Intrusive Elements:

- Street trees lose their dominance between Bourke and Auburn Streets (Photo 9).






Photo 3


Photo 4


Photo 5


Photo 6


Photo 7


Photo 8


Photo 9

(vii) Clifford Street

Featuring the Council Chambers and Goulburn Public School, Clifford Street has only limited consistency mainly on the western end towards Cowper Street.



Good Elements:

- Some two to single storey building consistency at western end towards Cowper Street (Photo 1).
- Avenue street trees along western end to Cowper Street and beyond (Photo 2).
- Two key corner heritage item buildings at Auburn Street. Excellent examples of Goulburn's traditional corner buildings with their tower like structures (Photo 3).

Intrusive Elements:

- No particular character with a mix of building styles (contemporary civic centre / bank / church and contemporary shopping mall) (Photos 4.1, 4.2).









Photo 4.1



Photo 4.2

(viii) Clinton Street



Clinton Street is one of Goulburn's major transport streets and it's character is affected by service station and accommodation premises.

Good Elements:

- Two to single storey buildings (mainly residential) towards Cowper Street end on northern side (Photo 1).
- Some new central avenue street trees (Photo 2).
- View to west (Photo 3).
- Wide footpaths (Photo 4).
- Relatively consistent bulk and scale of commercial developments (Photo 5).

Intrusive Elements:

- Overhead wiring (Photo 6).
- Corners occupied by service station and motel buildings. The corner of Clinton and Auburn Street is an important "gateway" (Refer S.8.6.3(d)(i)) (Photo 7).
- Large corporate signage (Photo 8).
- Lack of streetscape character between Auburn and Sloane Streets (Photo 9).










Photo 5


Photo 6


Photo 7


Photo 8


Photo 9

(ix) Cole Street



Good Elements:

- Public park at the intersection of Lagoon and Citizen Streets – Park creates an open setting and link between early grid subdivision and the later expansion. Good approach point to focus on (Photo 1).
- Established character between Lagoon and Mulwaree Streets (Photo 2).
- Build fabric – interwar to late 20th century (Photo 3).
- Well established street trees (Photo 4).

Intrusive Elements:

- Motel development dominates (Photo 5).
- There are some poorly maintained houses


Photo 1


Photo 2


Photo 3

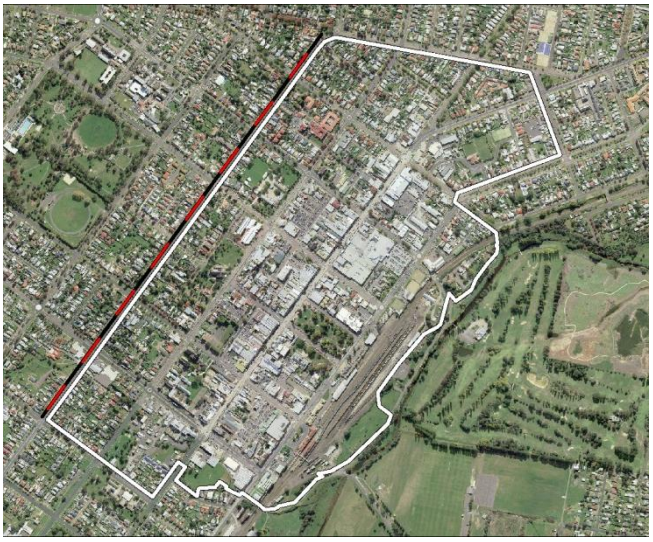

Photo 4


Photo 5

(x) Cowper Street

Creating the western boundary of the CBD, Cowper Street is a residential street with good examples of Victorian, Federation periods and Georgian style housing stock particularly on the western. Cowper Street has consistency at the north and south blocks of the street.

Good Elements:



- Consistent face brick single storey gabled houses with low traditional fencing (Photo 1).
- Infill residential development at the north east corner intersection with Clinton Street (Photo 2).
- Significant view corridors and vistas from highest point at the Montague Street intersection to the Central CBD, St Saviours Cathedral and the extended townscape (Photo 3).
- Laneway development in Little Addison Street, Hillview Road and Thorne Avenue (Photo 4).
- Neighbourhood character at the intersection of Addison Street (Photo 5).
- Vista looking north from Montague Street onto a well maintained tree lined street (Photo 6).
- Significant dwelling cluster between Montague and Clinton Street (Photos 7.1, 7.2, 7.3 & 7.4)

Intrusive Elements:

- Service station and industrial development at the southern intersection (Photo 8).
- Infill between Clifford and Goldsmith Street is unsympathetic to surrounding neighbourhood (Photo 9).






Photo 3


Photo 4


Photo 5


Photo 6


Photo 7.1


Photo 7.2


Photo 7.4


Photo 7.3


Photo 8


Photo 9

(xi) Goldsmith Street



Good Elements:

- Established streetscape west between Auburn and Cowper Streets (Photo 1).
- The early phase single storey free standing houses and shops (Photo 2).
- Methodist Church, Goulburn Public School garden and Georgian style cottages (Photo 3).
- Quality former bank building on the corner with Auburn Street. The brick building addresses both street frontages and makes a positive contribution to the streetscape (Photo 4).
- Significant dwelling clusters (Photos 5.1 5.2).

Intrusive Elements:

- Inconsistent streetscapes in the eastern and middle blocks (Photo 6).
- Unsympathetic buildings break the street wall appearance (Photo 7).
- Lack of street trees in the eastern block (Photo 7).
- Side elevations and central car parking of shopping mall further dominates the traditional streetscape character (Photo 8).
- The service station at Bourke Street intersection dominates the traditional streetscape character (Photo 9).






Photo 3


Photo 4


Photo 5.1


Photo 5.2

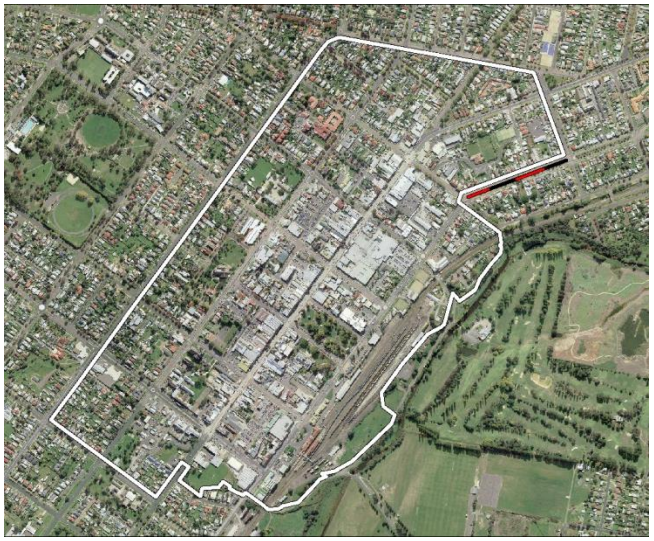

Photo 6


Photo 7


Photo 8


Photo 9

(xii) Grafton Street



Good Elements:

- Early major approach road to CBD to north (Photos 1.1, 1.2, 1.3, 1.4 & 1.5). This street, much of which is outside the study area, contains some 21 heritage items from an early phase.
- Good tree lined streetscape with mature trees and central tree island (Photo 2). Mostly sympathetic residential.

Intrusive Elements:

- Car yard (Photo 3).










Photo 1.5


Photo 2


Photo 3

(xiii) Lagoon Street

Good Elements:

- Mixed residential and commercial streetscape with some of the dwellings being adaptively reused offices (Photo 1.1 & 1.2).
- Some federation period houses remain intact and contribute to the streetscape with their low fencing and characteristic features of their style (Photo 2).
- Good tree lined pedestrian pathway in sections (Photo 3).
- Park at the intersection of Lagoon & Auburn Streets (photo 4)



Intrusive Elements:

- Number of motel designs (Photo 5).
- Unsympathetic signage (Photo 6.1, 6.2).










Photo 4



Photo 5


Photo 6.1



Photo 6.2

(xiv) Lithgow Street

Good Elements:

- A good tree lined residential streetscape with mature trees (Photo 1).
- Narrow allotments with few as early as 1840s – 60s semi-detached dwellings and former shop and residence (Photo 2).
- Single to two storey free standing or semi-detached housing with corrugated or tile hipped or pitched roofs (Photo 3).
- Asymmetrical façade and front veranda (Photo 4).
- Few garages placed discreetly to the rear of their respective sites with side driveways (Photo 5).
- Street parking is provided between the trees (Photo 6). Note: New colour scheme.










Photo 1


Photo 5

(xv) Market Street

Previously a busy commercial street Market Street has lost its integrity due to changes to the early buildings including the introduction of the uncharacteristic club building.



Good Elements:

- The surviving early buildings (heritage items) provide physical evidence of Market Street early commercial phase (Photo 1).
- Use of appropriate signs (Photo 2).
- Remaining Bull and Woodward Arch has been conserved (Photo 3).

Intrusive Elements:

- Street car parking dominance (Photo 4).
- Club building (Photo 5.1, 5.2) and street replacement building at Auburn Street. These two key corner sites have been compromised by these two buildings. The replacement building does have some traditional architecture elements but overstates them by the use of dominant vertical piers and moulded panels that make it an unsuccessful infill development.



Photo 1



Photo 2


Photo 3


Photo 4


Photo 5.2


Photo 5.1

(xvi) Montague Street

Montague Street forms the central axis of the original street grid pattern with extensive view corridors up and down in both directions along the street focussed on the St Saviours Cathedral hill.

Good Elements:



- Good consistent streetscape between Auburn and Bourke Street terminating with St Saviours Cathedral (Photo 1.1, 1.2).
- Contains two of the most important early features of the City – Goulburn Court House group and Belmore Park (Photo 2.1, 2.2).
- Contains central axis view corridor to St Saviours Cathedral (Photo 3.1, 3.2).
- Contains significant portion of heritage architectural character of area (Photo 4.1, 4.2).
- Belmore Park with its important traditional street lights, good pedestrian friendly traffic managements and landscaped treatments (Photo 5.1, 5.2).
- Good adaptive reuse of early building as a Café (Photo 6).

Intrusive elements:

- Key corner occupied by unsympathetic bank building and signage which also breaks up the streetscape (Photo 7).






Photo 2.1


Photo 2.2

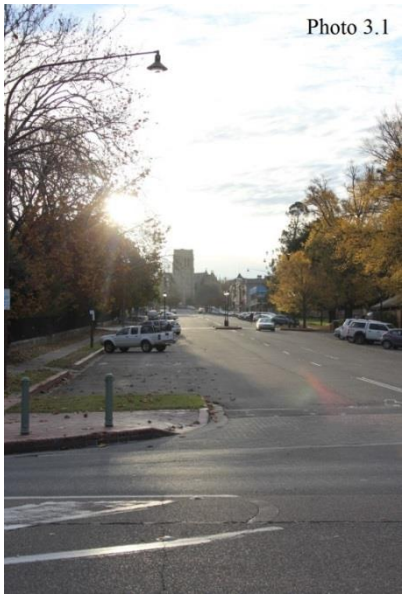

Photo 3.1


Photo 4.1


Photo 4.2


Photo 3.2


Photo 5.1


Photo 5.2


Photo 6


Photo 7

(xvii) Mulwaree Street

Good Elements:

- A street that is characterised by a row of single-storey semi-detached brick cottages associated with the railway development some of which present the same architectural detailing in groups suggesting their construction by the same builder(s) (Photo 1.1, 1.2).
- Good streetscape with mature trees along the railway line containing (together with Bradley Street) some of the oldest trees in Goulburn (Photo 2).



Intrusive Elements:

- Uncharacteristic and unsympathetic alterations and modifications to the buildings' fabric and fencing are evident (Photo 3).


Photo 1.1

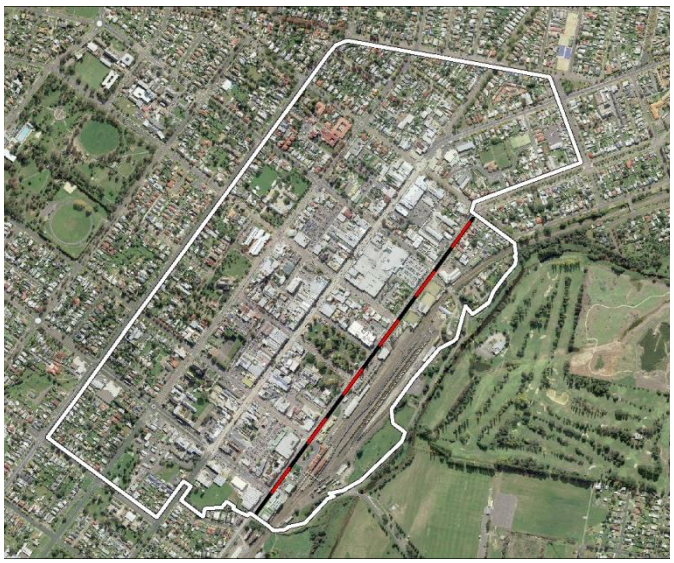

Photo 1.2


Photo 2


Photo 3

(xviii) Sloane Street

Sloane Street has a similar role and importance to Auburn Street as one of the main commercial and administrative streets of Goulburn from the early years of settlement. It contains a number of buildings from early period however it has lost its cohesive traditional appearance with the majority of public movements shifted to Auburn Street. Sloane Street contains a large number of heritage items of local and state significance.



Good Elements:

- Scattered two storey terraces at northern end (Photo 1).
- Warehouses including former railway workshop adaptively reused building in a sympathetic manner (Photo 2).
- Belmore Park, Courthouse precinct, railway precinct buildings and traditional hotels (Photo 3).
- View and vistas especially vistas towards St Saviours Cathedral along Montague Street (Photo 4).
- Early buildings adaptively reused – old Connolly's Mill (Photo 5).
- High quality government & privately owned buildings including the firmer Courthouse, Railway, Alpine Lodge Hotel & Railway/Coolavin Hotel (Photos 6.1, 6.2, 6.3 & 6.4)

Intrusive Elements:

- Bowling Club car park area, contemporary hotel, railway yards, open storage areas and major car parking for shopping mall break the continuity of the street (Photo 7).
- Corporate signage. Though it was incorporated some of the traditional design elements and compatible colour scheme, the signage makes it an unsuccessful development (Photo 8).
- Communication Tower (Photo 9).






Photo 3


Photo 4



Photo 5



Photo 6.1


Photo 6.2



Photo 6.3


Photo 6.4


Photo 7



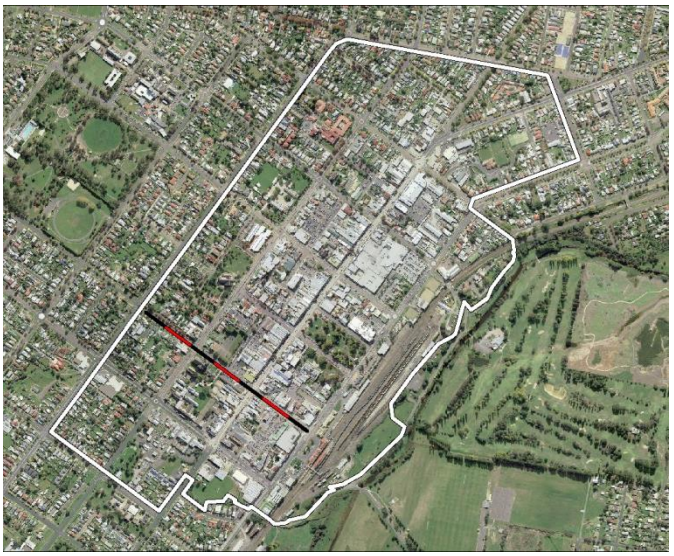
Photo 8


Photo 9

(xix) Verner Street

Good Elements:

- Good streetscape with trees on both sides (Photo 1).
- Vista from Cowper Street to the town centre and the hills beyond on the eastern edge (Photo 1).
- Views to Cowper Street and Church from Sloane Street end (Photo 2).
- Traditional early buildings of similar scale on north side between Auburn and Sloane Streets (Photo 3).
- Well defined corner allotments by two storey buildings (Photo 4).
- Church buildings (Photo 5.1, 5.2).
- Significant housing cluster on western end both north and south sides (Photo 6).



Intrusive Elements:

- No uniform streetscape towards Bourke Street due to the dominance of motel car park and bank car park (Photo 7.1, 7.2).


Photo 1


Photo 2



Photo 3


Photo 4


Photo 5.1


Photo 5.2


Photo 6


Photo 7.1



Photo 7.2

(xx) Laneways



Good Elements:

- Thorne Avenue – Good use of timber post and rail pedestrian balustrade, timber pailing and picket fencing and pavements grassed on one side and paved on the other (Photo 1).
- Hillview Road – Good laneway streetscape with mature garden landscaping (Photo 2).
- Little Addison Street – Established narrow streetscape with single to two-storey housing stock (Photo 3).
- Horne Square – Complete physical evidence of identical Victorian period detached dwellings built by former mayor c1869 – 1871 (Photo 4).

Intrusive Elements:

- Lanigan Lane – No particular consistency or dominate features (Photo 5).


Photo 1


Photo 2


Photo 3


Photo 4



(d) Levels of Heritage Significance

(i) Items of Environmental Heritage

These items are of key importance to the areas character eg. building works, relics, places, landscapes, gardens, trees or vegetation of historic, scientific, cultural, social, natural or aesthetic significance as listed in Schedule 5 of Goulburn Mulwaree Local Environmental Plan 2009 and shown in **Figure 8-1-2**.

(ii) Contributory Items

These items are of moderate significance and contribute to the predominant character and visual attractiveness of the Schedule 5 items above. Again shown in **Figure 8-1-2**.

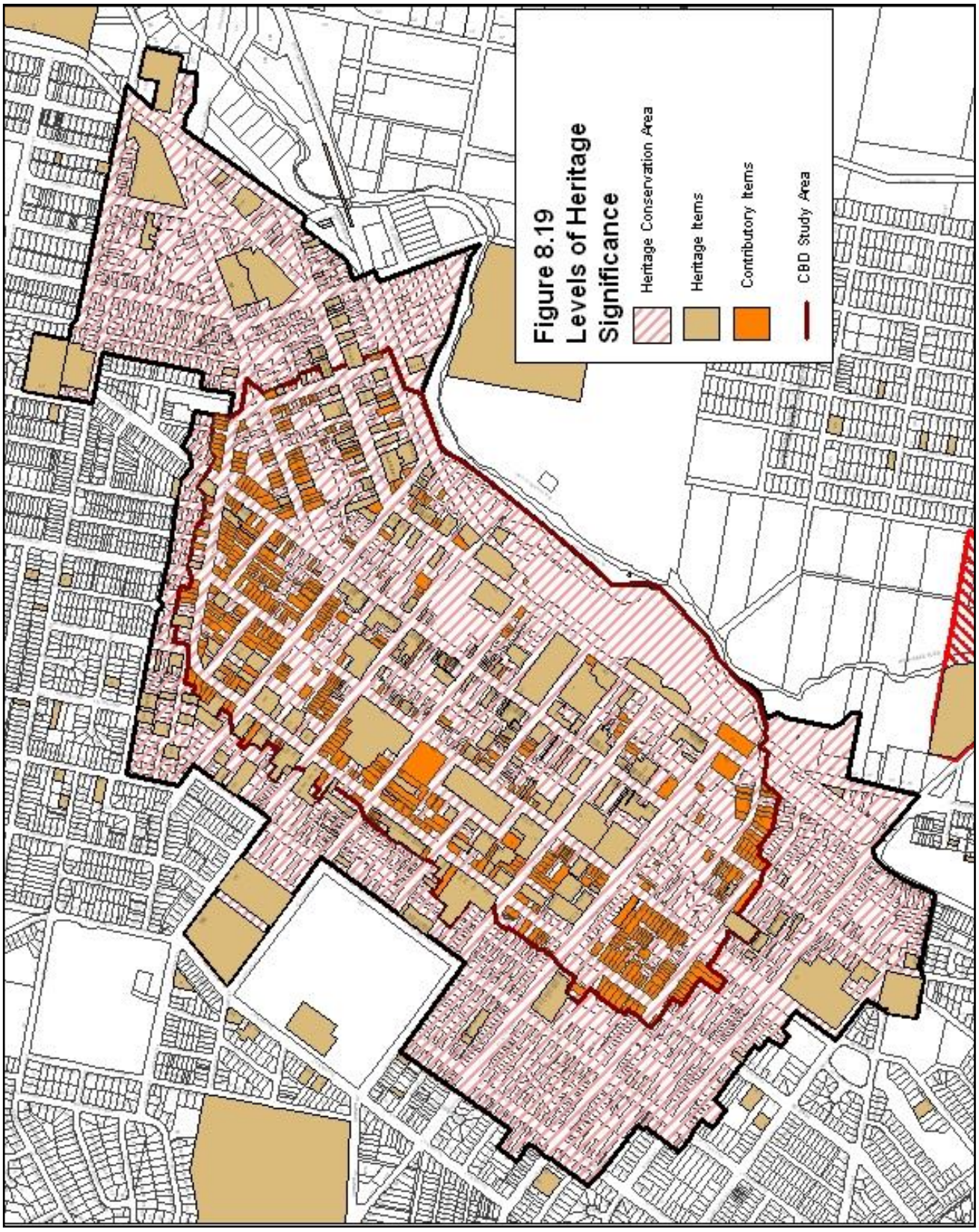
(iii) Non-Contributory Items

These items are buildings or places that have either a neutral or detrimental contribution to the areas character. Such items are buildings and places not mapped as a Heritage Item or Contributory Item in **Figure 8-1-2**.

(iv) Heritage Conservation Areas (HCA)

Applicable HCA's are mapped in Goulburn Mulwaree Local Environmental Plan 2009 and shown in maps HER 004, 005, 006, 007, 008, 009 and 010. The objective of the HCA is to conserve the heritage significance of the Area included associated fabric, setting and views.

Clause 5.10 of Goulburn Mulwaree Local Environmental Plan 2009 details statutory requirements that need to be addressed in development applications which fall within the HCA.


Figure 8.19
Levels of Heritage Significance
Heritage Conservation Area
Heritage Items
Contributory Items
CBD Study Area

(e) Protective structures in the public domain

Objectives

Any structures within the public domain should principally serve to enhance public use and amenity in terms of shade, shelter, comfort, egress and safety.

The structure should enhance the building and streetscape.

Where restoring a lost structure this should be done on the basis of the known evidence and Burra Charter principles.

Structures that are new to the building should be identifiably modern whilst complementing the style and form of the building.

Structures can provide other benefits such as improved private open space or commercial opportunities such as outdoor dining, providing that these do not compromise the public amenity.

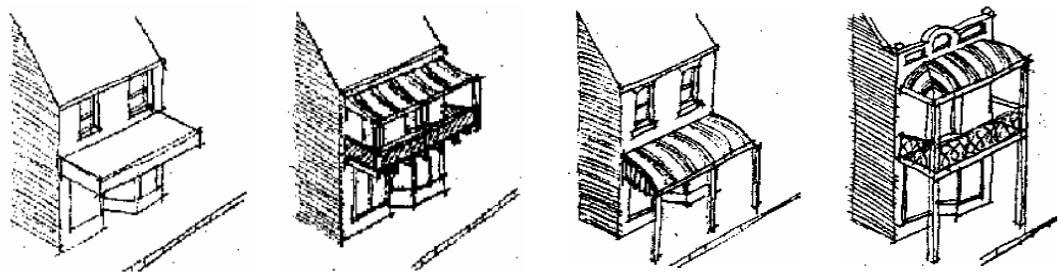
Controls

Generally all buildings in a commercial centre should have permanent protective structures over footpaths. The only exceptions are where such structures are not compatible with the heritage or architectural values of the building. This is usually the case with civic buildings, churches, and often with banks.

Where a building has heritage value either as a Heritage Item or is contributory to a heritage precinct or Heritage Conservation Area, the approach should be to restore on the basis of known evidence, preferably photographic, as well as by the detailed examination of the structure and surrounds. Where the evidence is lacking, appropriation of conjectural detail from a nearby structure of similar form and style may be reasonable.

Where an existing building is not consequential in heritage terms, or a new building is proposed, the protective structure should be complementary to the building in terms of form, material, detail etc, and compatible to the row if it is in a row of like buildings. The options are identified in **Figure 8-1-3** below.

Figure 8-1-3: Preferred public domain protective structures



Generally protective structures over footpaths are light, open, timber or steel structures. The structural members are normally exposed and the structure unlined so that any upper floor is exposed and any roofing is exposed to the underside. This gives them a light and airy appearance, appropriate to their function and location. All structures need to be carefully crafted as with a piece of joinery or street furniture, as the whole structure is exposed to view. All structures also need to be robust given their exposure to public use and risk.

The traditional materials are usually timber for the structure with often metals including cast iron for decorative elements. The timbers are always planed and usually shaped such as with stop chamfering, with hardwood tongue and groove flooring which falls to the kerb, and corrugated profile roofing. These materials are appropriate for reinstatements. It may be appropriate to use other materials such as steel and metals, or glass and acrylics with new structures.

Post supported structures are often appropriate in heritage precincts and Heritage Conservation Areas both for new structures and restorations. Posts can enhance the rhythm and composition of a building and streetscape, provide a protective edge to the pedestrian space, and frame the views in and out. They should be placed so as to minimise obstruction of pedestrian access, and the structure designed so that it will continue to stand intact even if a corner post or posts are damaged or removed due to a vehicle or similar collision.

(f) Principles for Goulburn City Business District

(i) Commercial Development

- New, infill and alteration developments are to respect and contribute to the special character of the CBD demonstrated in the street character statements;
- Prominent corner buildings are to maintain the traditional corner design element of addressing both street facades with a prominent tower-like corner element and generally splayed entrance or corner;
- Façade and restoration works are to be based on sound historical or physical evidence (Reference Main Street Study);
- New large scale developments are to respect and retain the existing grid subdivision street pattern;
- Intrusive elements such as uncomplimentary oversized buildings, unsympathetic alterations and additions, large sizes, horizontal facades, inappropriate colour schemes, and out of character design elements must be avoided.

(ii) Residential Development

- Proposed residential development in the mixed business area is to keep uniform single to two-storey cohesiveness of streetscapes including leafy quality in accordance with their identified street characteristics.
- No intrusive changes or elements will be permitted in the residential portions of the study area including high, visually impenetrable front fences, the painting and rendering of face brick facades, the removal of original detailing, or unsympathetic alterations and additions such as first floor additions.

Additions:

- must not impact upon the contribution of a building to the streetscape,
- should be restricted to the rear of a dwelling,
- must minimise impact upon original roof form when viewed from the public domain,
- should be recessive and not dominate the original form and character of the dwelling, and

- which interrupt the front roof plane of a heritage item or contributory building, will not be permitted.

- Established character of the main streetscapes should be reflected in the form, design, materials and signs of the infill and corporate developments. New developments should be compatible with the dominant streetscape and town centre character.

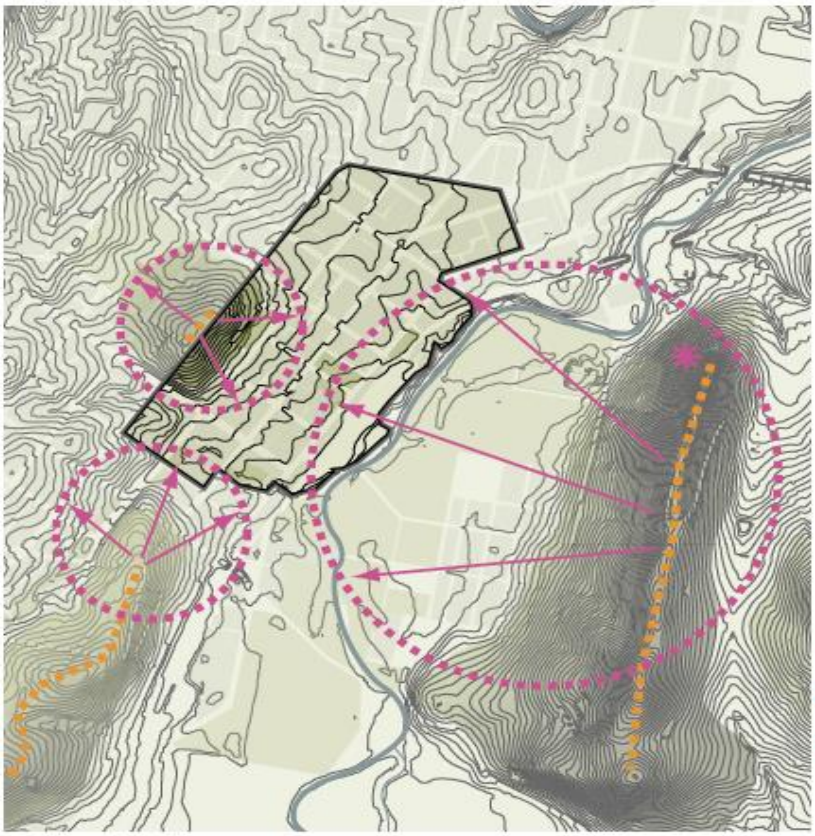
Reference: Goulburn Mulwaree CBD Master Plan, Heritage Report and Conservation Principles / Guidelines, July 2008, City Plan Heritage.

(iii) Demolition

- Buildings that are listed as heritage items and contributory items should not be demolished unless such demolition is justified in a Heritage Impact Statement (HIS). Applicants must retain as much as possible of the existing building fabric particularly those aspects that contribute towards the items visual / heritage significance and the identified streetscape qualities. This process must be informed by an assessment of the heritage / streetscape significance of the items (this does not apply to the removal of unsympathetic elements).

- Non – contributory items may be demolished but must be replaced by a building that will contribute to the character and significance of the streetscape.

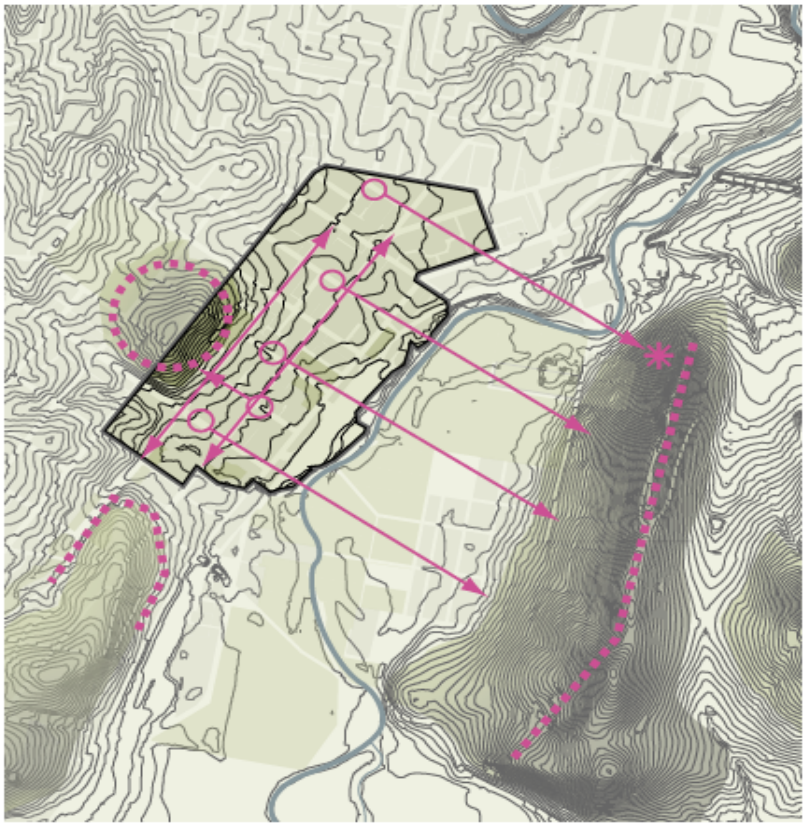
(g) Views and Vistas



Panoramas into the CBD are available from the ridge line to the south east. These views illustrate the importance of the grid street pattern and the City's spires and towers to its visual character. Any development within the CBD must protect and enhance these elements of the city's viewscape.

Views from knolls and ridges to the north-west and south-west of the City are less panoramic due to their orientation but they equally illustrate the significance of these visual elements.

War Memorial
Ridge line
Existing/ potential views
0 500



Views available from within the CBD are strongly influenced by the grid street and subdivision pattern. Long vistas east to the ridge line are available down most of the north-west to south-east streets. The ridge forms a green backdrop to the CBD in these views.

In north-east to south west streets, long views terminate at the ridge line to the south west of the centre.

Internally, important elements of the viewscape are in built form and include notably:

- the aerial view down Montague Street to St. Saviours Church;
- the spire of the Uniting Church (which is a particularly important element in views from the road when entering the CBD from the north-east (see view 5); and
- spires and towers across the cityscape generally which form focal points and points of orientation in numerous views with and across the city.

War Memorial
Ridge or edge to steep land
0 500

Reference: Goulburn Mulwaree CBD Plan, Interim Report 1, 29 August 2009, Edaw/AECOM.

(h) Economic Viability and Social Values

All new developments are to demonstrate a contribution to the economic viability of the Business District.

New development may achieve this outcome by:

(i) following Council's precinct based approach to land use distribution:

Concept Development Plan



Contributing to:

(ii) vibrant north south Auburn Street accommodating a range of retail and commercial business:

(iii) an improved east west activity path, including redevelopment of laneways into supporting niche retail precincts below residential development to increase population mass.

(iv) the dedicated commercial office precinct at the western fringe of the CBD to allow the CBD to remain as a concentrated retail precinct with high pedestrian activity focused on hospitality services and shop front retailing.

(v) large format household goods retailing concentration at the northern end of the CBD. This area presents the leading location for larger format retail and commercial space given the size of the sites, their gateway location and high exposure to passing trade.

(vi) the development of residential development of different housing types throughout the precincts is fundamental to broadening the range of socioeconomic backgrounds of the CBD's residents. This enrichment of the social fabric of the CBD is necessary to maintain the values of the CBD as a social service centre and its commercial role for residents and visitors.



Reference: Goulburn CBD Plan, Master Plan, 29 August 2008, EDAW/AECOM

(i) Landscape and access

New developments are to contribute, in-kind or by monetary means towards the following public domain treatments:

(i) heritage parks, plazas, urban and suburban walkways and lane ways.

(ii) green link connection following the line of drainage from south of the CBD through Manfred Park towards the Mulwaree River.

(iii) green link along the historic east-west axis connecting the CBD with the Mulwaree River foreshore and Victoria Park.

(iv) additional street tree planting in Sloane Street along the rail edge and in residential streets surrounding the CBD.

(v) traffic control measures.



Reference: Goulburn Mulwaree CBD Plan, Master Plan, 29 August 2008, EDAW / AECOM

(j) Strategies

Concept Plan – Strategies

The following diagram indicates the key strategies of this plan to guide future change in the Goulburn CBD. The key components of a planning framework to achieve the Vision for the CBD are derived from the Planning and Design Principles in the EDAW / AECOM Master Plan document.

Consolidate

1. Define a CBD core and a series of land use precincts that support and enhance its function.

Integrate

2. New development zones including key redevelopment sites identified by Council at the northern and southern ends of the CBD are designed to enhance and strengthen the integrity of the CBD core.

Humanise

3. Define a pedestrian based precinct within the CBD core.

4. Encourage north – south through traffic to travel around the core via Goldsmith, Bourke and Clinton Streets.

5. Encourage service and local through traffic to travel east of the Core via Sloane Street.

6. Concentrate people orientated place making measures on Auburn and Montague Streets and the parks, streets and laneways in this vicinity.

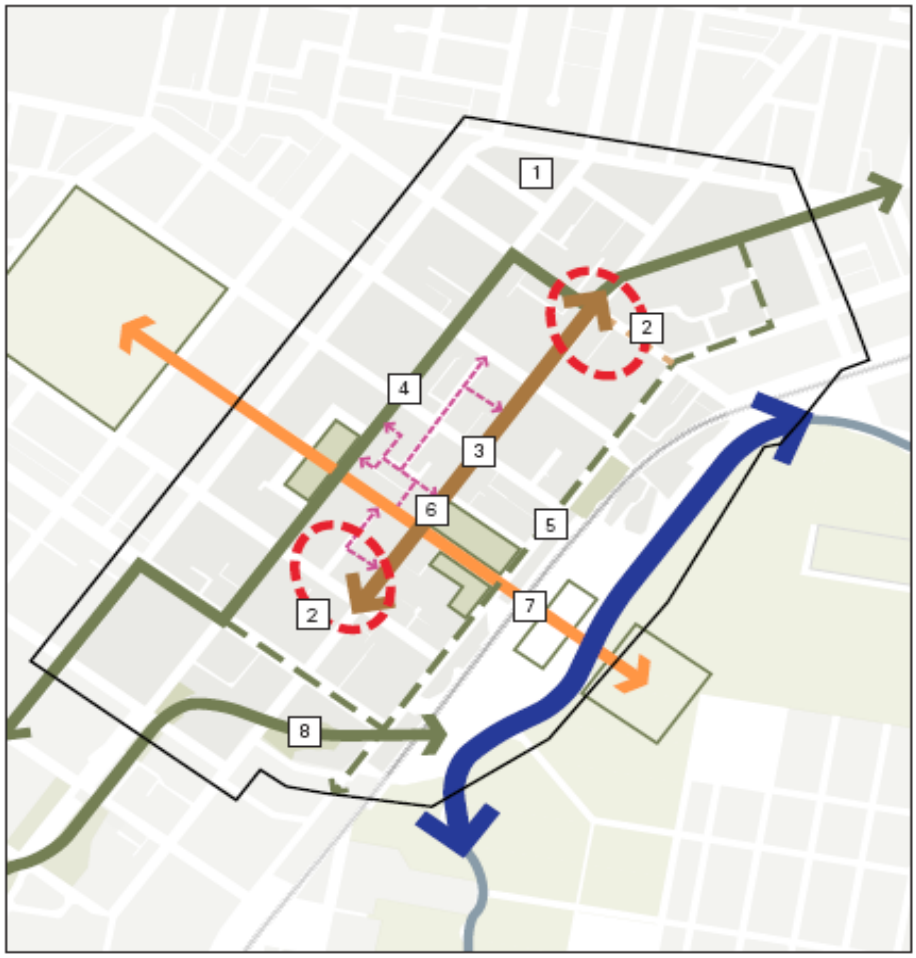
Connect

Reinstate the connection of the CBD with its context along two principle lines:

7. The historic east – west axis is reinforced and extended to reconnect the CBD with the Mulwaree River foreshore and Victoria Park.

8. The open space connection to the river at the southern edge of the CBD is reinstated and strengthened.

Concept Plan – Strategies



- Reference: Goulburn Mulwaree CBD Plan, Master Plan, 29 August 2008, *EDAW / AECOM.*

8.1.3 Acknowledgements

- Goulburn Mulwaree CBD Plan, Interim Report 1 and Part 2, Master Plan, 29 August 2008, EDAW / AECOM.
- Goulburn Mulwaree CBD Master Plan, Heritage Report and Conservation Principles / Guidelines, July 2008, City Plan Heritage.
- Goulburn Mulwaree CBD Plan, Master Plan Development Assessment, Traffic, Transport and Parking, 25 August 2008, GTA Consultants.
- Goulburn Mulwaree CBD Master Plan, Economic Assessment, July 2008, AEC Group

8.2 Marulan Local Business Centre

Aim

Develop a plan for Marulan's Local Business Centre that facilitates future management by balancing development and conservation in a sustainable way.

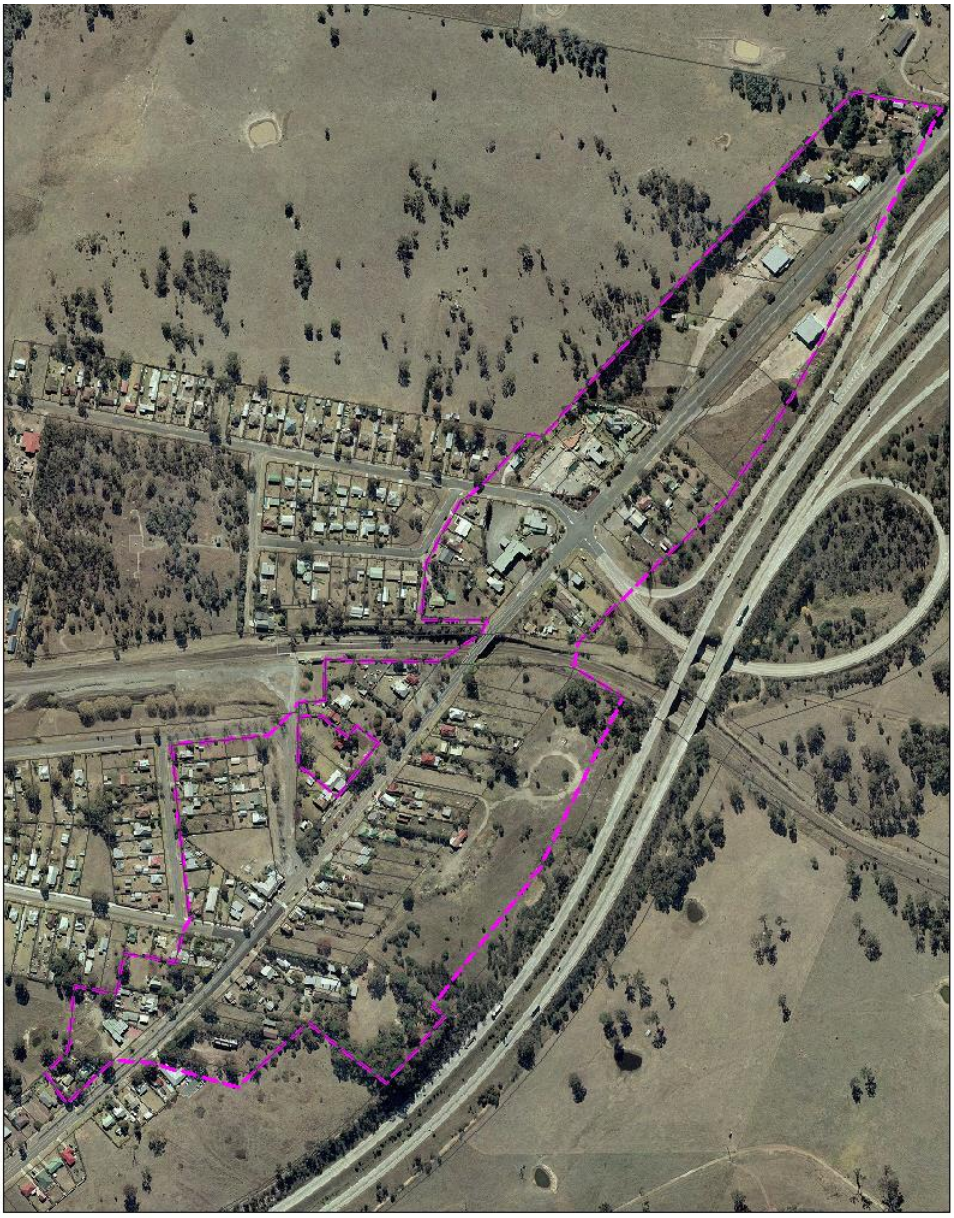
Objectives

- Create a plan that allows for the fulfilment of the aspirations of the Marulan community for their Local Business Centre;
- Maintain, protect and enhance the Local Business Centre's existing visual, built and environmental heritage and landscape character;
- Develop standards and recommendations to maintain and improve the image, attractiveness and functionality of the Local Business Centre in accordance with its existing character;
- Provide an appealing and sustainable living and working environment for existing residents;
- Attract new residents, business and tourism to Marulan;
- Describe Council's requirements in the form of performance criteria to achieve the objectives above;
- Plan for economic development and growth initiatives in accordance with the Goulburn Mulwaree Economic Development Plan 2008.

8.2.1 Land to which Plan applies

This Plan applies to the land identified on the map shown as **Figure 8-2-1** - George Street Marulan, Local Business Centre.

Figure 8-2-1: Land to which Plan applies – Marulan Local Business Centre



8.2.2 Performance Criteria

8.2.2.1 Visual Character of Marulan

Old Marulan was surveyed in 1834 by Surveyor Hoddle. Old Marulan was located at the junction of the Bungonia Road and the Hume Highway. When a location for the new Railway Station was chosen it was 2.5 km north of the old village. The railway station was built in 1867 adjacent to the Terminus Hotel that was built in 1866. Old Marulan declined and the town became one in 1878 on the site of the current Marulan. Old Marulan is now only an archaeological site.

In the 1890's the main part of town had ten stores, Police Station, Post Office, an Oddfellows Hall (also used as the Court House), School of Arts, a number of Churches and numerous residences. Many of these buildings can still be seen.

For fifty years Marulan was a highway town until it faded in importance following the construction of the freeway by-pass in 1985. Marulan Local Business Centre's role as a refreshment stop has been usurped by the vast roadhouses that have been built alongside the highway including the one at the south of the town. Marulan proper has reverted to a sleepier but more pleasant village.

Marulan's character in 2008 is a mixture of fine but often run down historic buildings and more recent buildings of various qualities. George Street has a number of now derelict service stations that do nothing to enhance the image of the town. A number of businesses are lifting the aesthetic quality of the precinct.

The length of George Street located in the Village Business Centre Zone can be divided into four character sections. Heading north;

- The southern section to the intersection with Goulburn Street has spaced out buildings of various uses and is primarily residential but also includes two churches on large blocks, a disused service station, the school and the former Baldock's General Store buildings. Baldock's store buildings are a fascinating time capsule from the past and are an important component of Marulan's character;
- Next the centre of town has something of a "gap toothed grin" in that quality items are interspersed with vacant, run down or poor quality items. This section contains the Terminus Hotel that dates from 1866 but now has a somewhat awkward Spanish Mission façade, the wonderful but underutilised Royal Hotel, the Post Office and Police Station and a number of small businesses and residences;
- The section of George Street to the north of the rail bridge to Brayton Road can't readily be perceived from the centre of town. This is because of the physical separation caused by the rail line and the way the land falls away from the rail bridge. This section is dominated by the former service station on the corner but also includes a number of residences. This is the image that visitors from the north see when approaching Marulan. All items north of the rail line are assessed as being non-contributory to Marulan's heritage;
- The area north of Brayton Road is open and in parts rather messy. It is dominated by the former RTA truck weigh stations and includes a number of residences and the nursery/landscape supply business.

Marulan is set amongst a landscape of mature specimens of the Endangered Ecological Community – Yellow Box/ Blakely's Red Gum Woodland. The trees link to remnant

vegetation in the surrounding farm land to provide fauna habitat. The mature gum trees, regardless of their environmental value give the town a leafy outlook and aspect.

The area also has mature examples of exotic tree and shrub species that are significant to the towns character e.g. Oak, Date Palm, Cypress etc. More recently part of George Street has been planted with Chinese Pistachio; the trees are well suited to the street.

8.2.2.2 Retention of Visual Character

The two significant elements that create visual character are the landscape and the built environments; gardens, parks, road reserves, public spaces and built structures contribute to the Local Business Centre's visual character;

8.2.2.3 Levels of Heritage Significance

(a) Items of Environmental Heritage.

These items are of key importance to the areas character e.g. buildings works, relics, places, landscapes, gardens, trees or vegetation of historic, scientific, cultural, social, natural or aesthetic significance as listed in schedule 5 of Goulburn Mulwaree Local Environmental Plan and shown on **Figure 8.11** (below);

(b) Contributory items.

These items are of moderate significance and contribute to the predominant character and visual attractiveness of the schedule 5 items (Environmental Heritage items above) as shown in **Figure 8.11**.

(c) Non-contributory items

These items are buildings or places that have either a neutral or detrimental contribution to the areas character. Such items are also shown on **Figure 8.11**.

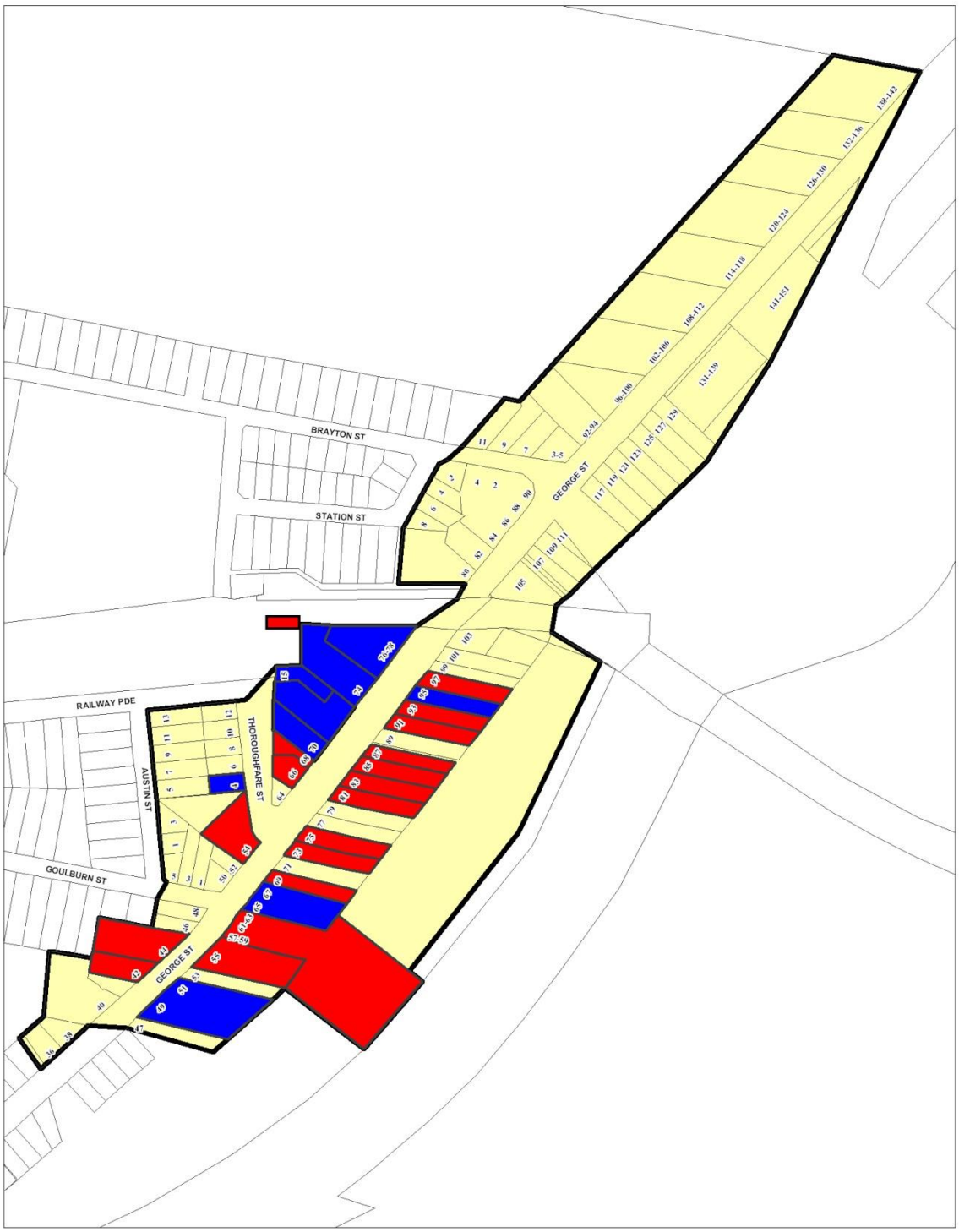


FIG 8.11 - HERITAGE AND CONTRIBUTORY ITEMS

8.2.3 Performance objectives for Environmental Heritage, Contributory Heritage and Non-Contributory buildings and places

The following performance objectives must be achieved by each development proposal in the area covered by this plan.

8.2.3.1 For environmental heritage items

(a) Retain as much as possible of the existing building fabric particularly those aspects that contribute towards the items visual/heritage significance. This process should be informed by an assessment of the heritage significance of the item;

(b) Where possible remove unsympathetic building elements and additions;

(c) Reconstruct original detail based on research and avoid mimicry e.g. mock details;

(d) Paint buildings and structures in colour schemes based on schemes of the relevant period and retain natural surface finishes;

(e) Avoid modification to door and window openings, spacing and proportions;

(f) Prohibit cladding of traditional building facades with modern materials and do not allow rendering or painting of external brick work or stone wall elements;

(g) Ensure building additions are sympathetic to the item and its setting in terms of setback, scale, building design and form, materials, proportion and spacing of openings, shopfront/awning treatment etc. and achieve a subtle contrast between old and new. The original item should be able to be distinguished from the new work;

(h) Ensure that development of items adjoining items of heritage significance is sympathetic in siting, design, scale and materials and where relevant maintain the group significance of a cluster of items;

(i) Site and design public on street infrastructure so as to maintain the significance of adjacent heritage items;

(j) Where subdivision occurs around heritage items ensure that an appropriate curtilage area is identified, retained and protected including gardens and landscape elements;

(k) Identify vistas both to and from heritage items and ensure that development does not encroach upon or diminish these vistas.

8.2.3.2 For contributory items

(a) Retain the qualities and details that form the stylistic character of the item and organise alterations and additions so as not to compromise that character;

(b) Discourage the introduction of building elements that are unsympathetic to the style of the building or adjacent heritage items;

8.2.3.3 Non-contributory items

(a) Restrain the visual prominence of non-contributory items by the use of subtle colour schemes, materials and finishes. Ensure that franchise type businesses respect the character of the area in the detailing of their buildings, signage and landscape treatments;

(b) New and redeveloped non-contributory items shall respect the scale, form and pattern of other development in the locality;

8.2.3.4 New buildings on vacant properties or sites to be wholly redeveloped

(a) Avoid large scale monolithic buildings and achieve small scale and discreet built forms by the use of sympathetic detailing;

(b) Respect the visual prominence and scale of existing items of heritage, contributory items and the streetscape generally by means of selective planning for setback, height, architectural design, materials and colour schemes;

(c) Retain sunlight penetration to footpaths and other public spaces;

(d) Avoid mock heritage building styles and fenestration (fenestration refers to windows and other openings).

(e) Enhance the landscape with thematic use of plant species and styles i.e. identify common local plant varieties used and styles of planting e.g. hedges etc.

8.2.4 General Development Controls

8.2.4.1 Street Frontage

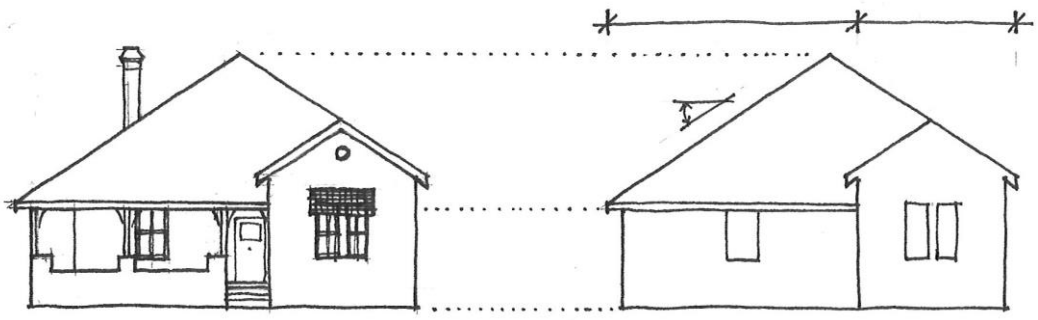
The predominant character of smaller scale historic buildings is that the frontage is narrower than the depth. Modern housing and businesses etc tend to have a wider street frontages and this will detract from the existing character of the Local Business Centre zone, particularly in George Street.

To maintain the character of the village the front façade of buildings is to be narrower in width than it is deep or long.



Example of modest two storey dwelling where the second storey is contained in the roof area, this reduces the bulk and scale and therefore the impact of the building.

To reduce impact the bulk of larger buildings should be located set back from the front of the site. Designs for new buildings must respect the scale, height and massing of adjacent buildings. Refer to **Figure 8-2-3**.



Existing **New**

Respect adjacent scale, heights and massing;

Maintain roof form and rhythm;

Locate the bulk of new buildings to the rear.

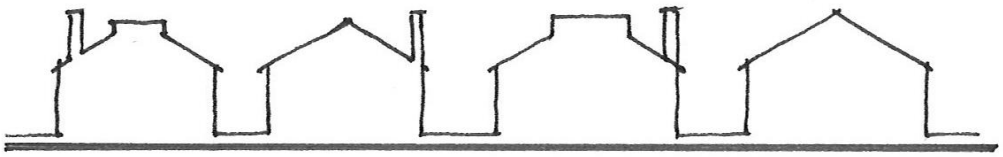


Figure 8-2-3: Building Design

8.2.4.2 Roof Pitch

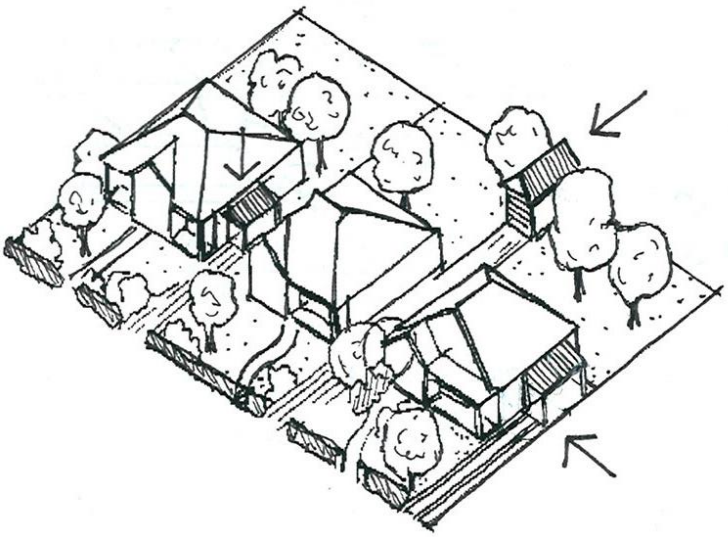
Historically roofs were pitched at 27.5 to 33 degrees. This is a steeper pitch than is used on modern buildings that tend to be pitched at around 22 degrees.

The roof pitch of new buildings or additions shall be similar to that of adjacent buildings e.g. above 27.5 degrees.

8.2.4.3 Garages and Outbuildings

The existing character of historic garages and outbuildings is that they are generally separate buildings set to the rear of the main building. It is preferred that garages not be incorporated into the main building in new work. Where garages are proposed they shall be located fronting the side or rear of the allotment as per **Figure 8-2-4**. Outbuildings shall also be located to the side or rear of the main building.

Figure 8-2-4: Siting of Carports and Garages

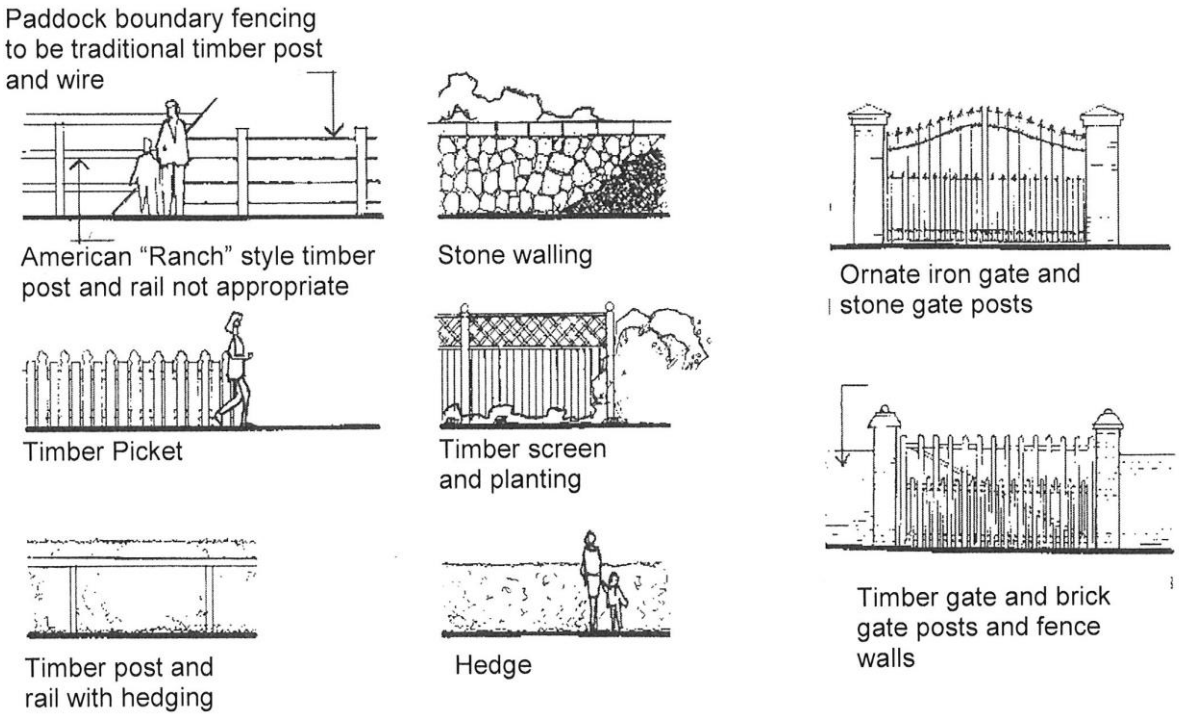


8.2.4.4 Fencing

Fencing, walling and gates should complement and enhance the existing streetscape and the locality where they are erected in the village. This is particularly so where they can be view from a public place. Materials used should reflect materials used historically. If timber, brick or stone was predominantly used then these materials should be used in new work.

The following materials have typically been used in Marulan and should be used in new work. Particular attentions should be paid to the type of building and type of fencing selected. In general simpler buildings used simpler fencing styles and materials.

Figure 8-2-5: Fence Diagrams



8.2.4.5 Landscape Character

Public and private landscapes contribute significantly to the character of the Local Business Centre. New development should be designed to minimise its impact on significant landscape elements. Avoid development in the vicinity of major plantings.

Prior to beginning design of a new development a site analysis is required. Significant vegetation including native vegetation and exotic trees and shrubs should be included in the site analysis. See Appendix G for information on preparing a Site Analysis.

If development proposes the removal of significant vegetation an assessment by a suitably qualified Arborist or Horticultural professional will be required. If vegetation is rated of moderate or high significance then a statement will be required in the application that discusses what alternatives have been considered and if removal is proposed justifying why removal is the selected outcome.

Where possible extend existing landscape themes e.g. planting, fence styles etc. into new work. See Appendix G for information on preparing a Landscape Plan.

8.2.5 George Street, Marulan Landscape Concept Plan

Council has prepared a George Street, Marulan Landscape Concept Plan. The actions proposed in the plan and endorsed by Council are;

Priority	Item
1	Street tree planting- 25 advanced trees & road treatment south end George street
2	Southern entry feature
3	In front of Post Office and adjacent areas
4	Pedestrian crossing
5	Northern entry feature

The Council adopted the recommendation;

"That the amount included in the adopted 2008/9 Management Plan for "George Street Marulan – Streetscape beautification be used to:

(a) undertake landscape works to the northern end of the "Post Office median strip" area specifically the replacement of the scoria garden and replanting;

(b) undertake replanting of the garden adjacent to the pedestrian crossing in George Street.

Funding for additional actions included in the table above will be considered in future Council Management Plan budgets.

Acknowledgement.

Acknowledgement is made of material used from Wingecarribee Shire Council Development Control Plan No. 54 - Exeter including text and sketches.

8.3 Marulan Estates Urban Release Area

8.3.1 Land to which Plan applies

This Plan applies to the land identified on the map shown as **Figure 8-3-1**.

Figure 8-3-1: Land to which Plan applies – Marulan Estates



8.3.2 Urban Release Area (Goulburn Mulwaree LEP 2009 – Part 6)

8.3.2.1 Staging Plan

Figure 8-3-2 shows the staged residential land release area for the Marulan precinct. Approximately half of the southerly zoned R1 General Residential area off Wilson Drive is proposed to be staged released.

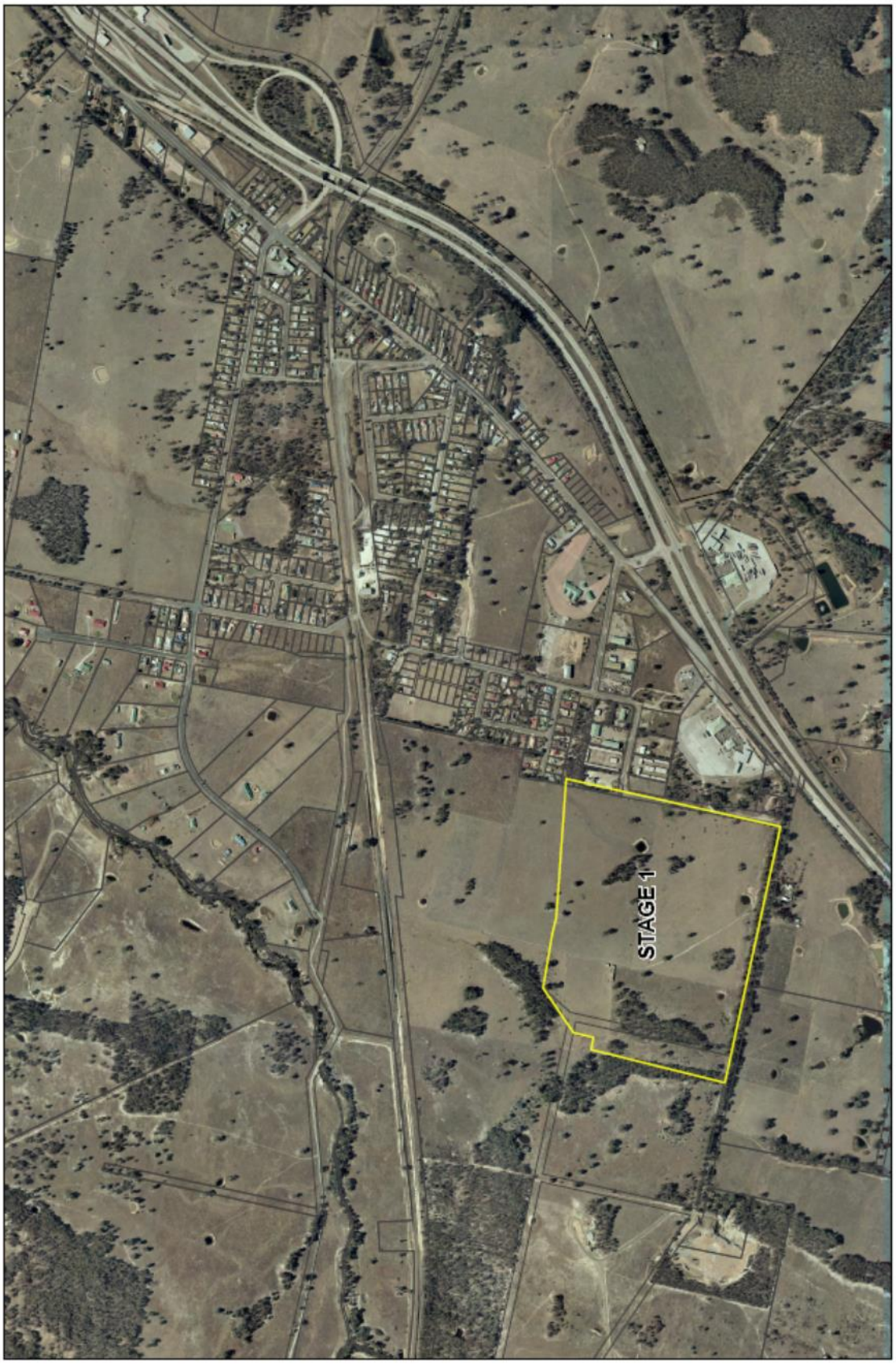
This area will not be released until Council has made an assessment off:

(a) the stock of vacant, serviced, undeveloped or underdeveloped residential land and the potential housing opportunities available within the general Marulan R1 General Residential zone; and

(b) the rate of supply, the degree of choice and the current and projected rate of take-up and demand for residential land and housing types within the Marulan R1 General Residential zone; and

(c) Council is satisfied that:

- there is insufficient land available within the R1 General Residential zone to cater for projected household growth having regard to the need to ensure the efficient functioning of the housing market or
- the land available within the R1 General Residential zone is inadequate to satisfy housing preferences or requirements of all segments of the housing market; and
- adequate arrangements via a planning agreement have been made with Council for the provision of infrastructure and services to the land including essential services of:
  - the disposal and management of sewage;
  - reticulated water supply;
  - stormwater drainage management; and
  - the modification of the 'at grade' intersection at George Street – Portland Avenue and the Hume Highway intersection to left turning traffic only.


STAGE 1

8.3.2.2 Transport movement hierarchy

Marulan is serviced by a major arterial road (Hume Highway) and a number of Collector Roads:

(a) Brayton Road, connecting the Hume Highway to the northern end of Portland Avenue;

(b) George Street, connecting Brayton Road to the southern end of Portland Avenue;

(c) Portland Avenue south, and George Street intersection connecting the Hume Highway to Wilson Drive; and

(d) Wilson Drive connecting Portland Avenue to the Urban Release Area.

Staged release area is required to contribute towards the upgrading of collector roads Wilson Drive, Portland Avenue and George Street.

Figure 8-3-3 shows the road hierarchy.

Chapters 7.2 and 7.3 of this plan sets out detailed requirements for access roads, general road provisions, drainage and water sensitive urban design principles.

Figure 8-3-3: Road Hierarchy and Remnant Vegetation Map

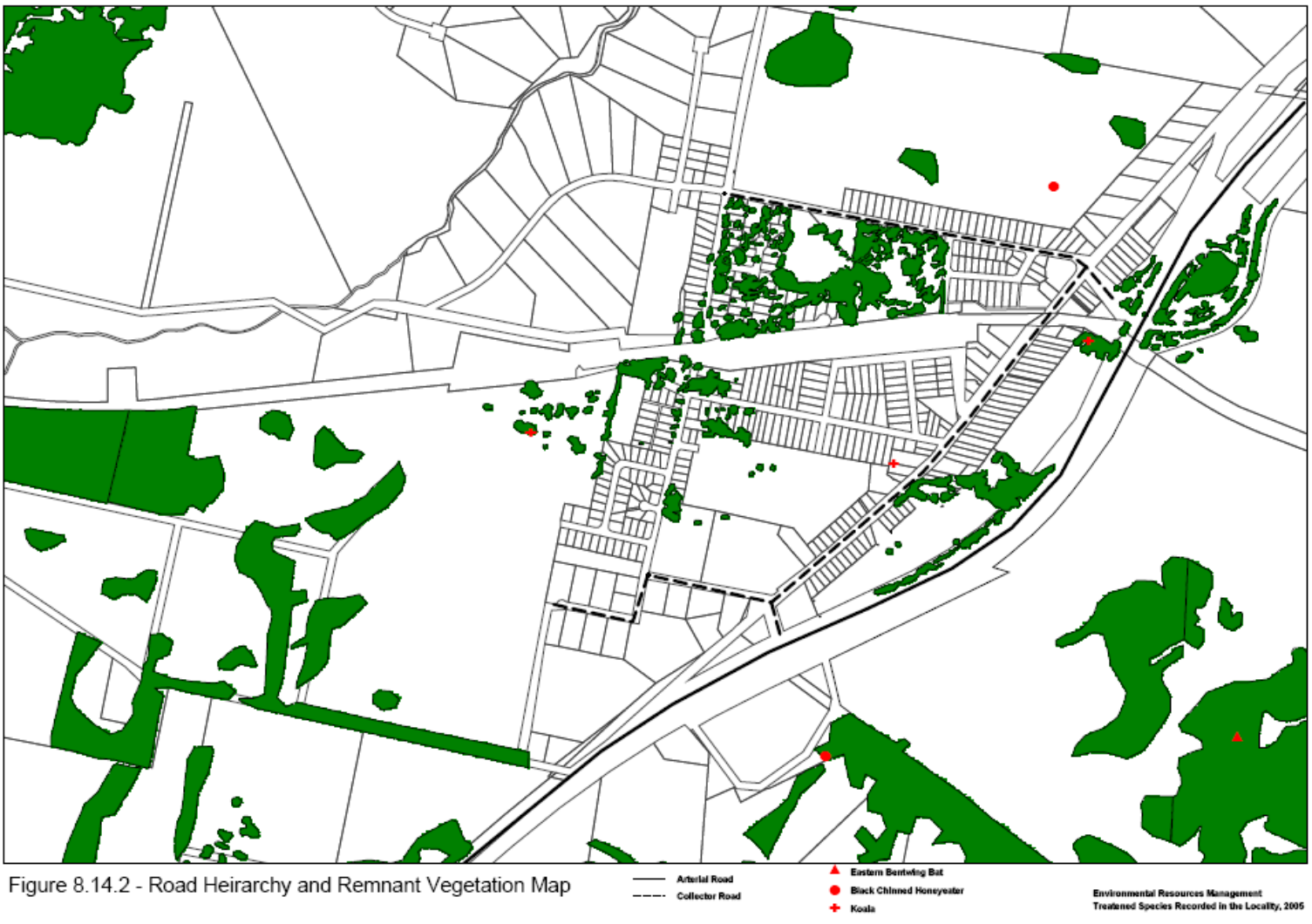


Figure 8.14.2 - Road Heirarchy and Remnant Vegetation Map

8.3.2.3 Overall landscape strategy

The overall landscape strategy for the urban release area is to protect, enhance and retain:

- remnant vegetation shown on **Figure 8-3-3**; and
- important vegetated areas within land zoned RU2 Rural Landscape and RU6 Transition.

Chapter 3.3 of this plan sets out detailed landscaping requirements for future development applications.

8.3.2.4 Passive and active recreation areas

Further to the landscape strategy recreation areas in the Wilson Drive urban release area include:

(a) Passive:

(i) Area of land zoned RU2 adjacent to the Main Southern Railway; and

(ii) Bio - retention swales and basins and proposed artificial wetlands to be developed as part of the stormwater management plan; and

(b) Active:

(i) Bio - retention basin proposed in the south-eastern corner could also be utilised for playing fields; and

(ii) the main active playing fields are located adjacent to the north-eastern corner and zoned RE1 – Public Recreation and are known as the Portland Avenue sporting fields.

8.3.2.5 Stormwater and water quality management

Stormwater and water quality management controls are detailed in chapter 7.3 – Drainage and soil and water management.

Patterson, Britton and Partners, December 2005 have developed an "indicative stormwater management plan and a water sensitive urban design (WSUD)" strategy for the Wilson Drive urban release area. Both documents' principles are recommended for inclusion in development applications.

Principles:

"The WSUD strategy includes measures such as:

(a) Residential areas:

(i) rainwater tanks for reuse of roof runoff in washing machines;

(ii) use of recycled water (treated effluent) for toilet flushing and irrigation;

(iii) water saving devices on all residential development;

(iv) gross pollutant traps; and

(v) bio-retention / detention basins / swales along the edges of parkland corridors / and artificial wetlands to remove pollutants and to reduce peak flow rates. In some instances, detention storage to attenuate peak flow rates can either be separate or incorporated into the bio-retention basins or artificial wetlands.

(b) Industrial areas:

(i) use of recycled water and rainwater for non-potable uses;

(ii) installation of water saving devices;

(iii) gross pollutant traps;

(iv) bio-retention / detention basins / swales along the edges of hard stand areas to remove pollutants and to reduce peak flow rates. In some instances, detention storage to attenuate peak flow rates can either be separate or incorporated into the bio-retention basins; and

(v) permeable pavers for car parking areas, although, permeable pavers would not be used on high traffic hard stand areas (eg. delivery access ways) because of the greater load of vehicles using these areas."

(c) Ground water management:

(i) limit additional impervious areas on the site; and

(ii) encourage water infiltration at the base of bio-retention basins and swales.

(d) River protection:

The site is at the top of two drainage catchments and as such:

(i) significant existing vegetation is to be retained through the middle of the site as part of the drainage corridor; and

(ii) the perimeter of the drainage corridor is to incorporate further run off water quality treatment measures like retention swales / basins and artificial wetlands.

8.3.2.6 Natural and Environmental hazards

Figure 8-3-4 depicts identified environmental hazards and indicative solutions that need to be addressed and satisfied in future development applications for the Wilson Drive residential and industrial zoned areas.

These include:

(a) Flooding hazard

(i) Patterson, Britton and Partners, December 2005 have approximated the 100 year ARI flood extent and the PMF flood extent. Both these events have been plotted onto **Figure 8-3-4**. The accompanying report concludes that the

catchment flood flows are relatively minor and should be incorporated into the piped trunk drainage system and overland flow areas in roadways and drainage reserves for up to the 100 year ARI flood extent in accordance with industry best management practice.

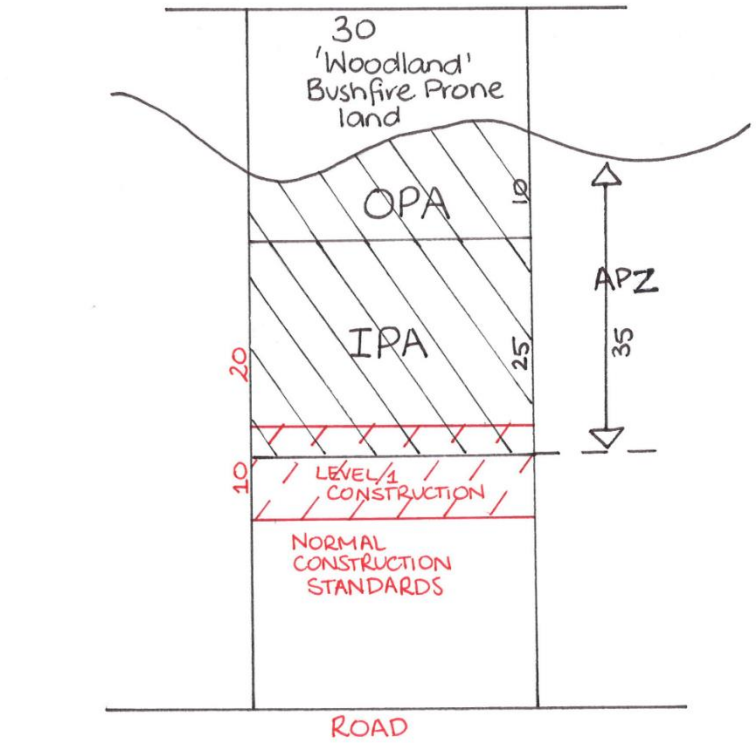
(b) Bushfire prone land

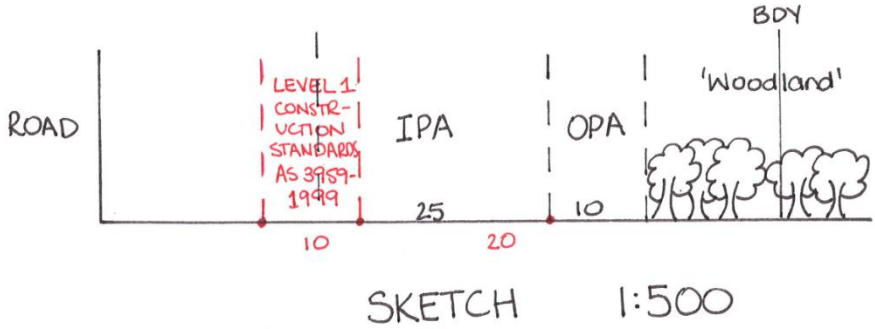
(ii) Environmental Resources Management (ERM), November 2005 have identified bushfire prone land for the Wilson Drive Marulan site. This map has been incorporated into **Figure 8-3-4**. The ERM report concludes that development within the identified bushfire prone land will require:

(iii) a preliminary assessed APZ (asset protection zone) of 35m, which incorporates and OPA (outer protection area) of 10m and an IPA (inner protection area) of 25m. This will need to be reassessed at DA stage;

(iv) "Level 1 construction standards (AS 3959-1999) are required for any development within bushfire prone land that is between 20m and 30m from the hazard (woodland) (not including the OPA)"; and

(v) "no construction standards will be required for development that will be more than 30m from the hazard (not including the OPA) or within land outside that classified as bushfire prone".





(c) Noise assessment

Noise sources include:

(i) existing industries (Boral Concrete batching plant);

(ii) operation of Marulan's waste management facility;

(iii) Main Southern Railway adjoining on the north;

(iv) Hume Highway to the east;

(v) proposed State significant hard rock quarry to the west; and

(vi) proposed industrial zone on the southern side of Wilson Drive.

(vii) Proposed Quarry

(viii) ERM Consulting (November 2005) advise as follows:

(ix) "A proposed Readymix quarry is understood to have been granted approval nearby the site. A review of the noise and blasting assessment part of the May 2005 Environmental Impact Statement (EIS) has been undertaken. Based on this document, noise and blasting at the proposed quarry are predicted to be within appropriate limits at proposed residences subject of this review. Hence, no development restrictions are anticipated as a result of the quarry."

(x) Further to this report the quarry has been granted Part 3A development consent.

(xi) In addition, the proposed quarry's current owners have objected against the proposed residential development on land zone R1 at Wilson Drive, Marulan.

(xii) ERM noise control requirements:

(xiii) ERM have recommended an acoustic barrier at the eastern edge of the land zoned IN2 light industrial.

(xiv) Design of such barrier and future residential dwellings will depend on quantification of noise coming from the proposed quarry, and industrial areas to the west and south of residential release area.

(xv) House design may take the form of reducing openings facing noise sounds, providing air conditioning and double brick and window construction.

(xvi) Noise from industrial sources, freeway and rail traffic can also be controlled by employing noise barriers and buffer zones. These can take the form of solid panels or an earth type bund forming part of a nature strip or a combination of both.

(xvii) The following ERM Consulting recommendations have been adopted:

- 3m high solid noise barriers adjacent to the Main Southern Railway and proposed residential development along the northern boundary.

- 4m high solid noise barrier adjacent to the Boral batching plant and the Wilson Drive Road reserve along the eastern and southern boundaries (for a distance of 300m along the southern boundary).
- acoustic buffer between the proposed industrial zone, and the residential zone.

(xviii) This plan also recommends that:

- acoustic buffer also be included adjacent to the southern road reserve of Wilson Drive from the 4m high solid barrier to the RU6 zone.

(xix) All barriers to be positioned along the north, east, south and west residential boundaries are to ensure that any proposed dwellings are to be shielded so that the line-of-sight from the noise source, be it rail, Hume Highway or the future industrial development to the south and west and the receptor location is blocked.

(d) Heritage assessment

(i) Aboriginal sites

- ERM Consulting (November 2005) have located some five sites within the subject Wilson Drive precinct. A section 90 consent under the NPW Act is required from DECC for the two sites found within the residential release area (Lot 1 DP 221236). Also respective Aboriginal representatives have expressed the wish to collect Aboriginal objects from those sites. Lot 3 DP 517713 which contain the remaining three sites is to be maintained as a conservation area. This area has been zoned RU2 Rural Landscape.

(ii) European items

- There are no European heritage items within the residential urban release area.

(iii) Soil and contamination

- Coffey Geosciences Pty Ltd, February 2004 advise that there appears to be no significant geotechnical constraints and that likelihood of contamination being present that would pose constraints to residential development of the subject release site is considered to be low.

(iv) Drainage lines

- Indicative stormwater management plan has been prepared by Patterson, Britton and Partners, December 2005, though the locations of swales etc may vary the principles developed in this plan will remain the same for the subject residential release area.

Figure 8-3-4: Natural and Environmental Hazards (Part 1)

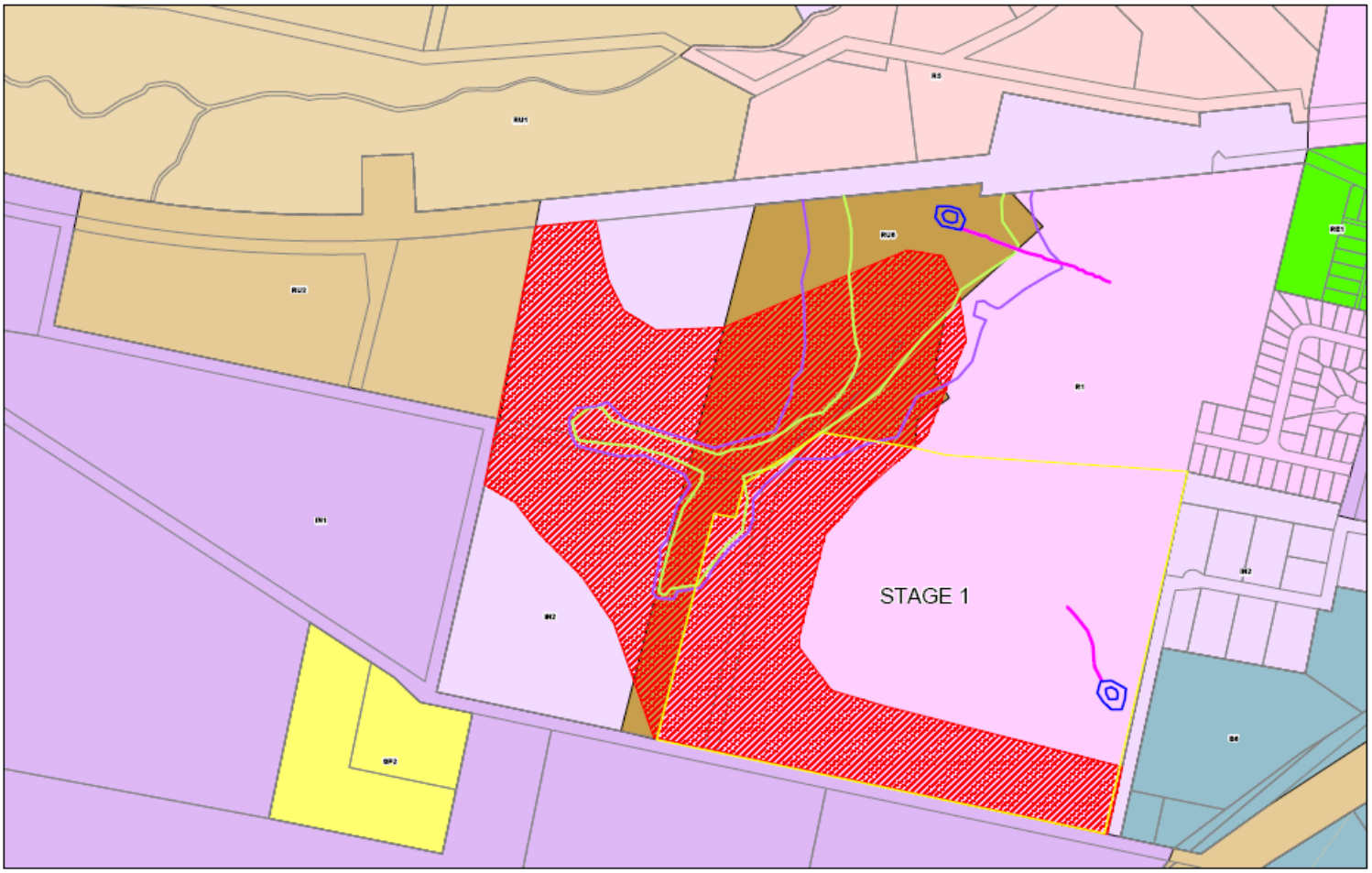


Figure 8.14.3 - Natural And Environmental Hazards
Part 1

Figure 8-3-5: Natural and Environmental Hazards (Part 1)

Public facilities and services



Council has put in place a Section 94A levy development contributions plan and a Marulan Infrastructure Contributions Plan.

Wilson Drive urban release area is subject to both of these plans. However with the Infrastructure Contributions Plan only the identified works in that plan are to be funded.

All other works required in the release area must be fully funded by the relevant developer.

The following figures identify the public facilities and their location for which contributions will be required pursuant to S94A Contributions Plan:

Figure 8-3-7 – public facilities

(a) George Street landscape works including:

(i) street tree planting and road treatment at the southern end;

(ii) southern and northern entry features;

(iii) post office median strip and adjacent areas;

(iv) garden area adjacent to the pedestrian crossing.

(b) Meridian Park development including:

(i) picnic facilities, playground equipment, landscaping and off street parking.

(c) Portland Avenue public recreation area development including:

(i) sporting fields, access roads and parking area.

(d) Health care and community centre in George Street(completed):

(e) Traffic facilities upgrading including:

(i) modification works on the north and south bound lanes of the Hume Highway at the southern "at-grade" intersection with Portland Avenue and George Street roundabout;

Figure 8-3-7 – Marulan Infrastructure Contributions Plan public infrastructure utilities including:

- water supply infrastructure;
- sewerage infrastructure;
- stormwater design infrastructure.

The staged urban release area will not be consented to until chapter 8.4.9(2) has been satisfied and Council is satisfied that any public utility undertaking infrastructure that is essential for the proposed development is available or that adequate arrangements have been made to make that infrastructure available when required.

The recommended means to satisfy the above requirements is for a mutually agreed planning agreement to be put in place between Council and the developer.

Figure 8-3-6: Zoning and Lot Size Map

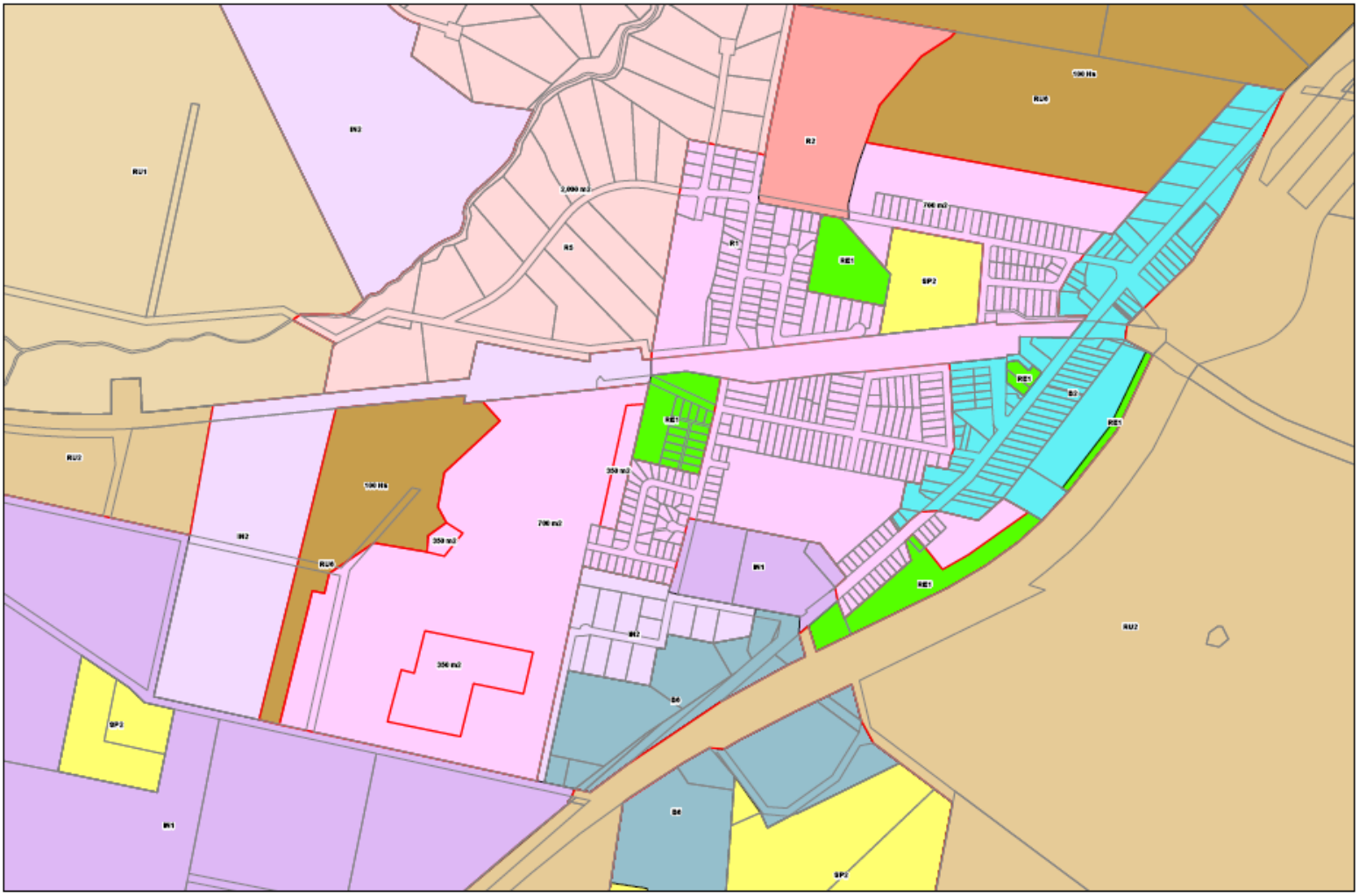
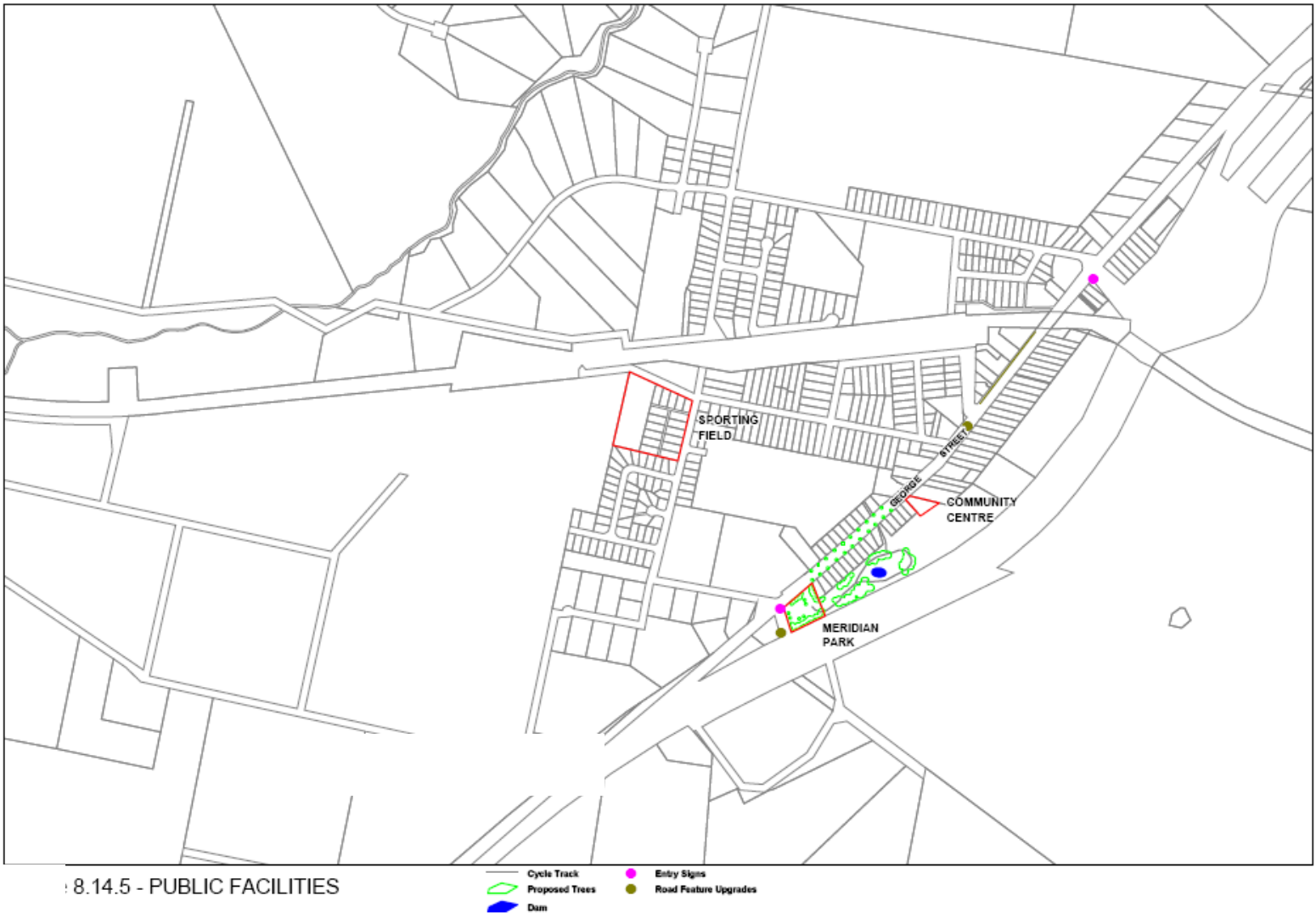


Figure 8-3-7: Public Facilities



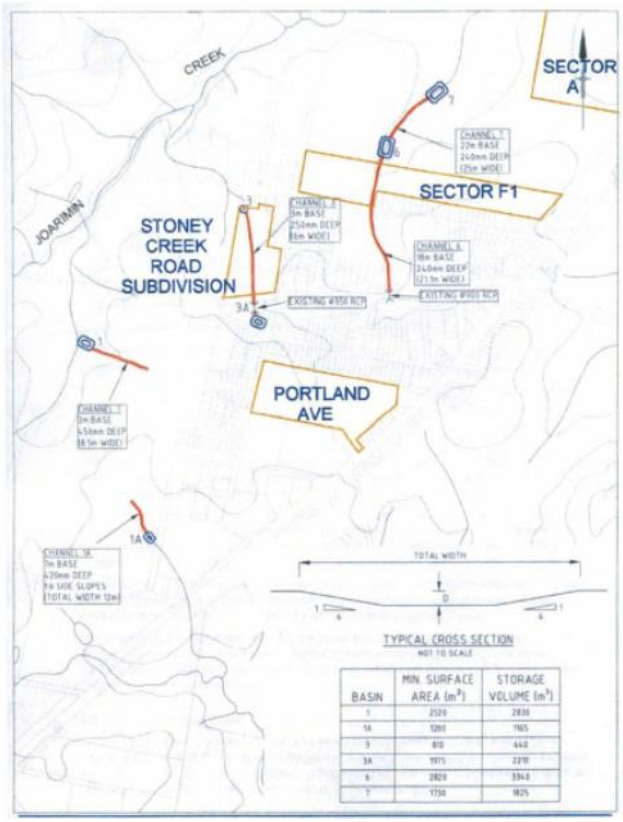
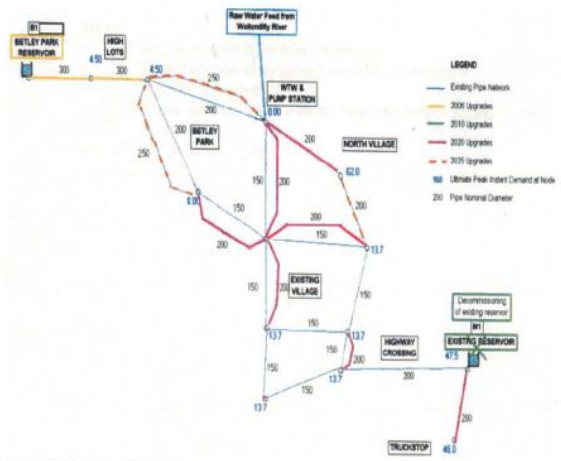


Figure 8-3-9: Sewer



Figure 8-3-10: Water



8.4 Charles Valley – Long Street Goulburn

Objectives

The overall objectives of this plan are:

- to identify the development constraints to urban development of land in the Study area
- to provide an indicative plan for the future land use, subdivision and development of the area
- to identify and protect natural and heritage assets in the study area

8.4.1 Land to which Plan applies

This Plan applies to the land identified on the map shown as **Figure 8-4-1**.

Constraints

Investigations have been undertaken into the potential for residential development in the land subject to this plan. The reasons for these investigations were to identify opportunities and constraints to development to guide future residential development and to be used for any rezoning of land in the area.

The initial planning process included the identification of main constraints to development within the area, which includes:

- water infrastructure requirements (and estimated costs)
- road requirements (access is not available off Memorial Drive)
- drainage lines

- stormwater runoff
- land capabilities for on site effluent disposal and building envelopes
- land ownership patterns
- existing development, including house locations
- remnant vegetation
- historic features
- potentially contaminated land
- bushfire hazards
- steep land
- the adjoining public recreation area to the west and environmental conservation area to the east
- preservation of rural character
- potential aboriginal artefacts

The major constraints of bushfire hazard/buffer, drainage lines, vegetation and steep land (contours) were mapped on cadastre and aerial photograph which identified potential developable land. The other constraints identified will require consideration and investigation at the development application stage.

The land subject to major constraints is not considered suitable for rural lifestyle development.

Any development application for the locality will need to reflect all potential constraints and produce an overall master plan for the locality.

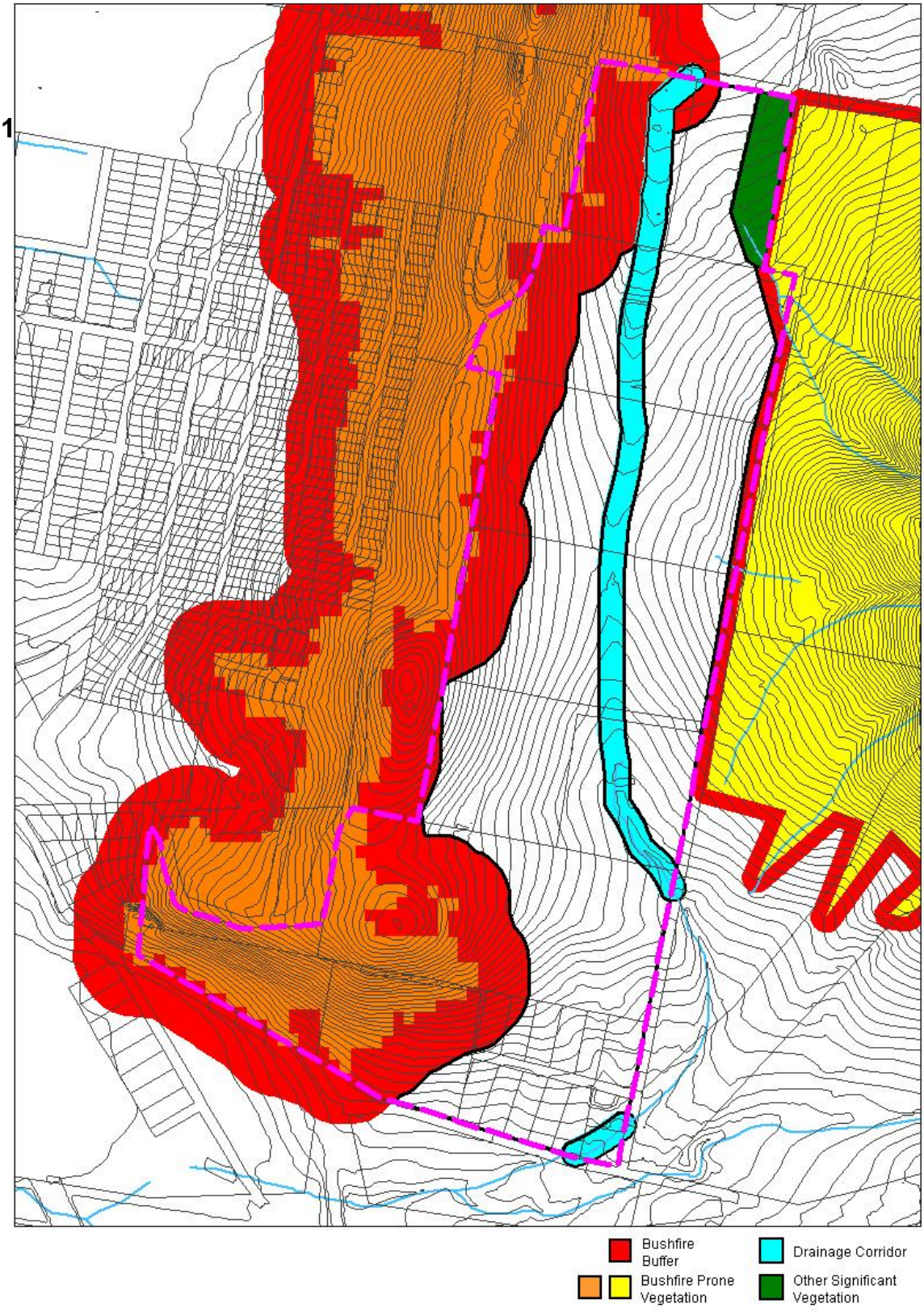
These major main constraints to development are mapped and shown in **Figure 8-4-2**.

Figure 8-4-1: Land to which Plan applies – Charles Valley



Figure 8-4-2: Constraints

8.4.1.1



8.4.1.1 Aboriginal sites

The Goulburn Mulwaree Council Aboriginal Archaeological Survey Policy identifies specific criteria as being an indicative of a site/area in which Aboriginal artefacts are likely to occur. Several of these criteria are located within the Charles Valley development area.

In accordance with the Aboriginal Archaeological Survey Policy, where a particular site within the Charles Valley development area is deemed to meet one or more of these criteria the following procedure must be followed.

A preliminary assessment to determine the likelihood of artefacts at the site. This assessment to include:

- review of the site history
- identification of the level of disturbance
- literature review and consultation with the National Parks and Wildlife Service on information they hold
- site inspection by a person skilled in identifying Aboriginal artefacts
- any consultation with the local Aboriginal community
- a statement as to the likelihood of artefacts being found and the need, if any, for a more detailed Archaeological survey

An Archaeological Survey undertaken by an appropriately accredited person/organisation in accordance with relevant guidelines on the preparation of such documentation.

8.4.1.2 Potentially contaminated sites

Grazing has been the main agricultural use in the area and no sites have been identified as being potentially contaminated.

8.4.2 Development potential

Land that has potential for development has been identified by removing land subject to the major constraints identified. The total area covers 120ha and the area of land available for development totals approximately 66ha. The existing lot pattern is shown in **Figure 8-4-3**. The minimum lot size to be created within the areas is 2ha.

Factoring in the major land constraints, the approximate developable area has a potential for an approximate additional 33 dwellings.

It is important that an estimate is made on the number of potential dwellings, rather than calculating that all available land will become lots of 2ha. This is because infrastructure must be designed to meet the needs of the expected population. If infrastructure is

designed that overcompensates for the actual population, the cost of providing the infrastructure would effectively stifle any further development in this locality.

With occupancy rate of 2 persons per household (from Goulburn Mulwaree Strategy 2020) and assuming each lot will be used for a single dwelling there is the potential for an ultimate population of 66 people.

POTENTIAL DWELLINGS: 33 dwellings (excluding existing dwellings)

POTENTIAL POPULATION: Between 60 and 100 people

Note: Range of population figures is given because individual lots have the right to a "secondary dwelling".

Figure 8-4-3: Developable land



8.4.3 Subdivision

Note: Reference chapter 7 of this Plan.

Objectives

To encourage subdivision layouts that:

- allow integration of neighbourhoods between "natural" boundaries or barriers and connections between the neighbourhoods
- minimise environmental impact by ensuring subdivision into rural residential lots only occurs on land free of development constraints
- are based on a hierarchy of roads for the efficient movement of vehicle traffic. Roads will be connective and efficient, giving motorist multiple travel paths. Long cul-de-sacs are unsuitable for efficiency and safety reasons
- focus open space on the drainage constraints and network
- incorporate water sensitive urban design principles into subdivision design
- encourage northern orientation of dwellings for energy efficiency benefits and passive solar access
- ensure rural residential lots have a sufficient area to allow for the siting of a dwelling and ancillary buildings (including private open space, vehicle access and parking)
- provide for protection/enhancement of visually prominent sites/locations
- protect riparian areas and native vegetation areas
- consider existing residential development

Controls

8.4.3.1 Subdivision lot size

Minimum lot size, is 2ha. However this minimum will need to take into account the suitability of the site and the infrastructure that will have to be provided.

Battle-axe lots are generally not supported. In calculating the area of a battle-axe allotment, the access way, which includes any rights-of-carriageway/access, are to be excluded.

8.4.3.2 Lot orientation

(a) Solar access

The following design techniques are to be adopted to maximise opportunities for solar access to allotments and to allow for the consequent design and siting of energy efficient houses:

(i) Align streets east-west and north-south. Aim for north-south streets within 20^{o} west and 30^{o} east of true north and east-west streets within 30^{o} south and 20^{o} north.

(ii) Allotments on east-west orientated streets need to have greater depth and width to make best use of solar access.

(iii) Allotments on south side of street should be sufficient depth so buildings can be set well back to allow north facing rooms to look onto larger front yards.

(iv) Allotments on north-south streets to be of sufficient width to allow for private open space on the north side and for houses to be built on the south boundary.

(v) Taking into account views and topography, lot orientation and layout should enable the majority of dwellings to be designed so that the main living area receives not less than 4 hours of sunlight per day between 9am and 3 pm.

(vi) Regular rectangular shaped allotments maximises siting opportunities and increases potential lot yield.

(vii) On sloping sites, north-facing sites improve opportunities for solar access.

(b) Passive surveillance

(i) Lots shall face toward public open space areas, vegetation conservation areas and public roads to encourage passive surveillance from dwellings over these public spaces to assist with safety and security.

(ii) Where this cannot be achieved open style fencing is required to promote passive surveillance of public open space and public road area with some landscape screening to provide privacy.

8.4.3.3 Bicycle and pedestrian movements

Bicycle and pedestrian movements to be addressed in accordance with Council's Bicycle Strategy 2007.

Cyclists can be integrated into the road network through a combination of on and off road measures together with bike parking at clusters of community and commercial facilities.

To encourage cycling as an easy transport alternative, on-road and off-road cycle networks will be clearly highlighted with signposting and pavement logos. Engineering works, including signposting and line marking must comply with the appropriate engineering standards.

8.4.3.4 Streetscape

Existing trees are to be retained where possible and appropriate.

Existing trees should be located near boundaries of proposed allotments to avoid conflict with proposed building envelopes (refer Council Policy – Bushfires and Vegetation Controls)

Streetscape planting themes are to be developed based on native tree species suitable for the locality and in an urban context.

Boundary fencing shall be rural timber style fencing i.e. post and rail with mesh. This is to maintain semi-rural amenity of this locality.

8.4.3.5 Open space

Areas identified as being as a drainage line shall be set aside as a drainage reserve.

The open space network is to be focused on these drainage lines.

Drainage lines are to be re-established as "natural" watercourses largely through revegetation with native species. These will meet the passive outdoor recreation needs.

Environmental management plans for the natural areas are to be prepared particularly for the watercourses and areas of remnant vegetation.

8.4.3.6 Sites of visual importance

Areas of visual importance have a building form of significant architectural and design merit or a prominent landscape feature. For this area the following sites/areas have identified:

- gateway entries to neighbourhood entrances within the plan area
- ridgelines
- treed hilltops or ridgelines
- subdivision design must address areas of visual importance and demonstrate how they will be protected or enhanced

8.4.4 Residential development

Objectives

To encourage residential development in which:

- there is a diversity of housing stock and type to meet diverse housing needs
- dwellings to face public spaces for passive surveillance
- living areas are orientated to the north for energy efficiency benefits
- dwelling design and siting respects the privacy of neighbours
- on site vehicle parking is provided to minimise congestion within the streets
- garages and fences do not dominate the streetscape
- there is easy access to community facilities
- Rainwater tanks are provided to supplement water supply and control stormwater runoff.

Controls

8.4.4.1 Detached dwellings and "secondary dwellings"

(a) Streetscape

Dwellings are to face public spaces (roads and open space areas).

Dwellings are not to be hidden by high fences.

Garages are to be located behind the building facade so that they do not dominate the streetscape.

Fences shall be of a design that is sympathetic to the existing semi-rural character of this locality.

(b) Height

Maximum recommended height is two storeys.

(c) Energy efficiency

To maximise energy efficiency the internal and external living areas should be located to the north side of the dwelling. Further requirements are specified in **clause 4.1.3** of this plan.

(d) Privacy

Private open spaces and living rooms of adjacent dwellings should be protected from direct overlooking, by:

- appropriate dwelling layout
- use of distance or slope
- screening devices like screen vegetation and courtyard walls

First floor decks, balconies and the like, are not supported where they overlook or have the potential to directly overlook habitable rooms or private open space of adjoining properties.

Windows of one dwelling should not be located opposite the windows of another dwelling unless direct views are restricted:

- off-set windows
- use of narrow, translucent or obscured windows
- provide sufficient distance between dwellings

(e) Acoustic privacy

Noise generating area of a development (e.g. driveway, air conditioning units, swimming pool areas) should be adequately screened or located away from the bedroom areas to minimise impact on neighbours.

Bedroom windows to be a minimum 3m from shared streets, driveways and parking areas of other dwellings.

Transmission of noise between adjoining properties should be minimised.

Locate active recreation areas (swimming pools, spas, tennis courts, BBQs), driveways, carports, garages and garbage collection areas, pumps and air conditioners, away from bedrooms of adjacent dwellings.

Dwellings adjoining and other noise generating land uses should be designed and sited to minimise noise impacts.

Locate bedrooms and other noise sensitive rooms away from the road.

(f) Parking

Provision for a least one covered parking space per dwelling (e.g. carport or garage) and one tandem vehicle space (e.g. driveway area in front of garage or carport).

(g) Rainwater tanks

A rainwater tank is to be provided per dwelling to supplement water supply and control stormwater runoff.

The tank shall have a minimum capacity of 10,000 litres.

The rainwater tank supply shall be connected to the hot water service, laundry and toilet facilities with a top up connection into the tank.

(h) Water sensitive urban design

House design should include water sensitive urban design features such as porous paving, infiltration devices and landscaping.

8.5 Clyde Street

Objectives

To:

- Identify the development constraints to larger size residential development of land.
- Provide an indicative plan for future residential subdivision and development.
- Estimate the future population and any community services that may be required.
- Identify and protect natural and heritage assets.

8.5.1 Land to which Plan applies

This Plan applies to the land identified on the map shown as **Figure 8-5-1**, an area of approximately 213 hectares. This land is bounded by:

- Wollondilly River to the north
- the catchment boundary to the south (i.e. contour line running to the south west between Clinton Street and Addison Street)
- the catchment boundary to the east and west

8.5.2 Constraints

Investigations have been undertaken into the potential for residential development in the land subject to this plan. The reasons for these investigations were to identify opportunities and constraints to development to guide future residential development and to be used for any rezoning of land in the area.

The initial planning process included the identification of main constraints to development within the area, which includes:

- water and sewer infrastructure requirements (and estimated costs)
- road requirements
- drainage lines
- flooding
- land capabilities
- land ownership
- existing development, including house locations
- remnant vegetation
- historic features
- potentially contaminated land

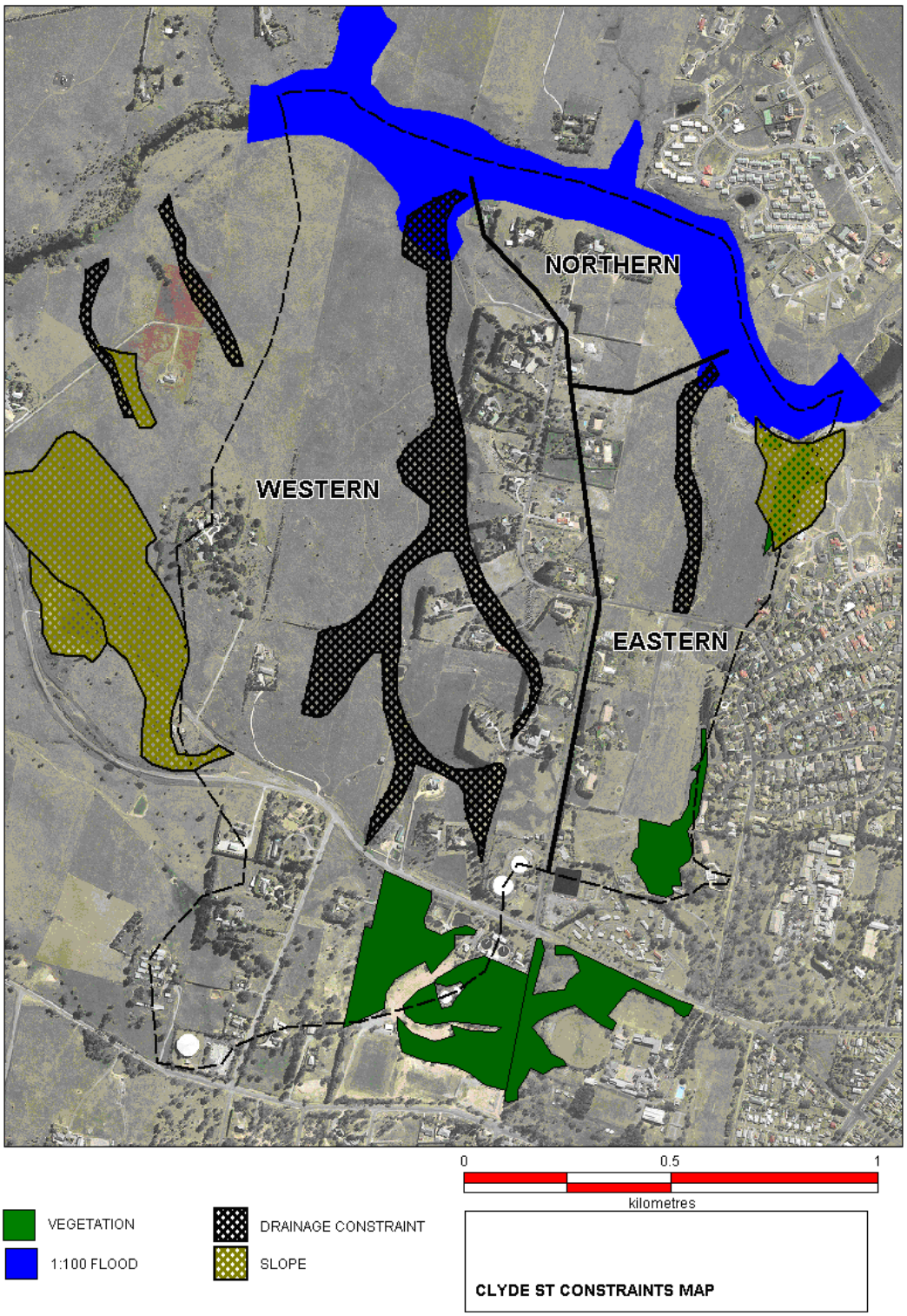
The constraints were mapped on cadastre and an aerial photograph, which identified land free of constraints i.e. developable land. The developable land was then refined with the provision of a Ring Road and stormwater management areas identified. Demand for shops, schools and other community facilities were then considered based on potential population numbers.

The main constraints to development are mapped and shown in **Figure 8-5-2**. The land subject to constraints is not suitable for urban development and this will need to be reflected in any development applications.

Figure 8-5-1: Land to which Plan applies – Clyde Street



Figure 8-5-2: Constraints



8.5.3 European heritage

In the LEP 2009, Schedule 5 the following heritage items have been identified:

- 199 River Street
- 24 Gilmore Street

All development proposals are subject to clause 5.10 of the LEP.

It will be necessary to impose design guidelines for future residential development in the vicinity of these items to ensure that the new development does not compromise the elements of heritage significance.

8.5.4 Aboriginal heritage sites

The Goulburn Mulwaree Council Aboriginal Archaeological Survey Policy identifies specific criteria as being an indicative of a site/area in which Aboriginal artefacts are likely to occur. Several of these criteria are located within the Clyde Street development area, namely, land that is in proximity to a watercourse, identified by a "blue line" on the 1:25,000 topographic map; land in close proximity to the Wollondilly River; lower slopes of undulating hills; ridgelines and hilltops.

According to the studies completed for Goulburn on Aboriginal archaeology and site location, there are no specific Aboriginal sites have been identified in the Clyde Street area.

In accordance with the Aboriginal Archaeological Survey Policy, where a particular site within the Clyde Street development area is deemed to meet one or more of these criteria the following procedure must be followed.

A preliminary assessment to determine the likelihood of artefacts at the site. This assessment to include:

- review of the site history
- identification of the level of disturbance
- literature review and consultation with the National Parks and Wildlife Service on information they hold
- site inspection by a person skilled in identifying Aboriginal artefacts
- any consultation with the local Aboriginal community
- a statement as to the likelihood of artefacts being found and the need, if any, for a more detailed Archaeological survey

An Archaeological Survey undertaken by an appropriately accredited person/organisation in accordance with relevant guidelines on the preparation of such documentation.

8.5.5 Potentially contaminated sites

Grazing has been the main agricultural use in the area and no sites have been identified as being potentially contaminated.

8.5.6 Development potential

Land that is suitable for development has been identified by removing land subject to the constraints identified. The total area covers 213ha and the area of land available for development totals approximately 169ha. The distribution of these lots is shown in **Figure 8-5-3**. The minimum lot size to be created within the developable land areas is 2000m^2. This would yield approximately 845 lots if all land could be developed to the 2000m^2 minimum. Factoring in land constraints, location of existing houses and road requirements, the yield is estimated to be 500 (including existing houses). The overall density of development expected within this locality following further development is one dwelling per 3300m^2. In reality the land constraints in the area will result in a variety of lot sizes.

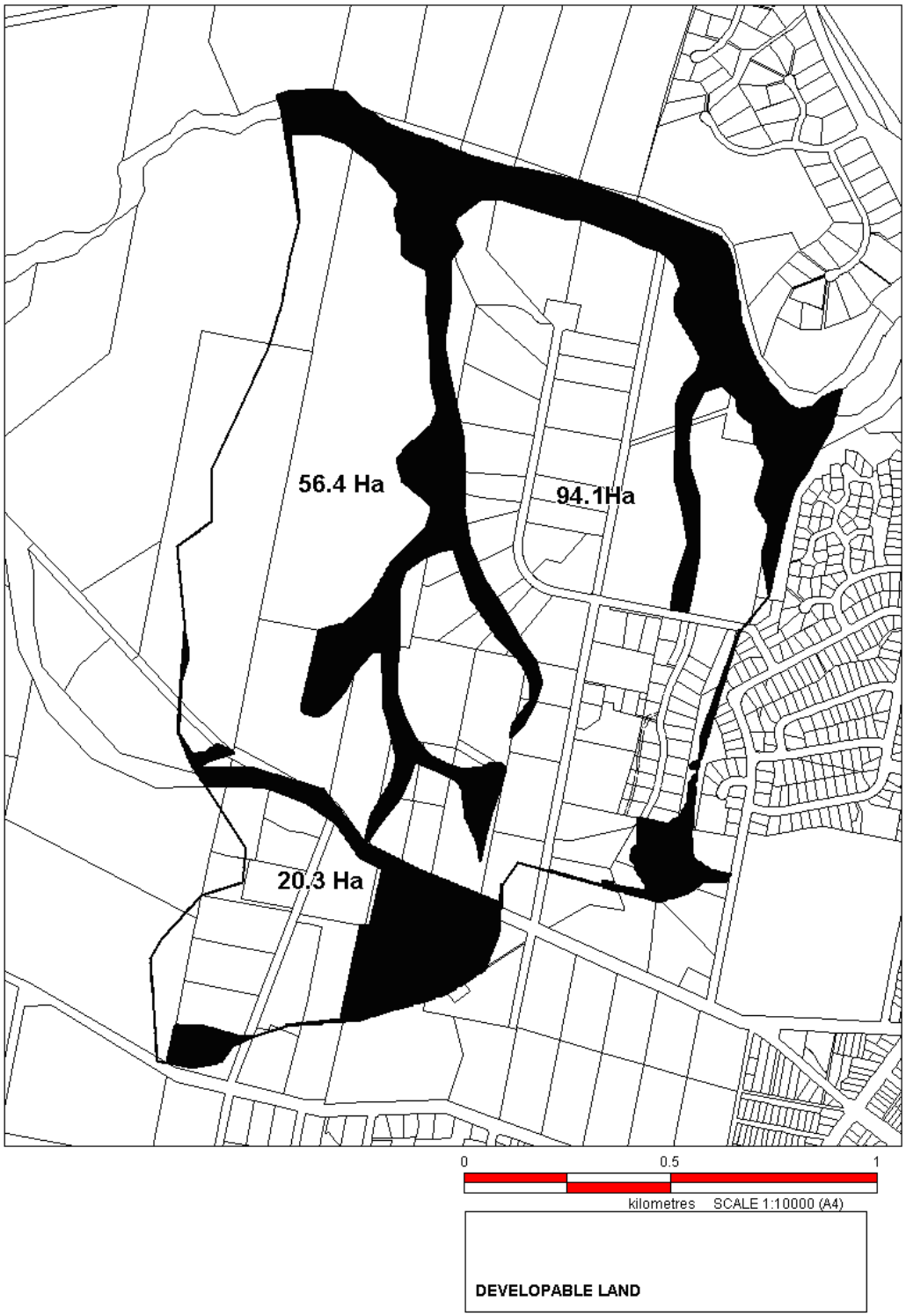
The number of lots for the area has been calculated based on the anticipation that owners of parcels of land greater than an area of 5 hectares will account for the majority of new lots created. It is also anticipated that approximately half of owners of parcels of land of between 1 and 5 hectares in area will subdivide their land to create an additional lot. It is important that an estimate is made on the number of new lots created, rather than calculating that all developable land will become lots of 2000m^2. This is because infrastructure must be designed to meet the needs of the expected population. If infrastructure is designed that overcompensates for the actual population, the cost of providing the infrastructure would effectively stifle any further development in this locality.

With occupancy rate of 2 persons per household (from Goulburn Mulwaree Strategy 2020) and assuming each lot will be used for a single dwelling there is the potential for an ultimate population of 1,000 people.

POTENTIAL RESIDENTIAL LOTS: 500 lots (including existing lots)

POTENTIAL POPULATION: 1000 people

Figure 8-5-3: Development potential



8.5.7 Subdivision

Note: Reference chapters 7.4.3 and 7.6 of this Plan.

Objectives

To encourage subdivision layouts that:

- allow integration of neighbourhoods between "natural" boundaries or barriers and connections between the neighbourhoods
- minimise environmental impact by ensuring subdivision into residential lots only occurs on land free of development constraints
- are based on a hierarchy of roads for the efficient movement of vehicle traffic. Roads will be connective and efficient, giving motorist multiple travel paths. Long cul-de-sacs are unsuitable for efficiency and safety reasons
- focus open space on the drainage constraints and network
- incorporate water sensitive urban design principles into subdivision design
- encourage northern orientation of dwellings for energy efficiency benefits and passive solar access
- ensure residential lots have a sufficient area to allow for the siting of a dwelling and ancillary buildings (including private open space, vehicle access and parking)
- residential lots face public areas (including open space areas) for passive surveillance
- provide for protection/enhancement of visually prominent sites/locations
- protect riparian areas and native vegetation areas
- consider existing residential development

Controls

8.5.7.1 Subdivision lot size

Minimum lot size is 2000m². However this minimum will need to take into account the suitability of the site and the infrastructure provided (refer to clause 7.3 of the LEP 2009).

Battle-axe lots are generally not supported. In calculating the area of a battle-axe allotment, the access way, which includes any rights-of-carriageway/access, are to be excluded.

Allotments should be able to accommodate a building envelope of 150m^2 with the minimum dimensions of 10m by 15m, within a 6m front building setback and a 1m side and rear setback and clear of any easements.

8.5.7.2 Lot orientation

(a) Solar access

The following design techniques are to be adopted to maximise opportunities for solar access to allotments and to allow for the consequent design and siting of energy efficient houses:

(i) Align streets east-west and north-south. Aim for north-south streets within 20^{o} west and 30^{o} east of true north and east-west streets within 30^{o} south and 20^{o} north.

(ii) Allotments on east-west orientated streets need to have greater depth and width to make best use of solar access.

(iii) Allotments on south side of street should be sufficient depth so buildings can be set well back to allow north facing rooms to look onto larger front yards.

(iv) Allotments on north-south streets to be of sufficient width to allow for private open space on the north side and for houses to be built on the south boundary.

(v) Taking into account views and topography, lot orientation and layout should enable the majority of dwellings to be designed so that the main living area receives not less than 4 hours of sunlight per day between 9am and 3 pm.

(vi) Regular rectangular shaped allotments maximises siting opportunities and increases potential lot yield.

(vii) On sloping sites, north-facing sites improve opportunities for solar access.

(b) Passive surveillance

Lots shall face toward public open space areas, vegetation conservation areas and public roads to encourage passive surveillance from dwellings over these public spaces to assist with safety and security.

Where this cannot be achieved open style fencing is required to promote passive surveillance of public open space and public road area with some landscape screening to provide privacy.

8.5.7.3 Bicycle and pedestrian movements

Bicycle and pedestrian movements to be addressed in accordance with Council's Bicycle Strategy 2007.

Cyclists can be integrated into the road network through a combination of on and off road measures together with bike parking at clusters of community and commercial facilities.

To encourage cycling as an easy transport alternative, on-road and off-road cycle networks will be clearly highlighted with signposting and pavement logos. Engineering works, including signposting and line marking must comply with the appropriate engineering standards.

8.5.7.4 Streetscape

Existing trees are to be retained where possible and appropriate.

Existing trees should be located near boundaries of proposed allotments to avoid conflict with proposed building envelopes (refer Council Policy – Bushfires and Vegetation Controls)

Streetscape planting themes are to be developed based on native tree species suitable for the locality and in an urban context.

Boundary fencing shall be rural timber style fencing i.e. post and rail with mesh. This is to maintain semi-rural amenity of this locality.

8.5.7.5 Open space

Areas identified as being as a drainage line shall be set aside as a drainage reserve.

The open space network is to be focused on these drainage lines.

Drainage lines are to be re-established as "natural" watercourses largely through revegetation with native species. These will meet the passive outdoor recreation needs.

Environmental management plans for the natural areas are to be prepared particularly for the watercourses and areas of remnant vegetation.

8.5.7.6 Sites of visual importance

Areas of visual importance have a building form of significant architectural and design merit or a prominent landscape feature. For this area the following sites/areas have identified:

- gateway entries to neighbourhood entrances within the plan area
- ridgelines
- treed hilltops or ridgelines
- subdivision design must address areas of visual importance and demonstrate how they will be protected or enhanced

8.5.7.7 Drainage and water sensitive urban design

Principles of water sensitive urban design are to be incorporated into subdivision design.

Development must comply with the neutral or beneficial effect on water quality test (refer State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011).

Drainage lines are to focus on the “natural” or existing drainage lines and integrated into the open space network (refer to **Figure 8-5-4**).

A Detention basin may be required to regulate and control runoff to rates equal with “natural” runoff.

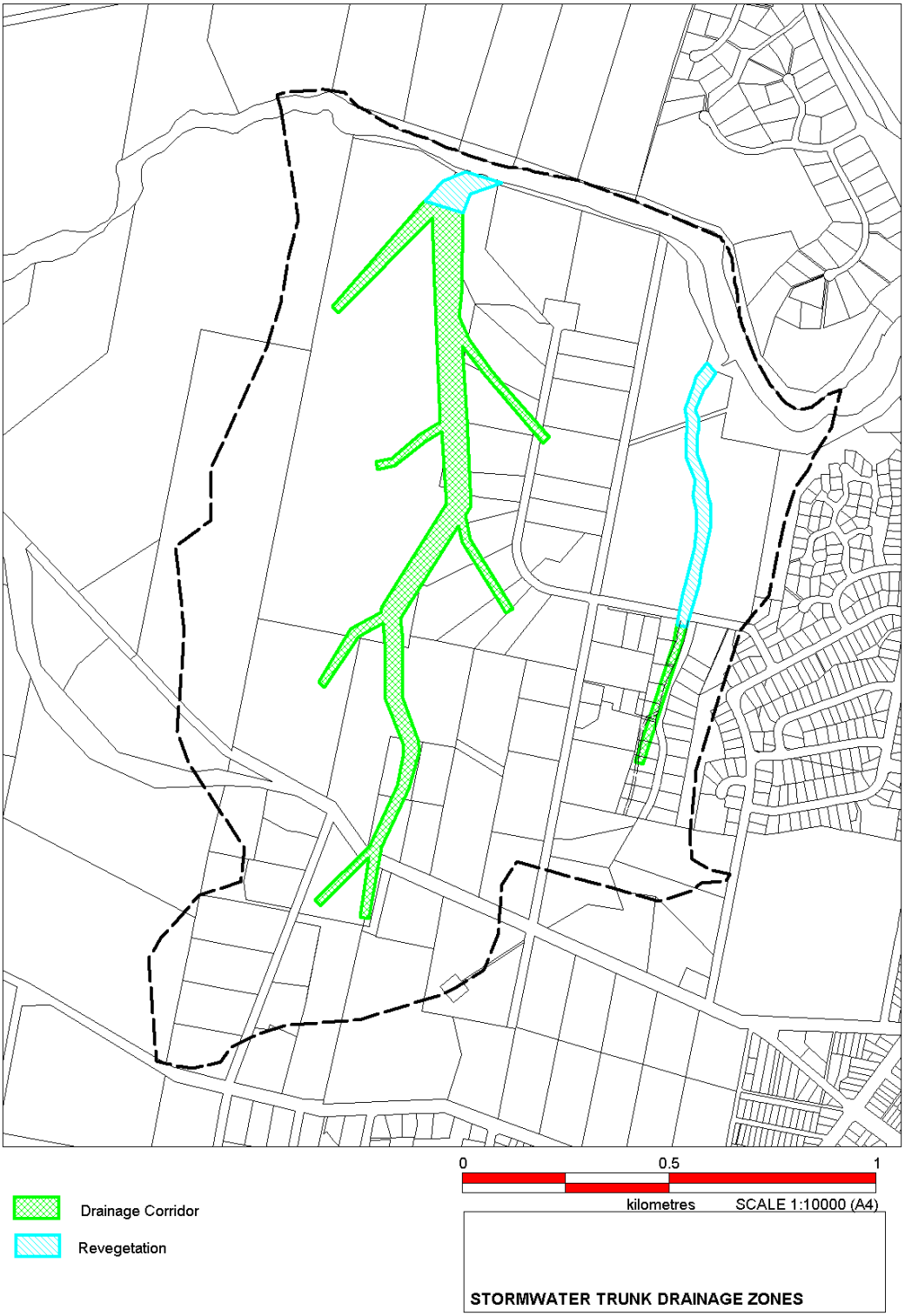
Detention ponds and other stormwater treatment devices are to be “offline” and “at source” to ensure stormwater runoff is treated prior to entering these areas.

Use of rainwater tanks will assist with minimising runoff associated with minor rainfall events.

Stormwater drainage systems are to be designed in accordance with the current version of Council’s Standards for Engineering Works.

Note: Development within this plan is to be constructed in accordance with the principles of Water Sensitive Urban Design and specifically in accordance with the report, “Water Sensitive Urban Design for Clyde Street Precinct, Goulburn”, Storm Consulting Pty Ltd (Storm), August 2004.

Figure 8-5-4: Trunk drainage zones



8.5.7.8 Road requirements

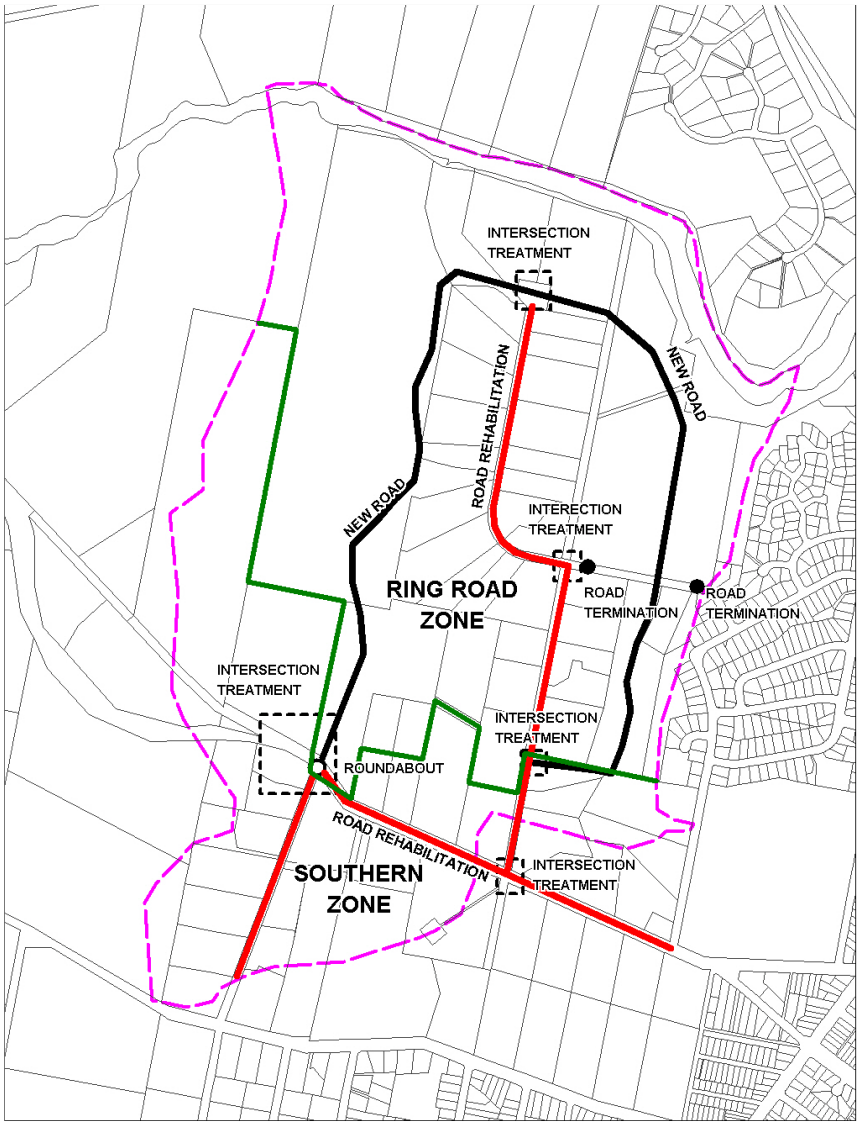
8.5.7.9 Sanctuary Drive

Provision for a Ring Road, which will distribute traffic more evenly and provide greater access to Clinton Street. This will reduce traffic pressure on existing residential areas to the east of the study site and allow for easy access to the town centre for new residents.

New road to be sufficient to accommodate linkage to Clyde Street for a potential school bus service.

Consideration is to be given to the Environment Protection Authority *Environmental Criteria for Road Traffic Noise May 1999*.

Figure 8-5-5: Proposed road network



8.5.7.10 General road provisions

All roads are to be designed and constructed in accordance with Council's Standards for Engineering Works.

Residential development shall be designed to:

- ensure satisfactory and safe operation with the adjacent road system
- take into account water sensitive road design practices
- have regard to contours and avoid large cuts and fills, steep slopes, prominent hilltops and creeks
- avoid long dead ends and cul-de-sac heads on the down slope end of roads
- not dam gullies, creeks or drainage lines
- stabilise, replant and/or top dress exposed batters and table drains and improve slope stability on all earthworks

All proposed road, splay and road widening shall be dedicated to Council, free of cost as public roads.

Where the design of the access road involves realignment, provided the Council egress to acquire any adjoining land, which may be necessary to affect such realignment, the applicant shall bear full cost of such acquisition.

The use of decorative paving such as brick, interlocking pavers or coloured concrete is encouraged as these materials can enhance the appearance of the street and signify to motorists it's residential function and corresponding appropriate driver behaviour. (This is of particular importance for the proposed T-intersection at the junction of Clyde Street and the proposed Ring Road, and at the potential Clyde Street/Turner Street junction).

Where cul-de-sacs are included in road design, when all other options are considered, alternative cul-de-sac heads that may be considered are square offset, T-Heads and Y-Heads.

Include appropriate traffic calming devices on the collector roads.

Roads should be placed between houses and open space areas/vegetation conservations areas to provide a buffer separation for fire management and vegetation preservation along with passive surveillance benefits.

8.5.8 Residential development

Objectives

To encourage residential development in which:

- there is a diversity of housing stock and type to meet diverse housing needs
- dwellings to face public spaces for passive surveillance
- living areas are orientated to the north for energy efficiency benefits
- dwelling design and siting respects the privacy of neighbours
- on site vehicle parking is provided to minimise congestion within the streets
- garages and fences do not dominate the streetscape
- there is easy access to community facilities
- rainwater tanks are provided to supplement water supply and control stormwater runoff.

Controls

8.5.8.1 Detached dwellings

(a) Streetscape

Dwellings are to face public spaces (roads and open space areas).

Dwellings are not to be hidden by high fences.

Garages are to be located behind the building facade so that they do not dominate the streetscape.

Fences shall be of a design that is sympathetic to the existing semi-rural character of this locality.

(b) Height

Maximum recommended height is two storeys.

(c) Energy efficiency

To maximise energy efficiency the internal and external living areas should be located to the north side of the dwelling. Further requirements are specified in **chapter 4** of this plan.

(d) Privacy

Private open spaces and living rooms of adjacent dwellings should be protected from direct overlooking, by:

- appropriate dwelling layout
- use of distance or slope

- screening devices like screen vegetation and courtyard walls

First floor decks, balconies and the like, are not supported where they overlook or have the potential to directly overlook habitable rooms or private open space of adjoining properties.

Windows of one dwelling should not be located opposite the windows of another dwelling unless direct views are restricted:

- off-set windows
- use of narrow, translucent or obscured windows
- provide sufficient distance between dwellings

(e) Acoustic privacy

Noise generating area of a development (e.g. driveway, air conditioning units, swimming pool areas) should be adequately screened or located away from the bedroom areas to minimise impact on neighbours.

Bedroom windows to be a minimum 3m from shared streets, driveways and parking areas of other dwellings.

Transmission of noise between adjoining properties should be minimised.

Locate active recreation areas (swimming pools, spas, tennis courts, BBQs), driveways, carports, garages and garbage collection areas, pumps and air conditioners, away from bedrooms of adjacent dwellings.

Dwellings adjoining and other noise generating land uses should be designed and sited to minimise noise impacts.

Locate bedrooms and other noise sensitive rooms away from the road.

(f) Parking

Provision for a least one covered parking space (e.g. carport or garage) and one tandem vehicle space (e.g. driveway area in front of garage or carport).

(g) Rainwater tanks

A rainwater tank is to be provided to supplement water supply and control stormwater runoff.

The tank shall have a minimum capacity of 10,000 litres.

The rainwater tank supply shall be connected to the hot water service, laundry and toilet facilities with a top up connection into the tank.

(h) Water sensitive urban design

House design should include water sensitive urban design features such as porous paving, infiltration devices and landscaping.

(i) Dual occupancy and multi dwelling housing accommodation

Development and density requirements in the subject R5 Large Lot Residential zone are contained in chapter 4 and also chapter 6 for development in Zone R5, Large Lot Residential

8.5.9 Other development

8.5.9.1 Community and commercial facilities

No sites have been identified specifically within this plan to be used for community or commercial facilities. Provision of community facilities will be the responsibility of individual landholders who may wish to operate or partner community or commercial facilities. Development other than residential development is largely prohibited in the Large Lot Residential zone (refer to the LEP 2009 Land Use table for Zone R5).

8.5.9.2 Schools

No additional school facilities have been identified for the area to serve the estimated population.

8.5.9.3 Open space

Council's Leisure – Recreation and Social Planning Study identifies that there is sufficient active recreational reserves and sports grounds provided elsewhere in the City, which are adequate to cater for any organised sporting needs from the area. However, identified detention basins can have a dual function to any unidentified active sporting recreation needs if required.

The balance of the open space can be satisfied via the passive open space created along the drainage lines along with any neighbourhood park requirements. These areas can also provide for informal active recreation areas.

8.6 Common Street

Objectives

- to identify the development constraints to urban development of land in the Study area
- to provide an indicative plan for the future land use, subdivision and development of the area
- to identify and protect natural and heritage assets in the study area

8.6.1 Land to which Plan applies

This Plan applies to the land identified on the map shown as **Figure 8-6-1**. This land is bounded by:

Harris Street, Gorman Road, Waste Management Centre, Chiswick Street, Hetherington Street, Arthur Street, Eaton Street, Sydney-Melbourne Rail Line, Long Street (north).

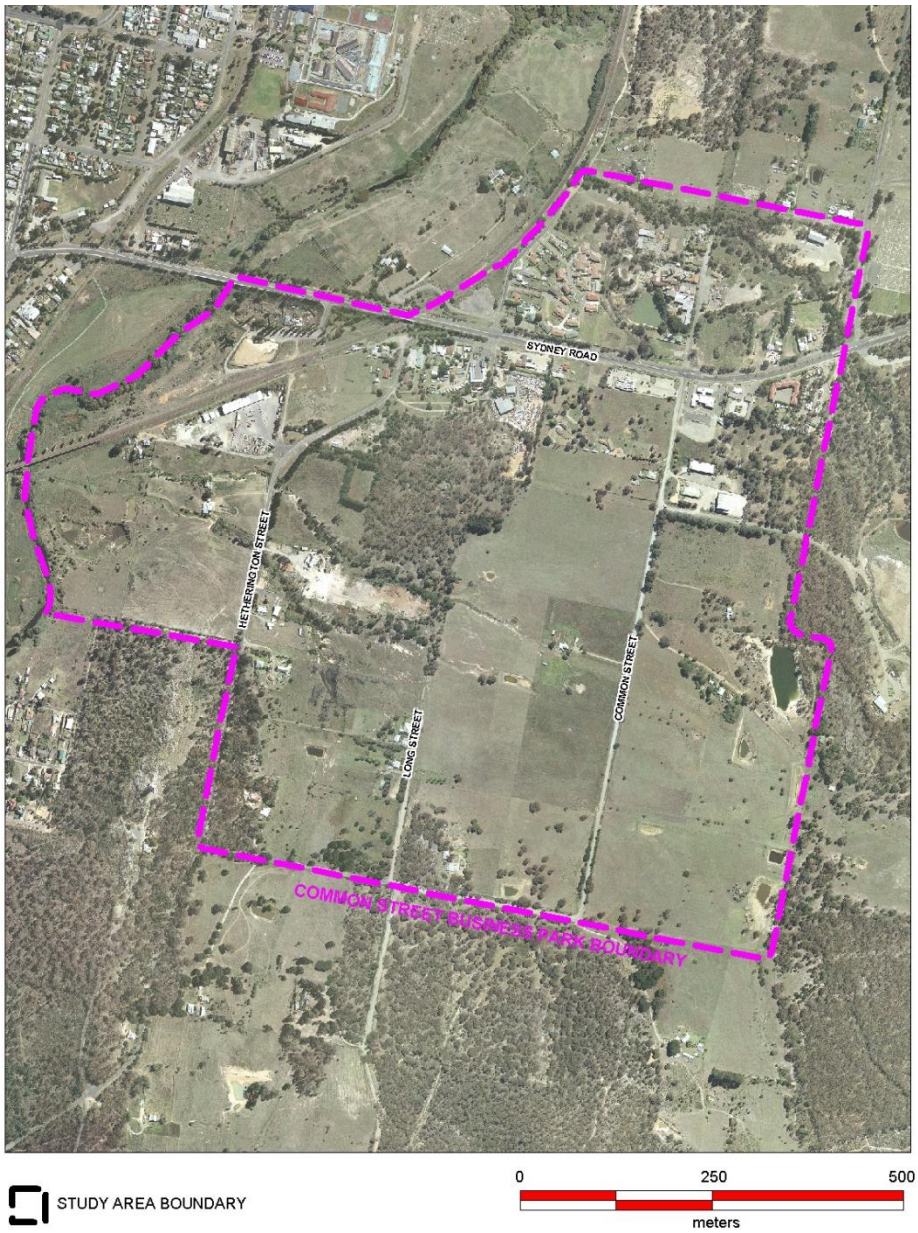
8.6.2 Constraints

Investigations have been undertaken into the potential for industrial development in the land subject to this plan. The reasons for these investigations were to identify opportunities and constraints to development to guide future development and to be used for any rezoning of land in the area.

The initial planning process included the identification of main constraints to development within the area, which includes:

- Water and sewer infrastructure requirements (and estimated costs)
- Road requirements
- Drainage lines
- Flooding
- Land capabilities
- Land ownership
- Remnant vegetation
- Ridgelines, steep land and visually prominent sites
- Historic features
- Bushfire hazard

Figure 8-6-1: Land to which Plan applies – Common Street



The constraints were mapped on cadastre and an aerial photograph, which identified land free of constraints (i.e. developable land).

The developable land was then refined with collector roads and open space areas identified.

The main constraints to development are mapped and shown in **Figure 8-6-2**.

The land subject to constraints is not suitable for urban development and this needs to be reflected in any development applications.

8.6.2.1 European heritage

In Schedule 5 to the LEP 2009 the following heritage items have been identified:

- 2-12 Common Street
- 14 Common Street
- 110 Long Street

All development proposals are consequently subject to the provisions of clause 5.10 of the LEP.

While not identified as a heritage item the oldest dwelling in Goulburn is located on the western side of Long Street (central). Any redevelopment of this building or site must be sympathetic to the heritage values of the building.

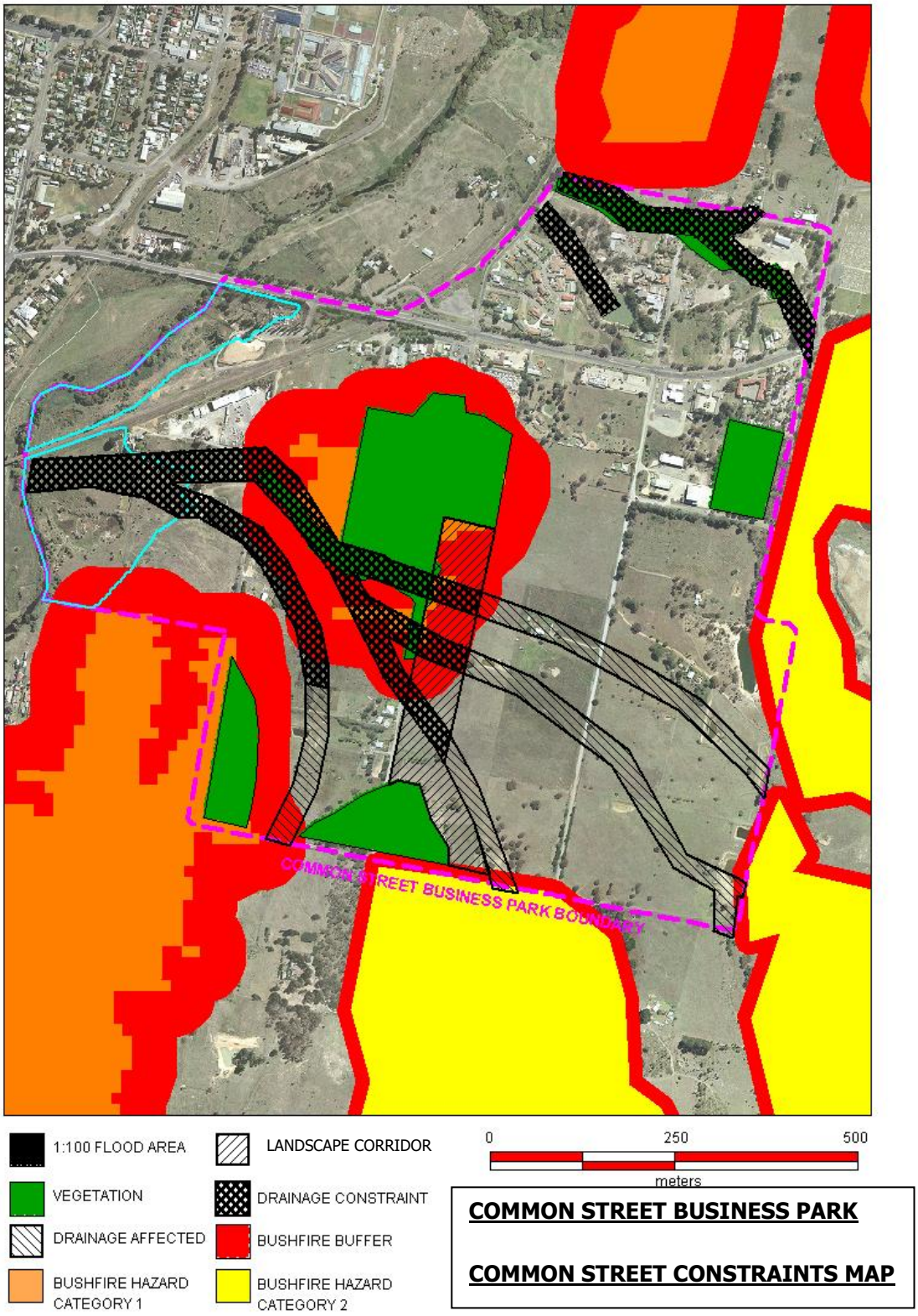
In addition, the Railway viaduct is of historic interest and the former Railway Gatehouse is a National Trust recorded building.

8.6.2.2 Aboriginal heritage sites

According to Council studies completed for Goulburn on Aboriginal archaeology and site location, there are no Aboriginal sites identified in the Common Street area.

A site inspection with a representative of the Pejar Aboriginal Land Council has established that likely sites for artefacts area ~~a~~ those that are relatively undisturbed such as watercourses, natural vegetation areas and landmarks sites (e.g. rock outcrops, hilltops). These areas have been generally recognised as being constrained for any development and are to be left undisturbed or restored to “natural” conditions (e.g. revegetation).

Figure 8-6-2: Environmental constraints



Council has adopted an interim policy on Aboriginal Archaeological Survey. Under this policy sites of potential artefacts have been identified. For development proposals in any of the areas identified an assessment will be required in accordance with the policy. The areas identified for Common Street are sites along the watercourses downstream of Long Street and the Mulwaree Ponds floodplain area.

8.6.2.3 Potentially contaminated sites

Grazing has been the main agricultural use in the Common Street area and no sites have been identified as being potentially contaminated.

Existing service station, former fuel depots, brickworks/landfill and car wrecking yard are sites, which may involve activities that could lead to contamination. Redevelopment at these sites will need to address this issue initially by undertaking a preliminary hazard analysis and possible testing.

8.6.2.4 Bushfire hazards

There are two bushfire categories affecting the study area each with different buffer distances to the hazard source:

- Category 1 – 100m vegetation buffer.
- Category 2 – 30m vegetation buffer.

These categories govern the type and extent of construction in these areas. For further details refer to the Rural Fire Service Planning for Bushfire Protection Guidelines 2006.

8.6.3 Developable land development potential

Land that is suitable for development has been identified by removing land subject to the constraints identified. The area of land available for development totals approximately 120 hectares (refer to **Figure 8-6-3**).

The zone proposed for the land available for development is B6 Enterprise Corridor.

Refer to the LEP 2009, Land Use table for B6 Zone for permissible uses.

8.6.4 Subdivision

Note: Reference chapters 7.4.2 and 7.6 of this Plan.

Objectives

To encourage subdivision layouts that:

- minimise environmental impact by ensuring subdivision into lots only occurs on land free of development constraints
- are based on a hierarchy of roads for the efficient movement of vehicle traffic and prevent infiltration of industrial traffic into residential areas
- focus open space on the drainage constraints and network
- incorporate water sensitive urban design principles into subdivision design
- ensure lots have a sufficient area to allow for the siting of buildings, landscaping vehicle access and parking
- have lots and buildings facing public areas (including open space areas) for passive surveillance
- provide for protection/enhancement of visually prominent sites/locations
- protect riparian areas and native vegetation areas

Controls

8.6.4.1 Subdivision lot size

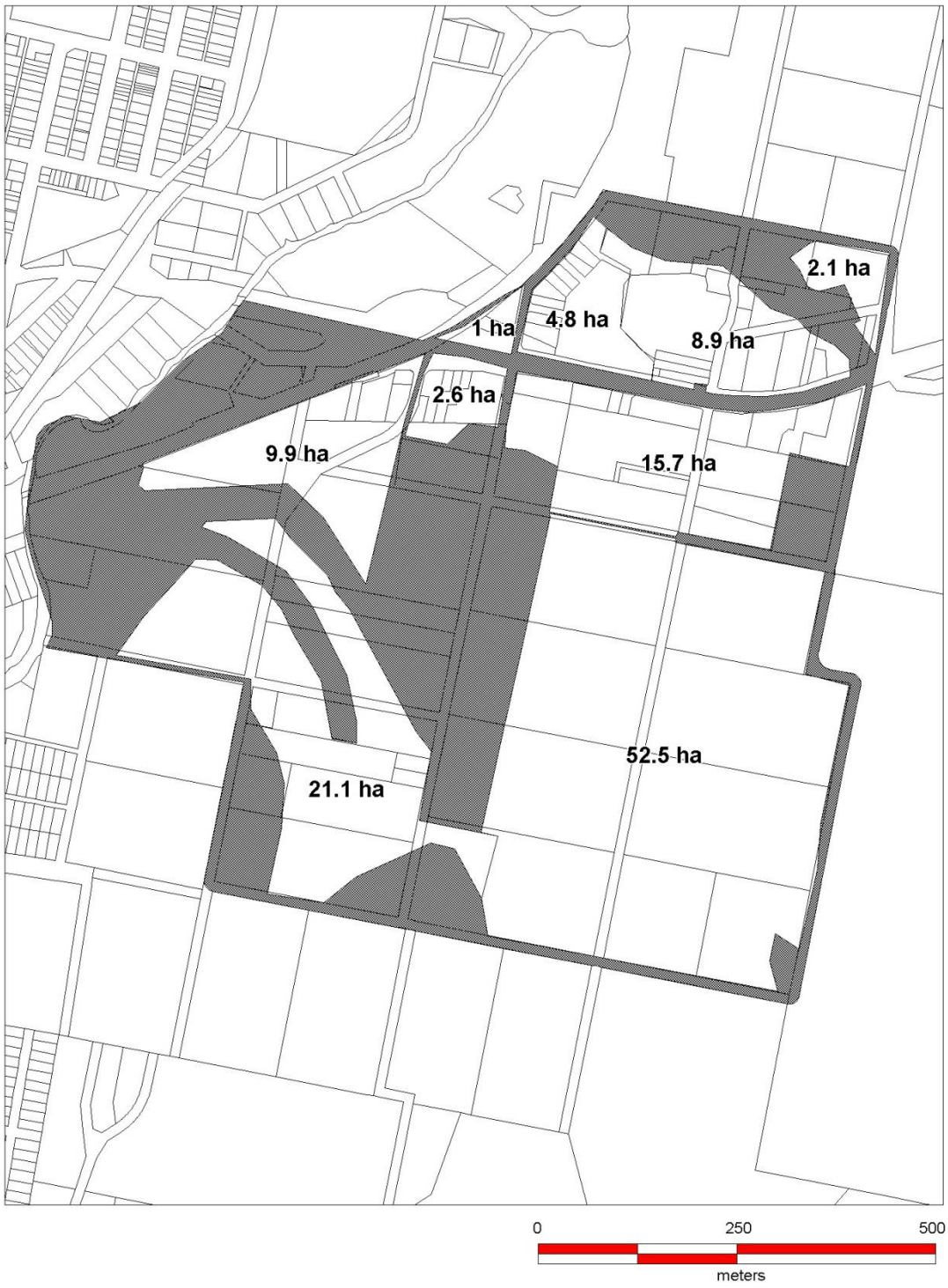
No minimum lot size specified

Battle-axe lots are generally not supported. In calculating the area of a battle-axe allotment, the access way, which includes any rights-of-carriageway/access, are to be excluded. For industrial type lots the access handle should have a minimum width of 15 metres.

The ratio of enterprise type lots sizes and frontages are detailed in the following table:

Lot Size	Minimum Frontage
1 ha	60m
6,000m^2	50m
2,000m^2	20m
1,000m^2	20m

Figure 8-6-3: Developable land



Lots for residential use should be a minimum of 700m² and able to accommodate a building envelope of 150m2 with the minimum dimensions of 10m by 15m, within a 6m front building setback and a 1m side and rear setback and clear of any easements.

8.6.4.2 Lot orientation

(b) Solar Access

The following design techniques are to be adopted for residential and rural residential type lots to maximise opportunities for solar access to allotments and to allow for the consequent design and siting of energy efficient houses:

(i) Align streets east-west and north-south. Aim for north-south streets within 20° west and 30° east of true north and east-west streets within 30° south and 20° north.

(ii) Allotments on east-west orientated streets need to have greater depth and width to make best use of solar access.

(iii) Allotments on south side of street should be sufficient depth so buildings can be set well back to allow north facing rooms to look onto larger front yards.

(iv) Allotments on north-south streets to be of sufficient width to allow for private open space on the north side and for houses to be built on the south boundary.

(v) Taking into account views and topography, lot orientation and layout should enable the majority of dwellings to be designed so that the main living area receives not less than 4 hours of sunlight per day between 9am and 3 pm.

(vi) Regular rectangular shaped allotments maximises siting opportunities and increases potential lot yield.

(vii) On sloping sites, north-facing sites improve opportunities for solar access.

(c) Passive surveillance

Lots (residential and light industrial/warehouse) shall face toward public open space areas and public roads to encourage passive surveillance from buildings/dwellings over these public spaces to assist with safety and security.

8.6.4.3 Bicycle and pedestrian movements

Bicycle and pedestrian movements to be addressed in accordance with Council's' Bicycle Strategy 2007.

Cyclists can be integrated into the road network through a combination of on and off road measures together with bike parking at clusters of community and commercial facilities.

To encourage cycling as an easy transport alternative, on-road and off-road cycle networks will be clearly highlighted with signposting and pavement logos. Engineering works, including signposting and line marking must comply with the appropriate engineering standards.

8.6.4.4 Streetscape

Existing trees are to be retained where possible and appropriate.

Existing trees should be located near boundaries of proposed allotments to avoid conflict with proposed building envelopes (refer Council Policy – Bushfires and Vegetation Controls)

Streetscape planting themes are to be developed based on native tree species suitable for the locality and in an urban or semi-rural context.

8.6.4.5 Open space

Areas identified as being a drainage line shall be set aside as a drainage reserve (refer to **Figure 8-6-2**) other than the drainage line upstream of Common Street, which will be combined into a single channel.

The open space network is to be focused on these drainage lines and the landscape corridor.

Drainage lines are to be re-established as "natural" watercourses largely through revegetation with native species. These will assist in recreating the natural landscape and providing opportunities to link remnant bushland areas.

Detention basins to have a dual function – stormwater control and bushland revegetation areas.

Environmental management plans for the natural areas are to be prepared particularly for the watercourses and areas of remnant vegetation.

8.6.4.6 Sites of visual importance

Areas of visual importance have a building form of significant architectural and design merit or a prominent landscape feature. The following sites/areas have identified:

- Bushland gateway entry to the City along Sydney Road opposite the General Cemetery
- Ridgelines.
- Treed hilltops or ridgelines

Subdivision design must address areas of visual importance and demonstrate how they will be protected or enhanced.

Sites of visual importance have been identified as "environment protection" and constrained for development.

8.6.4.7 Enterprise Corridor Development

Refer to chapter 6.10 of this plan.

(a) Enterprise Corridor – Outline Plan

Combining the constraints (**Figure 8-6-2**) and developable land (**Figure 8-6-3**) mapping with the development objective of the enterprise corridor zone gives an indication of what the area may look like into the future. **Figure 8-6-1** – Outline Plan provides a diagrammatic representation of this situation.

The enterprise corridor zone allows a mixed use of land uses including business and office premises, warehouse or distribution centre, light industrial, retail premises (except retailing of food and clothing – so as to maintain the economic strength of the main business centres)

The outline plan also indicates preferred location for the nominated land uses of:

- Business/Retail; and
- Light industrial/warehouse.

(b) Landscape Corridor / Drainage Reserve

For the light industrial development of the Common Street area it is essential that a buffer separation, by way of a landscape corridor is provided to separate existing residential development from future light industrial/warehouse development. The landscape corridor / Drainage Reserve is required to protect the amenity of residential properties,

existing and proposed and to limit intrusion of residential activities into the operation of the light industrial/warehouse precinct.

The landscape corridor / drainage reserve has been sited along the eastern side of Long Street (central) because it is:

- At the junction of drainage lines/overland flow paths.
- At the head of the identified watercourses.
- At the periphery of the light industrial/warehouse precinct.
- A potential vegetated corridor link between stands of remnant vegetation, and
- Not restricted by the existing pattern of residential development on the western side of the street.
- A nominated drainage reserve area under previous planning controls, titled Common Street Business Park, trunk drainage corridor.

The landscape corridor / drainage reserve will be required to be set-aside at the development application stage. The nominated area shall be free of buildings and used essentially for trunk drainage corridors, wetlands and / or on-site detention and reuse schemes as well as landscape corridors.

This corridor has been zoned Rural RU6 Transition and will link the environmental zones to the north and south.

The required width of the landscape corridor / drainage reserve has been estimated at approximately 100m. Final width will be dependant on design and the area needed to accommodate naturalised drainage systems (trunk drainage corridors), wetlands and / or on site detention and reuse schemes and landscape corridor widths.

The naturalised drainage systems required varies in width from 31 – 46 metres (upper catchment) and 44 – 66 meters (lower catchment) (Trunk Drainage Management Plan, Storm Consulting).

Where conventional “pit and pipe drainage” systems are accepted in lieu of naturalised drainage corridors the loss of natural drainage area shall be incorporated into the nominated landscape corridor / drainage reserve area.

Designs shall incorporate water sensitive urban design principles and reference "Water Sensitive Urban Design for Common Street Business Park Goulburn," Storm Consulting Pty Ltd, March 2004.

8.6.4.8 Drainage and water sensitive urban design

The principles of Water Sensitive Urban Design are to be incorporated into subdivision design.

Development must comply with the neutral or beneficial effect on water quality test (refer State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011*)*

Drainage lines are to focus on the natural drainage lines and integrated into the open space network.

Drainage design is to minimise run off into vegetation conservation areas to assist with ongoing preservation.

Detentions basins may be required to regulate and control the runoff to rates equal with "natural" runoff.

Detention ponds and other stormwater treatment devices are to be "offline" and "at source" to ensure stormwater runoff is treated prior to entering these areas.

Use of rainwater tanks is mandatory to assist with water supply and stormwater infrastructure requirements.

Stormwater drainage systems are to be designed in accordance with the current version of Council's Standards for Engineering Works.

The piped drainage system to be designed for storm events with the following ARI's:

- Commercial/industrial 10 years
- Residential and rural residential 5 years.

Higher order storms events to be based on overland flow systems along "natural" drainage lines.

Note: Development within this plan is to be constructed in accordance with the principles of Water Sensitive Urban Design and specifically in accordance with the report commissioned by Council: Water Sensitive Urban Design Common Street Business Park, Goulburn by Storm Consulting Pty Ltd December 2003.

Figure 8-6-4: Common Street trunk drainage corridor



Figure 8-6-5: Common Street Outline Plan

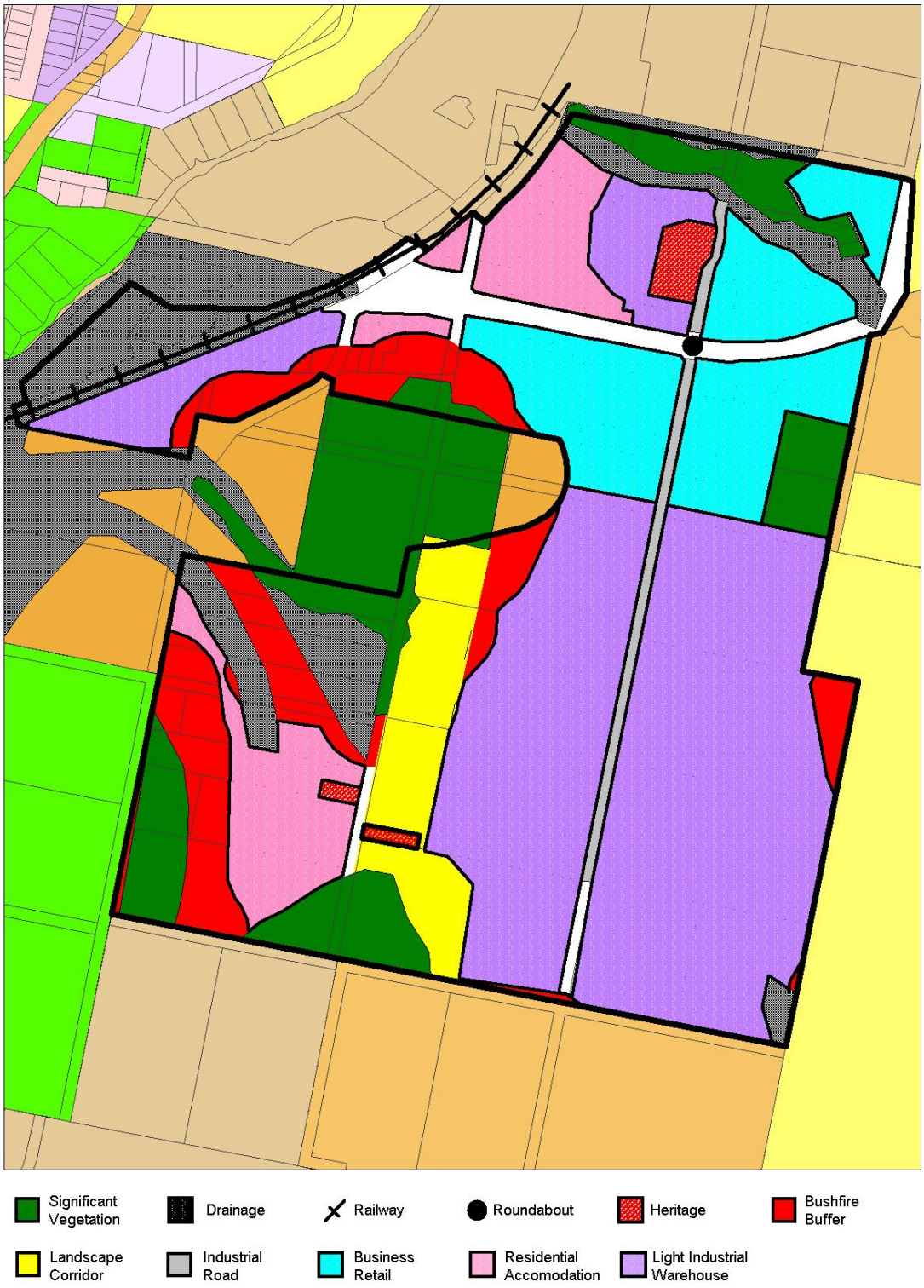


FIGURE 8.6.1 - Outline Plan

8.6.5 Road requirements

8.6.5.1 Common Street

Common Street North is to have a 10m wide carriageway pavement.

Common Street South is to have a 13m wide carriageway pavement

8.6.5.2 Enterprise development roads

Proposed roads widths are to be 22m with a 13m pavement plus kerb and gutter.

8.6.5.3 Sydney Road

Sydney Road is a Classified Road.

Direct access from Sydney Road or a new road access off Sydney Road requires Roads and Maritime Services approval, with the exception of existing development.

8.6.5.4 General road provisions

All roads are to be designed and constructed in accordance with the current version of Council's Standards for Engineering Works.

Development shall be designed to:

- ensure satisfactory and safe operation with the adjacent road system
- take into account water sensitive road design practices
- have regard to contours and avoid large cuts and fills, steep slopes, prominent hilltops and creeks
- avoid long dead ends and cul-de-sac heads on the down slope end of roads
- not dam gullies, creeks or drainage lines
- stabilise, replant and/or top dress exposed batters and table drains and improve slope stability on all earthworks

All proposed road, splay and road widening shall be dedicated to Council, free of cost as public roads.

Where the design of the access road involves realignment, provided the Council agrees to acquire any adjoining land, which may be necessary to affect such realignment, the applicant shall bear full cost of such acquisition.

The use of decorative paving such as brick, interlocking pavers or coloured concrete is encouraged as these materials can enhance the appearance of the street and signify to motorists it's residential function and corresponding appropriate driver behaviour.

Where cul-de-sacs are included in road design, when all other options are considered, alternative cul-de-sac heads that may be considered are square offset, T-Heads and Y-Heads.

Include appropriate traffic calming devices on the collector roads.

Roads should be placed between houses and open space areas/vegetation conservations areas to provide a buffer separation for fire management and vegetation preservation along with passive surveillance benefits.

8.7 Marys Mount

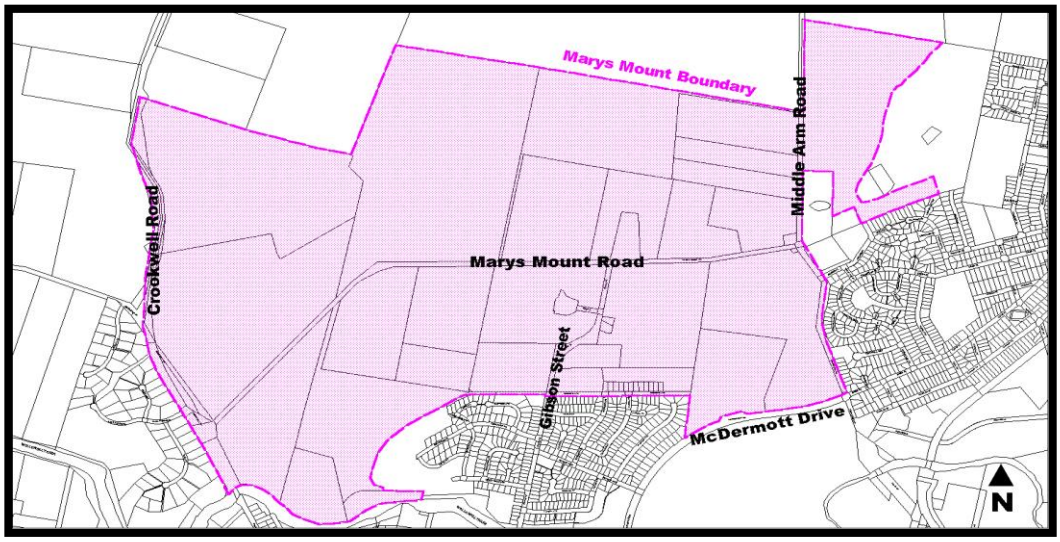
Objectives

- To provide an indicative plan for the future residential subdivision and development of the area based on the development constraints and infrastructure design.
- To identify and protect natural and heritage assets in the Marys Mount development area.

8.7.1 Land to which Plan applies

This Plan applies to the land identified on the map shown as **Figure 8-7-1**.

Figure 8-7-1: Land to which Plan applies – Marys Mount



8.7.2 Constraints

Opportunities and constraints to development have been identified to guide future residential development and for any future planning proposals.

The initial planning process included the identification of the main constraints to development within the area, which includes:

a) Water and sewer infrastructure requirements (and estimated costs)
b) Road requirements
c) Drainage lines
d) Flooding
e) Land capabilities
f) Land ownership
g) Remnant vegetation
h) Historic features
i) Potentially contaminated land

These constraints were mapped on cadastre and an aerial photograph, which identified land free of constraints (i.e. developable land).

The developable land was then refined with collector roads and open space areas identified. Demand for shops, schools and other community facilities were then considered based on potential population numbers.

The main constraints to development are mapped and shown in **Figure 8-7-2**.

8.7.2.1 European heritage

In the LEP 2009, Schedule 5 the following heritage items have been identified:

- 133 Marys Mount Road; and
- 38 Marys Mount Road.

All development proposals involving these sites are subject to clause 5.10 of LEP 2009.

It will also be necessary to impose design guidelines for future residential development in the vicinity of these items to ensure that the new development does not compromise the elements of heritage significance.

The Ledgerville property also has some local heritage value and a similar approach is to be taken.

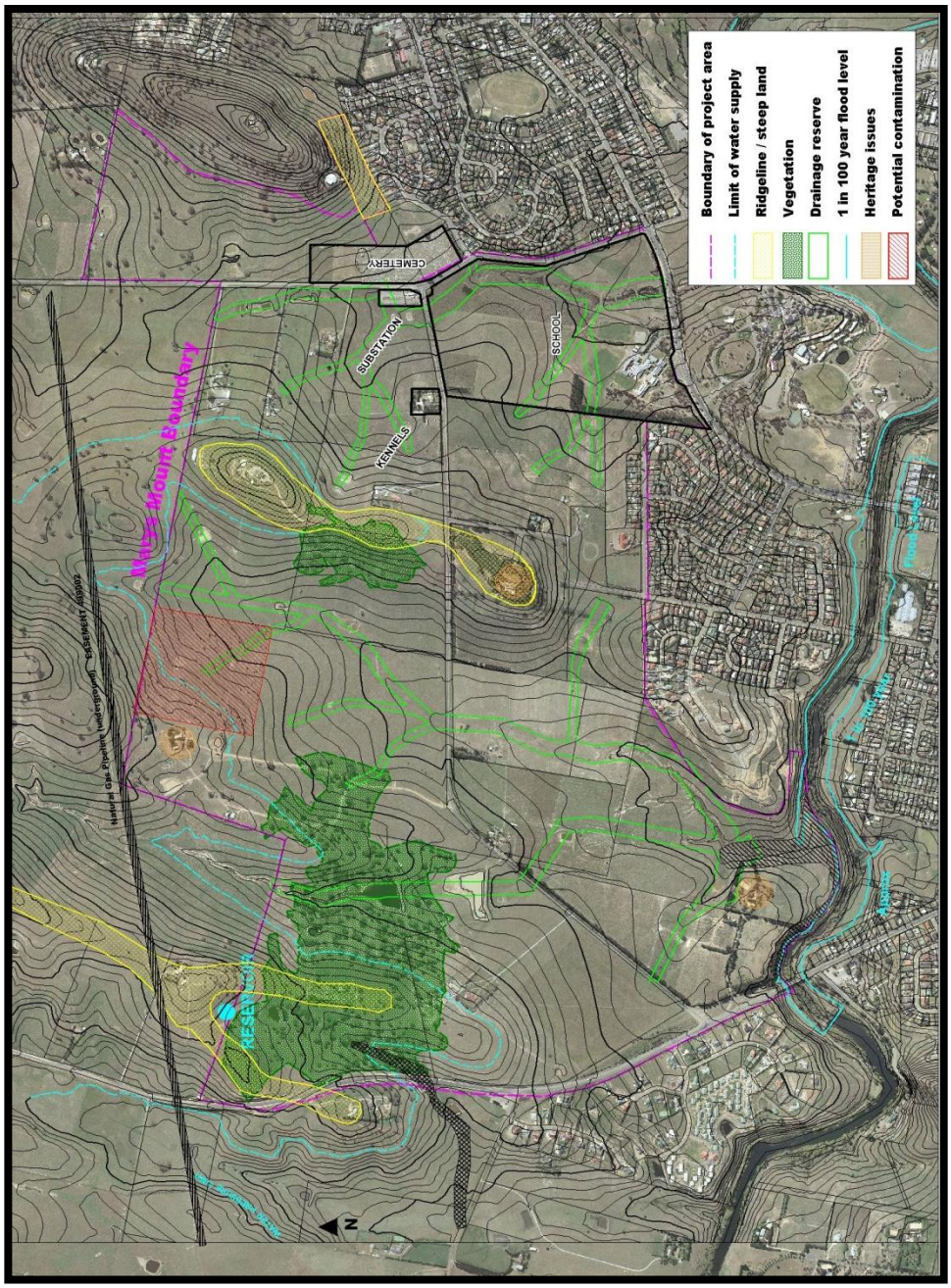
8.7.2.2 Aboriginal heritage sites

According to the studies completed for Goulburn on Aboriginal archaeology and site location, no aboriginal sites have been identified in the Marys Mount area. However, there may be potential for some sites near the Wollondilly River.

8.7.2.3 Potentially contaminated sites

Pastoral grazing has been the main agricultural use in the area and no sites have been identified as being potentially contaminated. However, the orchard area around "Tenneriffe" may have involved the use of chemical sprays. An assessment in accordance with State Environmental Planning Policy No.55 – Remediation of Land will be necessary prior to any rezoning/subdivision proposal for the site.

Figure 8-7-2: Environmental constraints



8.7.3 Development potential

Land that is suitable for development has been identified by removing land subject to the constraints identified. The area of land available for development is approximately 234 hectares based on an average residential lot size of approximately 1,000 m^2.

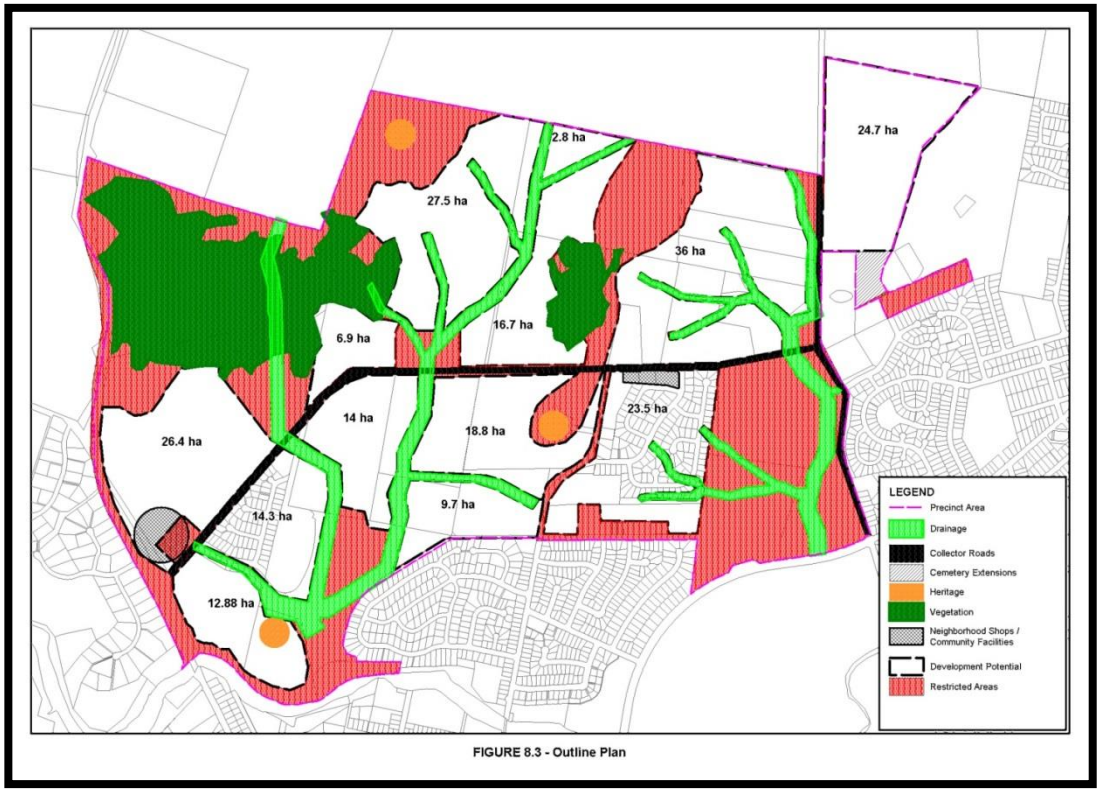
With an occupancy rate of 2 persons per household (from Goulburn Mulwaree Strategy 2020) and assuming each lot will be used for a single dwelling there is the potential for an ultimate population of 4,000 people.

The development potential is displayed in **Figure 8-7-3** (below).

POTENTIAL RESIDENTIAL LOTS: 2,000

POTENTIAL POPULATION: 4,000

Figure 8-7-3: Development potential



8.7.4 Subdivision requirements

8.7.4.1 Subdivision lot size

(a) Battle-axe lots are generally not supported. In calculating the area of a battle-axe allotment, the access way, which includes any rights-of-carriageway/access, are to be excluded.

(b) Allotments should be able to accommodate a building envelope of 150m^2 with the minimum dimensions of 10 metres by 15 metres, within a 6 metre front building setback and a 1m side and rear setback and clear of any easements.

8.7.4.2 Lot orientation

a) Solar Access

The following design techniques are to be adopted to maximise opportunities for solar access to allotments and to allow for the consequent design and siting of energy efficient houses.

i. Align streets east-west and north-south. Aim for north-south streets within 200 west and 300 east of true north and east-west streets within 300 south and 200 north.

ii. Allotments on east-west orientated streets need to have greater depth and width to make best use of solar access.

iii. Allotments on the south side of a street should have a sufficient depth so that buildings can be set well back to allow north facing rooms to look onto larger front yards.

iv. Allotments on south-north streets to be of sufficient width to allow for private open space on the north side and for houses to be built on the south boundary.

v. Taking into account views and topography, lot orientation and layout should enable the majority of dwellings to be designed so that the main living area receives not less than 4 hours of sunlight per day between 9am and 3pm.

vi. Regular rectangular shaped allotments maximises site opportunities and increases potential lot yield

vii. On sloping sites, north-facing sites improve the opportunities for solar access.

b) Passive Surveillance

(i) Lots shall face toward public open space areas, vegetation conservation areas and public roads. Where this cannot be achieved open style fencing is required to promote passive surveillance of public open space and public road area with some landscape screening to provide privacy.

(ii) Visually contain the carriageway to promote steady, predictable traffic speeds by:

- Encouraging hedging or front fences;
- Using upright kerbs;

- Provide on-street parking;
- Providing wide verges;
- Planting street trees at regular spacing within the carriageway or verge; and
- Only use narrow streets, when lot frontages are wide (at least 15 metres).

8.7.4.3 Bicycle and pedestrian movements

(a) Provision for bicycle and pedestrian movements are to be provided throughout the area.

(b) Provide footpaths on both sides of the street. They must be provided in accordance with Council's Standards for Engineering works.

(c) Cyclists can be integrated into the road network through a combination of on and off road measures together with bike parking and clusters of community and commercial facilities (Refer to Council's Bicycle Strategy 2008-2018).

(d) On -road and off-road cycle networks will be clearly highlighted with signposting and pavement logos.

8.7.4.4 Streetscape

(a) Street trees and landscaping

(i) A 5 metre landscape buffer area is to be provided along each side of Marys Mount Road. Dedication of this land to Council will attract offsets as provided for in the Section 94 Plan. This area will be planted with suitable native tree species to promote reestablishment of threatened or endangered species. A list of preferred planting species tree species is included in **Appendix B.**

(ii) Existing trees are to be retained where possible and appropriate.

(iii) Existing trees should be located near boundaries of proposed allotments to avoid conflict with proposed building envelopes (refer to Council Policy-Bushfires and Vegetation Controls).

(iv) Streetscape planting themes are to be developed based on native tree species suitable for the locality in an urban context.

(v) Use robust tree guards to protect immature trees.

(vi) Extensive landscaping to arterial and collector roads in order to soften their appearance and create a more attractive environment for users.

(b) Marys Mount Road presentation

(i) All subdivisions must provide an appealing streetscape presentation to Marys Mount Road that provides for amenity (including adequate separation of dwellings from the road) and surveillance of the road reserve. This may be achieved via one of the following outcomes:

- The incorporation of a slip road so that the front of adjacent dwellings are visible from but not directly accessible from Marys Mount Road. The verge between the main carriageway and the slip road must be landscaped consistent with any Council prepared landscape design for the relevant section of the road.
- Dwellings with direct frontage to Marys Mount Road will only be permitted pedestrian access to Marys Mount Road. In this case all vehicular access is to be provided via rear lane(s) within the development.
- Where it can be demonstrated that the other outcomes cannot be practically achieved Council may accept a subdivision layout whereby the rear of dwellings face Marys Mount Road if a minimum separation distance of 10m from the road reserve to the dwelling can be accommodated within the lot. At a minimum the boundary of the lot is to be landscaped and fences are to comply with (b)(ii)-(iv) below.

(ii) Where rear fences are proposed to front Marys Mount Road fencing details are to be submitted with the development application for subdivision taking into account the matters in (b)(iii) below. The approved fencing design shall be installed by the developer prior to the release of a subdivision certificate or provided for within a Section 88B (Conveyancing Act 1919) Instrument with Council as the varying authority.

(iii) Fencing along Marys Mount Road shall have regard to the following matters:

- avoidance of long expanses of high fences with same materials;
- the use of multiple materials with differing colours and textures such as pedestrian gates or other measures to activate the streetscape (particularly where the rear of dwellings front Marys Mount Road);
- the inclusion of landscaping to compliment fencing design;
- any existing Council prepared design for the landscaped buffer required by 8.1.4.4 (a)(i) of this Plan; and

- any adjoining existing or proposed fencing.

(iv) Council will not accept colourbond fencing adjoining or within the road reserve of Marys Mount Road.

8.7.4.5 Open space

(a) Open space should be dispersed throughout the locality to ensure equity of access for residents.
(b) Areas identified as being a drainage line shall be set aside as a drainage reserve and the open space network shall be focused on these drainage lines.
(c) Drainage lines are to be re-established as 'natural' watercourses largely through revegetation with native species.
(d) Environmental Management plans for natural areas are to be prepared particularly for the watercourses and areas of remnant vegetation.
(e) Council's Leisure- Recreation and /social Planning Study identifies that there is sufficient active recreational reserves and sports grounds provided elsewhere in the City.
(f) Goulburn Mulwaree Contributions Plan details community facilities and open space requirements.

8.7.4.6 Sites of visual importance

Subdivision design must address sites of visual importance and demonstrate how they will be protected or enhanced. The sites that have been identified, include:

(a) Monastery Hill;
(b) Ridgelines;
(c) Vegetated hilltops.

8.7.4.7 Water sensitive urban design

(a) Development must comply with the neutral or beneficial effect on water quality test (NorBE) (Refer to State Environmental Planning Policy Sydney Drinking Water Catchment 2011).
(b) Drainage lines are to focus on the 'natural' or existing lines and integrated into the open space network.
(c) Drainage design is to minimise run off into vegetation conservation areas to assist with ongoing preservation.

(d) Detention basins are required upstream of Marys Mount Road to regulate and control the runoff back to rates equal with 'natural' runoff. Detention basins may also be required to regulate and control runoff to rates equal to with 'natural' runoff.
(e) Detention ponds and other stormwater treatment devices are to be 'offline' and 'at source'.
(f) Stormwater drainage systems are to be designed in accordance with Council's Engineering Standards for Engineering Works 1996.
(g) The piped drainage system to be designed for a 1 in 5 year storm event. Higher order storm events to be based on overland flow systems along 'natural' drainage lines.

8.7.5 General road provisions

All access and road layouts will generally conform to the Indicative Road Layout Plan **Figure 8-7-4,** Transport Movement Hierarchy **Figure 8-7-5** and:

(a) Give consideration to NSW Road Noise Policy (July 2011);
(b) Give consideration to Council's Standards for Access Driveways and Parking Areas (2001);
(c) Be designed and constructed in accordance with Council's Standards for Engineering Works (July 2009);
(d) Should border all open space areas to provide a buffer separation;
(e) All proposed road, splay and road widening shall be dedicated to Council, free of cost as public roads;
(f) Where the design of the access road involves realignment, provided the Council agrees to acquire adjoining land, which may be necessary to affect such realignment, the applicant shall bear full cost of such acquisition; and
(g) Take into account Water Sensitive Road Design Practices (Refer to **Chapter 8.7.4.7**).
(h) All roads will provide upright kerbs to prevent informal use of verges for car parking.

8.7.5.1 Arterial roads

(a) With the exception of existing dwellings, direct access off Crookwell Road is prohibited and is to be controlled by an appropriate mechanism (e.g. restriction as to user on property title).

8.7.5.2 Collector roads

(a) Collector roads will provide reference to the Indicative Road Layout Plan (**Figure 8-7-4**)

(b) Collector roads need to be designed to enable easy-way finding. They must demonstrate connectivity by generally being more direct than access roads.

(c) Collector roads are to have a minimum road reserve width of 30 metres and a minimum pavement width of 10 metres (Refer to **Table 8-7-1 – Road Hierarchy**).

(d) Entry statements (such as signage marking the 'gateway' to an estate) should be avoided or temporary (e.g. for the sales period only) as it effectively isolates the development.

(e) Collector roads must be designed to enable uses by buses and bus stops and should be located where there is likely to be passive surveillance at most times of the day and night (e.g. outside dwellings rather than in open space).

(f) Must provide street trees in line with Council's Standards for Engineering Works (July 2009).

(g) Street parking must be provided in the carriageway and in line with Council's Standards for Access Driveways and Parking Areas (2001).

(h) A minimum of 5 metres of land should be provided to Marys Mount Road to achieve an overall road reserve width of 30 metres. This provides the necessary width required to provide for the carriageway, footpaths, bicycle path and landscaping.

(i) Direct access to Marys Mount Road from private property is prohibited.

(j) Marys Mount Road is part of the stock route network connecting Chinaman's Lane/Crookwell Road to Middle Arm Road. This can be provided as part of the landscaped roadside verge area.

8.7.5.3 Access roads

(a) Access roads should prioritise pedestrians and cyclists- they should provide a pleasant environment that encourages walking and social interaction.

(b) Houses on access road corners should address both street frontages.

(c) Avoid cul-de-sacs wherever possible. If they are used:

  (i) Limit their length so the end point is visible from the access point;

  (ii) Provide access to 10 house at the most

  (iii) Avoid cul-de-sac at activity centres (i.e. near shops) & where they would limit direct access to transport.

(d) Level 1 Access Roads are roads servicing more than 15 lots and that have direct access to a collector road are to have a minimum road reserve width of 20 metres and a pavement width of 9 metres, unless the road has:

(i) Trees in the verge, a pavement width of 9.6m are required;
(ii) With trees in the carriageway + verge, a pavement width of 9.6m is required;
(iii) With parking bays, a pavement width of 10.4m is required;
(iv) With trees in the carriageway and swales, a pavement width of 9.6m is required.

(e) Level 2 Access roads are roads servicing more than 15 lots are to have a minimum road reserve width of 18 metres and a pavement width of 9 metres, unless the road has:
(i) Trees in the verge, a pavement width of 9.6m are required;
(ii) With trees in the carriageway + verge, a pavement width of 9.6m is required;
(iii) With parking bays, a pavement width of 10.4m is required;
(iv) With trees in the carriageway and swales, a pavement width of 9.6m is required.

(f) Level 3 Access Roads are roads servicing less than 15 lots are to have a minimum road reserve width of 15 metres and a pavement width of 6 metres.

8.7.5.4 Intersections

(a) Design intersections to reflect street hierarchy.
(b) On collector and access roads use four-way intersections where possible.
(c) Avoid roundabouts wherever possible by:
(i) ensuring the design indicates the presence of the intersection on all approaches; and
(ii) using short block lengths (<70metres) on access roads.

8.7.5.5 Road hierarchy

(a) **Figure 8-7-4 & 8-7-5** illustrate the arterial roads, cycle-ways, existing and future collector roads.
(b) All developments in the precinct are required to contribute towards the upgrading of collector and arterial roads.

Table 8-7-1: Road Hierarchy

Street Type	Road Reserve Width (M)	Carriageway Width (M)	Appropriate Use	Reference
Arterial Road	N/A	N/A	Arterial roads are generally used to link and pass through a town or suburban regional/sub regional centres.	Crookwell Road
Collector Road - with landscaped buffer	30	10	Collector Roads link neighbourhoods together. They usually carry bus routes within as well as between neighbourhoods.	~~1~~ Marys Mount Road
Level 1 Access Road - with trees in verge - with trees in the carriageway + verge - with parking bays - with trees in the carriageway + swales	20	9 9.6 9.6 10.4 9.6	Level 1 Access Roads are roads servicing more than 15 lots and that have direct access to a collector road. They the predominant street type within a neighbourhood. They provide access to the dwellings, parks and neighbourhood edges.	2
Level 2 Access Road - with trees in verge - with trees in the carriageway + verge - with parking bays - with trees in the carriageway + swales	18	9 9.6 9.6 10.4 9.6	Level 2 Access roads are roads servicing more than 15 lots that do not have direct access to a collector road. They the predominant street type within a neighbourhood. They provide access to the dwellings, parks and neighbourhood edges.	3
Level 3 Access Road	15	6	Level 3 Access Roads have limited use. Use only where: - traffic volumes are low - there is low parking demand and - where the lot width is 15m or	4

			more.	

EXAMPLE ROAD HIERARCHY

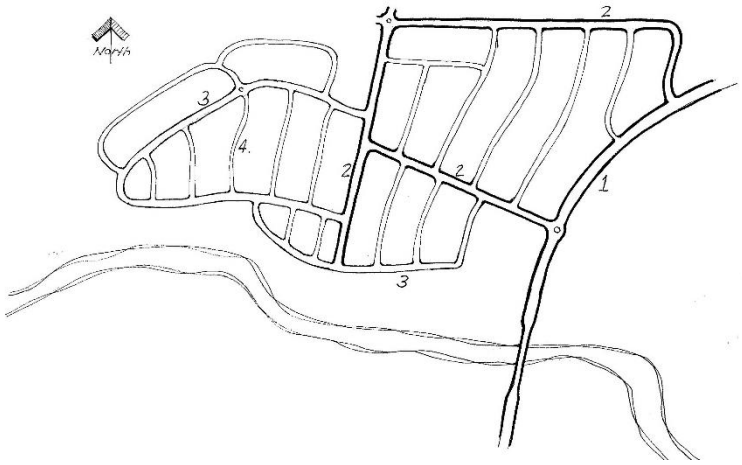


Figure 8-7-4: Indicative Road Layout Plan

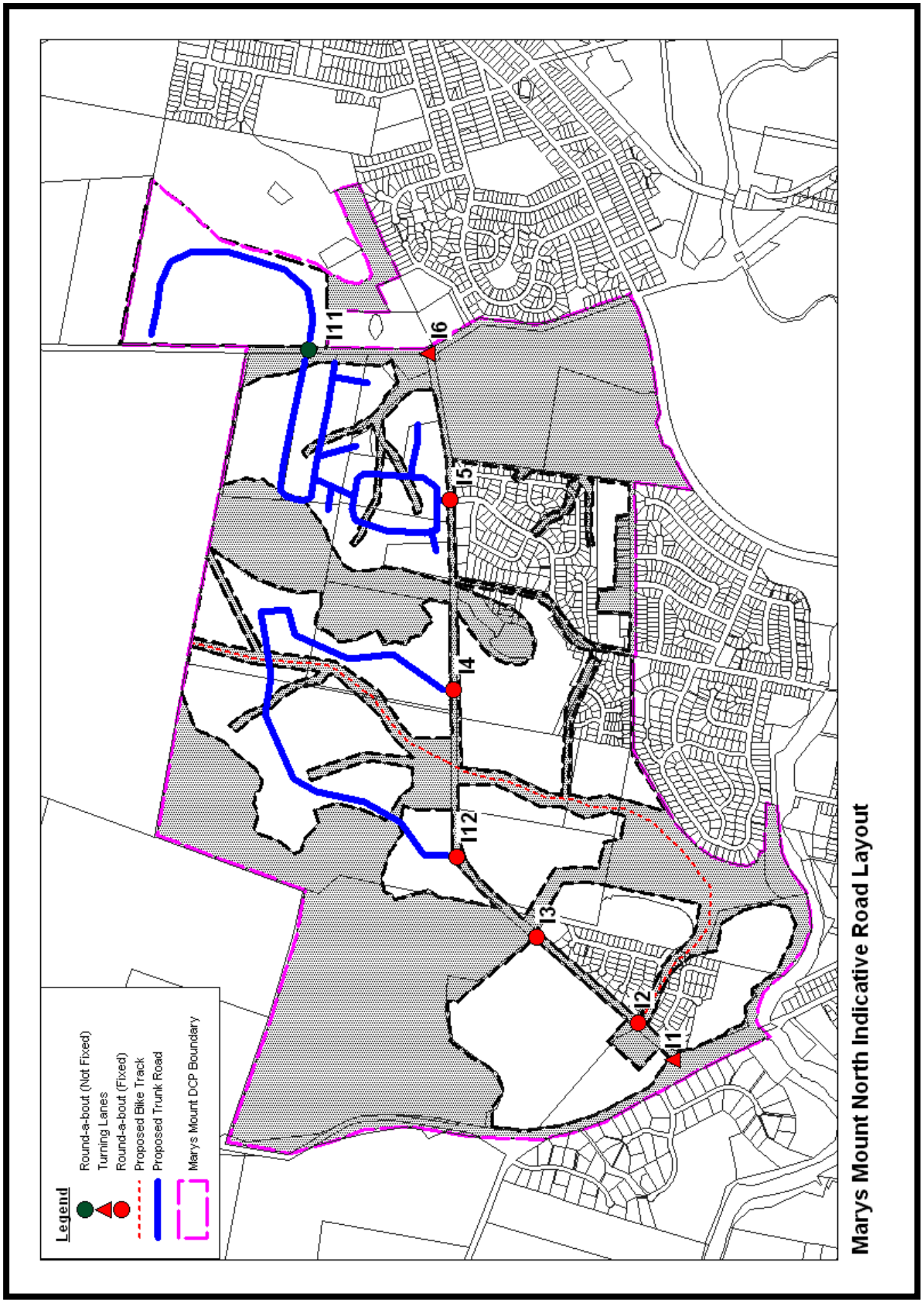


Figure 8-7-5: Transport Movement Hierarchy

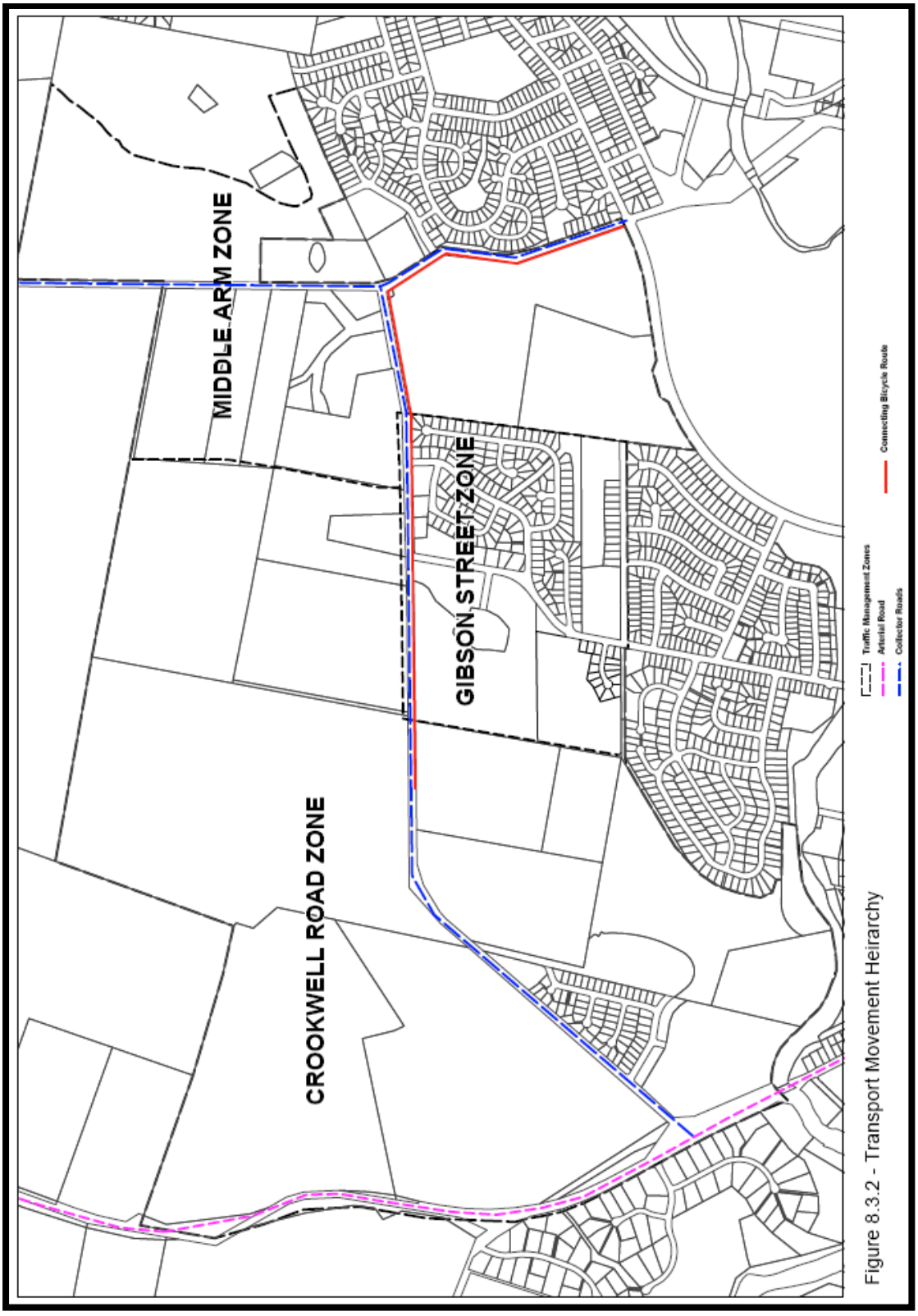


Figure 8.3.2 - Transport Movement Heirarchy

8.7.6 Residential development controls

Objectives

To encourage residential development in which:

- There is a diversity of housing stock and type to meet diverse housing needs
- Dwellings to face public spaces for passive surveillance
- Living areas are oriented to the north for energy efficiency benefits
- Dwelling design and siting respects the privacy of neighbours
- On site vehicle parking is provided to minimise congestion within the streets
- Garages and fences do not dominate the streetscape
- There is easy access to community facilities
- Rainwater tanks are provided to supplement water supply and control stormwater runoff

8.7.6.1 Detached dwellings

Controls

a) Streetscape

i. Dwellings are to face public spaces (roads and open space areas)

ii. Limit the height of front fences and hedges to 1.2 metres to enable surveillance of the street and to contribute to the streets amenity.

iii. Garages are to be located behind the building façade so that they do not dominate the streetscape.

iv. Rear private open space areas are to be accessible by vehicles.

b) Height

(i) Maximum recommended height is 2 storeys.

c) Energy Efficiency

(i) Internal and external living areas should be located to the north side of the dwelling.

(ii) A BASIX Certificate shall support all approvals for a dwelling.

d) Visual Privacy

(i) Private open spaces and living rooms of adjacent dwellings should be protected by:

- appropriate dwelling layout
- use of distance or slope
- screening devices like fences, window screens, screen vegetation and courtyard walls

(ii) First floor decks, balconies and the like are not supported where they overlook or have the potential to directly overlook habitable rooms or private open space.

(iii) Windows of one dwelling should not be located opposite the windows of another dwelling unless direct views are restricted.

(iv) Use of narrow, translucent or obscured windows is encouraged

e) Acoustic Privacy

(i) Noise generating areas of a development (such as a driveway, air conditioning unit or swimming pool areas) should be adequately screened or located away from bedroom areas to minimise impact on neighbours.

(ii) Bedrooms of one dwelling shall not share walls with living rooms or garages of adjacent dwellings.

(iii) Bedroom windows to be a minimum 3 metres from shared streets, driveways and parking areas of other dwellings

(iv) Transmission of noise between adjoining properties should be minimised.

(v) Location of active recreation areas (swimming pools, spas, tennis courts, BBQs), driveways, carports, garages and garbage collection areas, pumps and air conditioners should be away from bedrooms of adjacent dwellings.

(vi) Dwellings adjoining Marys Mount Road and other noise generating land uses should be designed and sited to minimise noise impacts.

(vii) Location of bedrooms and other noise sensitive rooms should be away from the road.

f) Parking

(i) Provision for at least one covered parking space and one tandem vehicle space.

g) Water

(i) Rainwater tanks of a minimum capacity of 10,000 litres shall be connected to the hot water service, laundry and toilet facilities with a top up connection into the tank.

(ii) House design should include water sensitive urban design features such as porous paving, infiltration devices and appropriate landscaping.

8.7.7 Other development controls

(a) Community Facilities

(i) Community facilities should be clustered, which will assist in promoting multi-use trips, reducing traffic impacts and improving accessibility.

(ii) Community facilities should be located at the periphery of residential neighbourhoods to avoid traffic impact intruding into residential areas.

(b) Schools

(i) No additional school facilities have been identified for the area to serve the estimated population.

(c) Retail Premises & Neighbourhood Shops

(i) Land at corner of Crookwell Road and Marys Mount Road has been zoned 'B1 Neighbourhood Centre'. A wider range of retail uses are permissible in this zone.

(ii) Two appropriate sites for neighbourhood shop development are identified in **Figure 8-7-3** - Development Potential.

(iii) Additional neighbourhood shops within the residential zones will only be considered where supported by an economic supply and demand analysis. A proposal should demonstrate consistency with the Draft Centres Design Guidelines (Department of Planning 2011) and any relevant strategy of Council.

8.7.8 Urban release areas

8.7.8.1 Staging plan

(a) **Figure 8-7-6** shows the sequence of staged residential land release areas.

(b) Stage 1, is the first residential land release area is on the corner of Marys Mount and Middle Arm Roads while the second stage is on the Eastern side of Middle Arm Road.

(c) Once stage 1 has been assessed and released, stage 2 will then go through the same process before released.

(d) Neither stage will be released until Council has made an assessment of:

(i) the stock of vacant, serviced and undeveloped or underdeveloped land and the potential housing opportunities available within the low density residential zone R2 and;

(ii) the rate of supply, the degree of choice and the current and projected rate of take-up and the current and housing types within the R2 Residential zone and;

(iii) Council is satisfied that there is insufficient land available within the R2 Residential zone to cater for projected household growth and having regard to the need to ensure the efficient functioning o the housing market or;

(iv) the land available within the R2 residential zone is inadequate to satisfy housing preferences or requirements of all segments of the housing market, and;

(v) adequate arrangements have been made with Council for the provision of infrastructure and services to the land including essential services of:

- the disposal and management of sewerage;
- reticulated water supply;
- the upgrading of Marys Mount Road;
- landscaping provisions; and
- stormwater drainage infrastructure, to support an orderly residential land release of stage 1 than stage 2.

8.7.8.2 Overall landscape strategy

(a) **Figure 8-7-6** shows the areas that need protection and enhancement for the Marys Mount precinct. They include:

i. ridgelines and steep land;
ii. remnant vegetation areas;
iii. riparian area;
iv. drainage reserve areas;
v. neighbourhood riverside park; and
vi. cycle ways

(b) Chapter 3.3 of this plan sets out detailed landscaping requirements

(c) Stage one residential release area is affected by extensive drainage reserves and Stage Two residential release area is affected by steep land.

(d) All developments in the precinct are required to contribute towards the enhancement of drainage reserve areas, cycle-ways and the neighbourhood riverside park.

8.7.8.3 Passive and active recreation areas

(a) **Figure 8-7-6** shows the recreation network consisting of:
(i) drainage reserves to be used as passive and active recreation areas;
(ii) cemetery reserve
(iii) passive remnant vegetation areas to be protected and enhanced; and
(iv) the precincts active neighbourhood riverside park site.

(b) Stage 1 of the residential release area is directly affected by extensive drainage reserves and stage 2 by the cemetery reserve. Drainage reserves are subject to the provisions of **Chapter 7.3** of this plan.

(c) The part of stage 2 (**Figure 8-7-6**) that is the cemetery reserve extension should be excluded from potential residential development. Dedication of such land by future applications would be treated as a 'material public benefit' for the purpose of Goulburn Mulwaree s94 Development Contributions Plan 2009.

8.7.8.4 Stormwater and water quality management

(a) Stormwater and water quality management controls are detailed in **Chapter 7.3** of this plan.

(b) Stage 1 of the residential release area is subject to extensive drainage lines which are to be constructed and designed in accordance with water sensitive urban design principles (**Chapter 7.3.2**) and soil and water management requirements (**Chapter 7.3.3**).

8.7.8.5 Public facilities and services

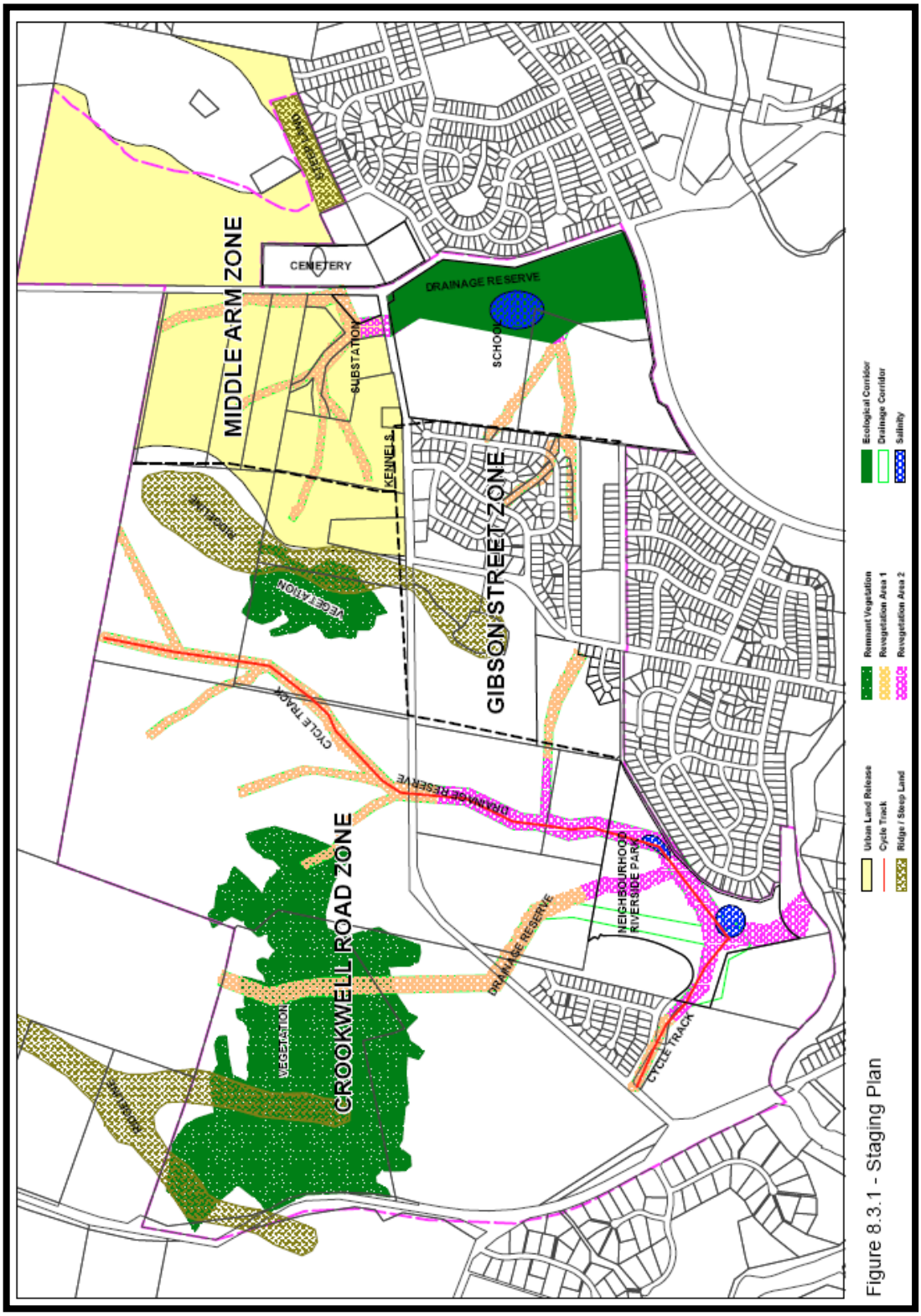
(a) **Figure 8-7-6** identifies the following public facilities and services in the Marys Mount Precinct:

(i) cemetery reserve
(ii) electricity substation
(iii) high school site;
(iv) neighbourhood riverside park site;
(v) required drainage reserves; and
(vi) traffic management zones.

(b) Residential release area stage 1 is affected by an electricity substation and proposed drainage reserves while stage 2 is affected by existing cemetery reserve and steep land.

(c) Goulburn Mulwaree Section 94 Development Contributions Plan 2009 Chapter 6- 'Marys Mount' details required development contributions towards 'neighbourhood riverside park', 'rustic cycle parks', and 'road upgrading and traffic management' for both release areas.

Figure 8-7-6: Staging Plan



8.8 Mistful Park Commercial Precinct

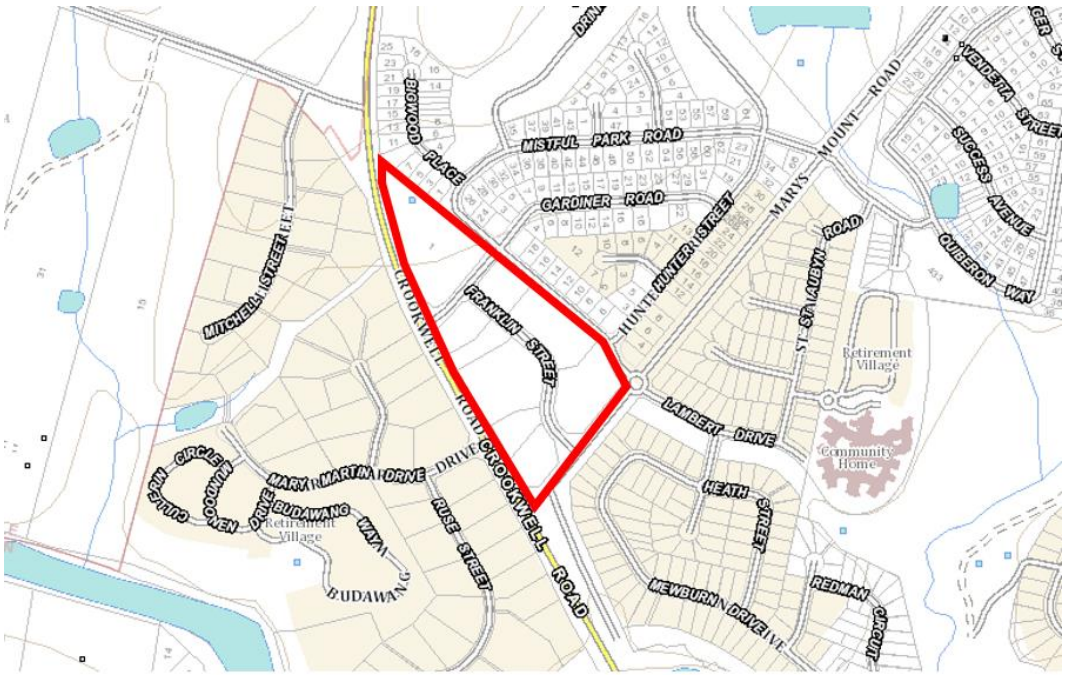
Objectives

- To facilitate the provision of commercial and retail services to the immediate surrounding community and commuters on Crookwell and Marys Mount Road.
- To ensure that Goulburn's existing CBD remains the primary centre for business and commerce in Goulburn.
- To facilitate medium density living close to commercial services in Mistful Park.
- To ensure that medium density residential development adequately provides for landscaping, design and car parking

8.8.1 Land to which this Plan applies

This Plan applies to the land on the map shown as Figure 8-8-1.

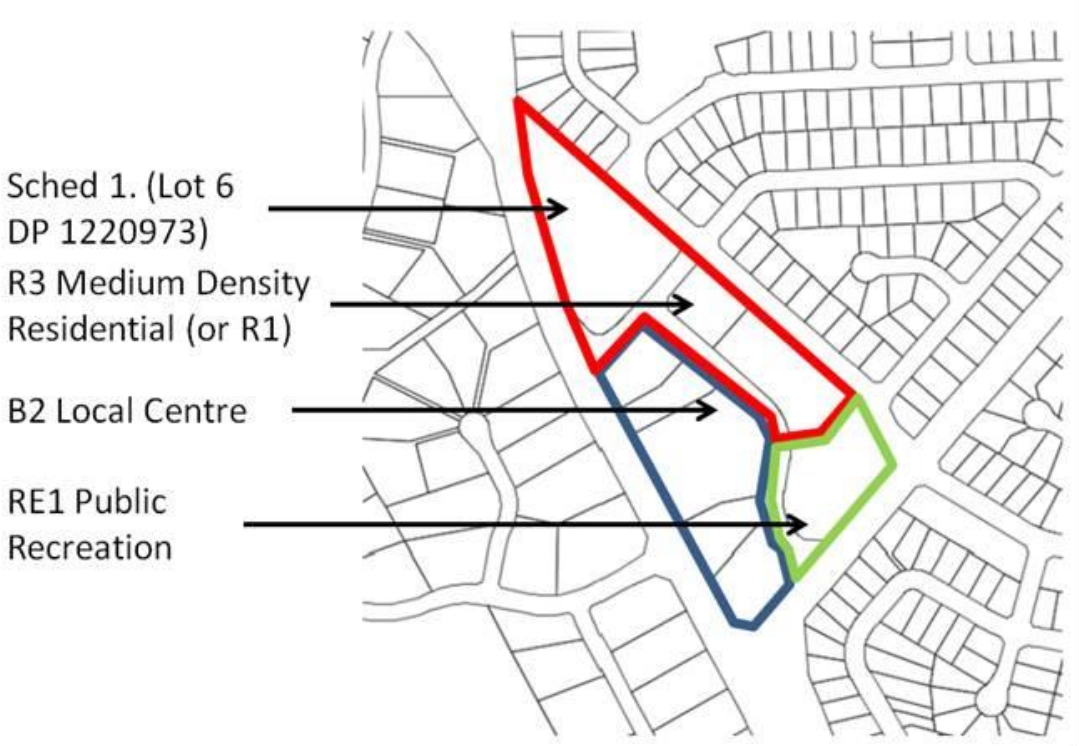
Figure 8-8-1: Land to which Plan applies – Mistful Park Commercial Precinct



8.8.2 Development Potential

The Land has been zoned to facilitate the development of a small commercial centre and medium density housing, with accommodation also permitted on Lot 6 DP1220973 (**Figure 8-8-2**).

Figure 8-8-2: Indicative zone map



Based on existing approvals, floor space ratio restrictions and current plans for the site, development identified as suitable for the land zoned as B2 Local Centre includes:

(a) A mid-size supermarket of around 1500m2;
(b) Three (3) retail tenancies ancillary to the supermarket with a combined floor space of approximately 250m2;
(c) Seven (7) commercial tenancies with a cumulative floor space of approximately 1000m2;
(d) Two (2) medical tenancies of any size;
(e) A take-away food and drinks premises;
(f) A car wash; and
(g) A petrol/service station.

The land zoned R3 Medium Density Residential is suitable for medium density housing given that it would be within walking distance from future commercial services, Riverside Park and public transportation. Low density residential development would also constitute a highly inefficient use of the land.

Lot 6 DP 1220973 is suitable for the development of camping grounds or caravan park in the near term, whilst remaining open for the development of a more permanent tourist or visitor accommodation and medium density housing in the future.

8.8.3 Restriction on commercial development

Council will only grant consent to commercial development that is beyond or significantly different to the commercial development indicated in 8.8.2 if an economic impact assessment is prepared and demonstrates, to the satisfaction of Council, that the development does not pose a significant threat to the commercial viability of Goulburn's CBD and its businesses. For the avoidance of doubt, an economic impact assessment is not required for development that does not cause the cumulative floor space of commercial development in the Mistful Park Commercial Precinct to exceed 3500m2, assuming that it consists primarily of:

(a) A mid-size supermarket of around 1500m2;
(b) Approximately three (3) retail tenancies with a combined floor space of approximately 250m2;
(c) Approximately seven (7) commercial tenancies with a cumulative floor space of approximately 1000m2; and
(d) A take-away food and drinks premises of approximately 550m2.
(e) But not including:
(f) Two (2) medical tenancies;
(g) A childcare facility;
(h) A car wash;
(i) A petrol/service station;
(j) Any accommodation or residential development.

It is recommended that the developer liaise with Council prior to the preparation of an economic impact assessment in order ensure that it is completed to the satisfaction of Council. If the economic impact assessment fails to address any key concerns raised by Council, then it may not be accepted.

8.8.4 Additional and alternative requirements for medium density residential development and tourist and visitor accommodation

To facilitate the orderly development of medium density housing in Mistful Park the following alternative controls apply and exceed to the extent of any inconsistency with any other part of this Plan:

Height	Development for the purposes of medium density residential housing or tourist and visitor accommodation must not exceed three (3) storeys in height.
Siting	Accesses and entries to any dwellings or tourist and visitor accommodation proposed must face towards Box Avenue and/or Franklin Street.
Private open space/communal open space	For multi storey residential flat buildings, dwellings on ground level should have private open space of at least 25m2 with a minimum length and width of 4m. For multi storey residential flat buildings, dwellings not on ground level must have access to balconies extending out of living areas in a northerly direction with a minimum depth of 2m. Multi storey residential development should provide between 25 and 35% of the site area as communal open space. For attached or semi-detached residential development, between 40m2 of private open space must be provided with a minimum length and width of 4m.
Landscaping	Development for the purposes of tourist and visitor accommodation should set aside between 25 and 35% of the site area for landscaping. Landscaping for the purposes of communal open space must provide for a variety of plantings and must not consist of large impermeable surfaces so as to minimise run off and the heat island effect.
Parking and access	Parking for the purposes of multi dwelling housing must be provided at the alternative rate of: • 1 space per 1 or 2 bedroom unit (including studio units) • 2 spaces per each unit with 3 bedrooms or more. • 0.25 spaces in visitor parking per dwelling.

	Where parking cannot be provided without non-compliance with open space or land scaping requirements, it must be provided either underground or under the building, provided that sufficient screening is provided. If secure parking or storage facilities are to be provided, they must be adequately screened from view from the street.

9 Appendices

9.1 Appendix A Criteria for the Assessment of Heritage Significance of Aboriginal Sites

Criteria for the assessment of heritage significance of Aboriginal sites

The Burra Charter of Australia defines cultural significance as 'aesthetic, historic, scientific or social value for past, present and future generations'. The assessment of the cultural significance of a place is based on this definition but often varies in the precise criteria used according to the analytical discipline and the nature of the site, object or place.

In general, Aboriginal archaeological sites are assessed using five potential categories of significance:

- significance to contemporary Aboriginal people
- scientific or archaeological significance
- aesthetic value
- representativeness
- value as an educational and/or recreational resource

Many sites will be significant according to several categories and the exact criteria used will vary according to the nature and purpose of the evaluation. Cultural significance is a relative value based on variable references within social and scientific practice. The cultural significance of a place is therefore not a fixed assessment and may vary with changes in knowledge and social perceptions.

Aboriginal significance can be defined as the cultural values of a place held by and manifest within the local and wider contemporary Aboriginal community. Places of significance may be landscape features as well as archaeologically definable traces of past human activity. Aboriginal cultural significance may or may not parallel the archaeological significance of a site.

Scientific significance can be defined as the present and future research potential of the artefactual material occurring within a place or site. This is also known as archaeological significance.

There are two major criteria used in assessing scientific significance:

1. Potential of a place to provide information which is of value in scientific analysis and the resolution of potential research questions

Sites may fall into this category because they: contain undisturbed artefactual material, occur within a context which enables the testing of certain propositions, are very old or contain significant time depth, contain large artefactual assemblages or material diversity, have unusual characteristics, are of good preservation, or are a constituent of a larger significant structure such as a site complex.

2. Representativeness of a place

Representativeness is a measure of the degree to which a place is characteristic of other places of its type, content, context or location. Under this criteria a place may be significant because it is very rare or because it provides a characteristic example or reference.

The principle aim of cultural resource management is the conservation of a representative sample of site types and variation from differing social and environmental contexts. Sites with inherently unique features, or which are poorly represented elsewhere in similar environment types, are considered to have relatively high cultural significance.

The cultural significance of a place can be usefully classified according to a comparative scale which combines a relative value with a geographic context. In this way a site can be of low, moderate or high significance within a local, regional or national context. This system provides a means of comparison, between and across places. However it does not necessarily imply that a place with a limited sphere of significance is of lesser value than one of greater reference.

Aboriginal heritage impact assessment process

The following is an outline of the process of Aboriginal heritage impact assessment.

(a) Determining if an Aboriginal heritage impact assessment is required

This determination process is described in clause 3.2.2 above.

(b) Conducting an Aboriginal heritage impact assessment

An Aboriginal heritage impact assessment must be prepared by a suitably qualified heritage practitioner or consultant. The minimum qualification generally recognised as a prerequisite for an Aboriginal heritage assessment practitioner is a tertiary level degree (or equivalent) in an Australian archaeology or cultural heritage degree. The range of specialist practitioners is considerable and can include anthropologists, stone artefact specialists, rock art specialists, materials conservators, palaeobotanists, and physical anthropologists. In general, heritage assessment based on field survey and/or excavation will require a qualified archaeologist. Assessments which involve the analysis of contemporary Aboriginal communities may also require input from an anthropologist.

Several professional organisations exist which recognise and accredit heritage consultants and other related practitioners. These are:

Australian Association of Consulting Archaeologists Inc – PO Box 214, Holme Building, University of Sydney, NSW 2006 (www.archaeology.usyd.edu.au/aacai).

Australian Institute of Professional Archaeologists Incorporated – GPO Box 5336BB, Melbourne Victoria 3001 (www.users.bigpond.com/raluebbers/AIPA).

Some consultant heritage practitioners are listed in the Yellow Pages under the categories of 'Archaeology' and 'Heritage Consultants'.

The following are key components of an Aboriginal heritage impact assessment:

Identify and then consult with appropriate local Aboriginal stakeholder groups – Consultation with local and custodial Aboriginal community groups is an integral component of any Aboriginal heritage impact assessment.
The status and number of stakeholder groups can change over time. The NSW Office of Environment and Heritage can provide advice regarding appropriate groups which should be consulted.
Consult with relevant Council Heritage staff – Council heritage staff are potential sources of information, advice and direction, regarding community consultation, site locations and the management of heritage values.
Conduct a review of previous heritage assessment work and background information (including a search of the NSW Office of Environment and Heritage Aboriginal site register) – All relevant previous heritage assessments should be reviewed with regard to the potential issues and heritage values present within the assessment area. Sufficient background information should also be presented so that the environmental and historical

context of the area can be characterised, and any heritage places, sites and features can be effectively placed within an assessment context.

Conduct an appropriate level of field inspection of the proposed development area – This usually involves comprehensive or sample survey of the development area. All field survey involves levels of sampling, however a comprehensive level of inspection would normally achieve a coverage of greater than 40% of the area subject to development impacts. The proportion of survey coverage achieved will depend on the degree of ground surface visibility available to the surveyors at the time of the investigation.

The first stage of field inspection and assessment generally involves visual inspection of the ground surface and does not include subsurface testing. In the event that an assessment concludes that an area has subsurface archaeological potential, then various forms of archaeological subsurface testing may be conducted to assess this potential. Excavation is generally conducted as a second stage of assessment, following the submission and consideration of a surface survey report. Excavation with the aim of recovering or detecting Aboriginal artefacts can only occur following the receipt of a permit or consent from the NSW Office of Environment and Heritage.

Any assessment of a study area must include consideration of any oral histories or traditions of the local Aboriginal or wider community regarding heritage place, events and values.

Identify known and potential archaeological sites and places of Aboriginal cultural heritage value – Both the known and potential cultural heritage resource of a proposed development area should be adequately described. Where ground surface conditions do not allow for an effective assessment of the subsurface potential of a deposit or landform, then predictions must be made based on oral or historical report, and regionally based predictive statements about probable site locations and content.

Submit cards to NSW Office of Environment and Heritage for all previously unrecorded Aboriginal sites detected during survey – All new site recordings must be reported to the NSW Office of Environment and Heritage using standard site recording forms (provided by the NSW Office of Environment and Heritage).

Assess cultural heritage significance of identified sites and places – An assessment of the heritage significance of all identified sites and places should be presented and documented. The assessment of significance is based on an established set of criteria including Aboriginal cultural and social value, scientific value, and educational value. The assessment of Aboriginal cultural significance must be contributed by appropriate members or representatives of the Aboriginal stakeholder groups.

The assessed level of heritage significance of any single or group of sites, artefacts or places will determine to a large degree, the nature and necessity of any management strategies drafted

Provide impact mitigation and management recommendations for known and potential cultural heritage values – Strategies and recommended actions should be drafted for the appropriate management of the known and potential heritage values identified in the proposed development area. Where possible strategies should seek to avoid or minimise impact to heritage values. Strategies should be developed in consultation with appropriate members or representatives of the Aboriginal stakeholder groups.

(c) Submit copies of the Aboriginal heritage impact assessment for review by Council and the NSW Office of Environment and Heritage

This step provides an opportunity for stakeholder groups to comment on the conduct and findings of the assessment. Three copies are required by the NSW Office of Environment and Heritage to cover archival and review responsibilities. All survey and assessment reports which inform planning, statutory and impact assessment procedures should be subject to the review of the NSW Office of Environment and Heritage. The NSW Office of Environment and Heritage has statutory responsibility for Aboriginal sites and artefacts in NSW and requires copies of all assessments for review.

(d) Where appropriate, amend assessment report or append supplementary information in response to review comments

In the event that review comments or other feedback are received as a consequence of providing copies of the assessment to the NSW Office of Environment and Heritage, Aboriginal group(s) and Council, consideration should be given to addressing the comments in an appropriate form. This may be achieved by amending the original report or by providing an addendum of supplementary information.

A written report from the Aboriginal group or groups consulted may have been included within the original heritage impact assessment. Where this presents a response to the findings of the report, there should be no requirement to await a further response.
If no comment has been received from the NSW Office of Environment and Heritage or stakeholder Aboriginal groups within a reasonable time, then the Aboriginal heritage impact assessment should be submitted to Council for their due consideration.

(e) Council assessment and determination

There are three broad categories of likely Council resolution regarding development applications or works proposals with the potential to impact heritage values:

the proposal is approved, subject to the conduct of impact mitigation strategies (which may or may not have been recommended by the Aboriginal heritage impact assessment);
a decision is delayed pending the results of further assessment; or
the proposal is refused.

Aboriginal Heritage Significance Areas

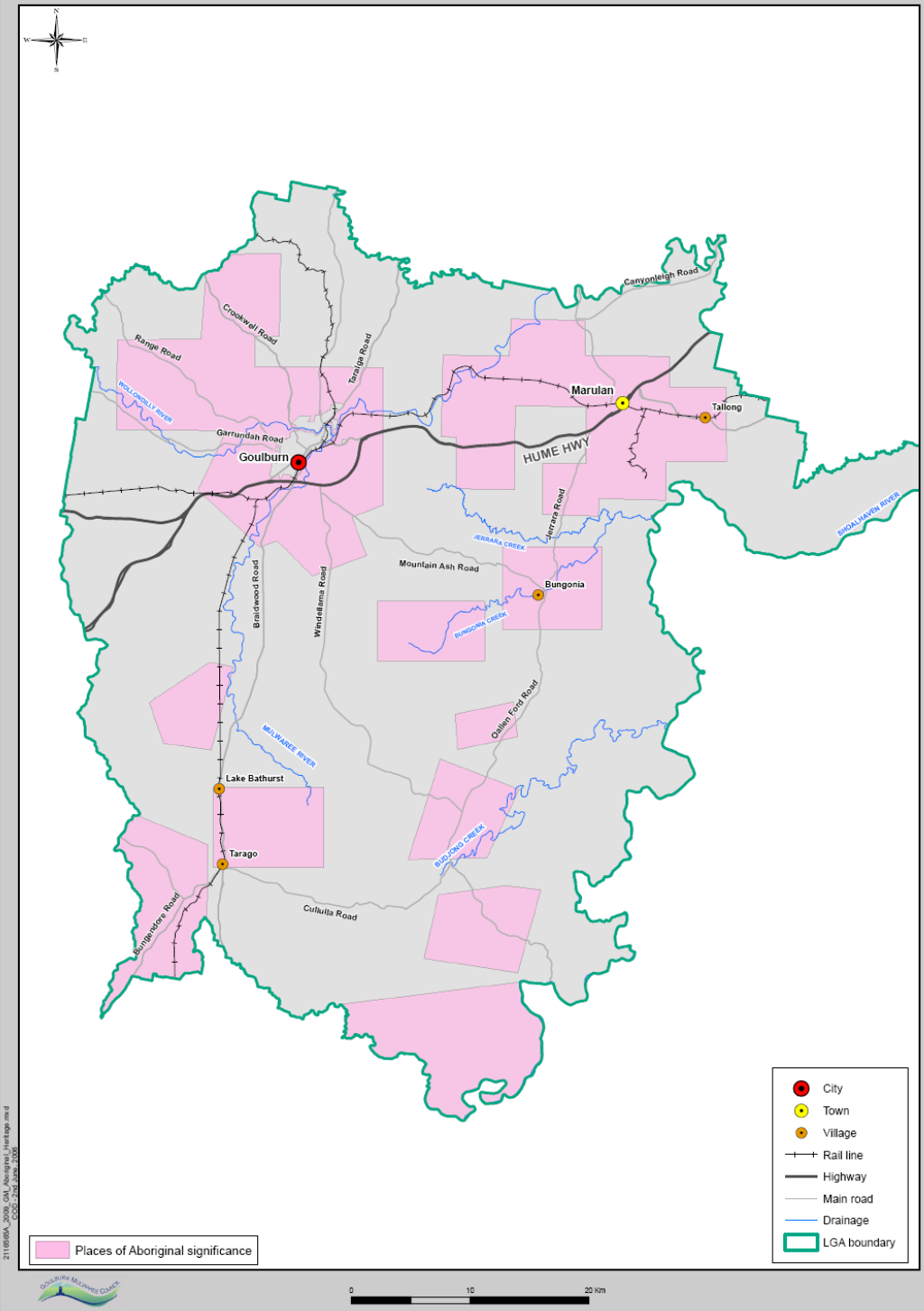
Council requires the preparation and submission of an Archaelogical Survey / Report for certain forms of development proposed in a place of Aboriginal Heritage Significance.

The map following defines the places of Aboriginal Heritage Significance. The matrix table that accompanies the map nominates the level of detail required by Council for development assessment purposes.

In some instances a pre-cautionary approach is nominated as the most appropriate means of protecting Aboriginal Heritage. The precautionary approach allows development to proceed without detailed field studies. In the event that artefacts are uncovered during earth/construction works, all activities must cease until all relevant approvals have been obtained for removal/destruction of the artefacts.

Goulburn Mulwaree Council

Potential Aboriginal artifacts map



Aboriginal archaeology matrix

Development/Land Use Type	Alterations/Additions	Awnings	Carports	Commercial/Industrial Buildings	Complying Development	Dams	Domestic Shed (less than 12m^2)	Dwelling	Exempt Development	Recreational Establishment	Recreational Facility	Rural Sheds (greater than 12 m^2)	Services/Infrastructure	Subdivision (no new road)	Subdivision (new road)	Tanks	Extractive Industry	Intensive Agricultural/Horticulture
Topography Type / Map Reference																		
Aboriginal Sensitive Land (refer to Map)	2	1	1	2	1	2	1	1[A]	1	2	2	1[A]	2	2	3	1	3	2
Exempt Land (refer to Map)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Flat Land	1	1	1	2	1	2	1	1	1	2	2	1	1	2	2	1	3	2
Lower slopes adjacent to water course	1	1	1	2	1	2	1	2	1	2	2	1	2	2	2	1	3	2
Ridge lines/Hill tops	1	1	1	2	1	2	1	2	1	2	2	1	2	2	2	1	3	2
Undulating hills and plains predominately vegetated	1	1	1	2	1	2	1	2	1	2	2	1	2	2	2	1	3	2
Undulating hills and plains predominately grazing land	1	1	1	2	1	2	1	1	1	2	2	1	2	2	2	1	3	2
Water courses (within 40 metres)	2	1	1	2	1	2	1	2	1	2	2	2	2	2	3	1	3	2

1	Precautionary Approach
2	Pejar Local Aboriginal Land Council Assessment or Archaeological Survey or Risk Assessment Report
3	Archaeological Survey
A	Precautionary approach if the development is proposed within a building envelope nominated at subdivision stage. If proposed outside an approved envelope a type 2 assessment is required.

9.2 Appendix B Preferred planting species

Preferred planting species in the Goulburn Mulwaree local government area

Zone 1 - In stream
Zone 2 - Waters edge, wet
Zone 3 - Littoral zone, moist but not wet
Zone 4 - Dry areas, beyond banks

PLANTS FOR ZONE 1:

Plant species	Common name	Comments	Height
Phragmites australis	Common Reed		
Triglochin procera	Water Ribbon		

PLANTS FOR ZONE 2:

Plant species	Common name	Comments	Height
Acacia retinodes	Wirilda	Not endemic to Gbn	6m
Banksia robur	Swamp Banksia	Not endemic to Gbn	2m
Callistemon sieberi	Swamp bottlebrush	Formerly sp. Paludosa	2m
Casuarina cunninghamiana	River she-oak	Plants as pots, frost tender when young	30m
Eucalyptus camphora	Broad Leaved Sally	Also called Swamp Gum	20m
Hakea microcarpa	Hakea	Edge swamps and bogs	2m

Plant species	Common name	Comments	Height
Leptospermum juniperinum	Prickly Tea tree	Endemic in ACT	3m
L. myrtifolium	Swamp Tea tree	Endemic in ACT	1-3m
L.obovatum	Creek Tea tree	Endemic in ACT	2m
Lomandra longifolia	Spiny Matrush	Plant as tubes	1m
Melaleuca ericifolia	Swamp Paperbark		4-5m
M.styphyloides	Prickly Paperbark		10m

PLANTS FOR ZONE 3:

Plant species	Common name	Comments	Height
Acacia dealbata	Silver Wattle	Suckers	8m
A. decurrens	Green Wattle	Similar to A. mearnsii	6m
A. parramattensis	Wattle	Similar to A mearnsii	10m
Allocasuarina luehmannii	Bull oak	Doesn't seed locally?	10<local
Banksia ericifolia	Heath Banksia	Plant as tube stock	5m
B. marginata	Silver Banksia	Plant as tube stock	4m
B. spinulosa	Hairpin banksia	Plant as tube stock	3m
Callistemon citrinus	Cirmson bottlebrush		1-2m
C. sieberi	Swamp bottlebrush	Can grow in water	2m
Casuarina Cunninghamiana	River she oak	Plant as pots	30m
Euclayptus amplifolia	Cabbage Gum	Adjecent to creeks	25m
Eucalyptus	Apple top box	Similar to	20m

Plant species	Common name	Comments	Height
Angophoroides		bridgesiana	
E. bridgesiana	Apple box		25m
E. camphora	Broad leaved Sally		20m
E. pauciflora	Snow gum	Frost pockets	15m
E. rubida	Candle bark	Frost pockets	25m
E. stellulata	Black Sally	Frost pockets	15-20m
E. viminalis	Ribbon Gum	Frost pockets	20m
Hakea microcarpa	Hakea		2m
Leptospermum phylicoides	Tea Tree	Suitability? Damp sites	5m
L. polygalifolium	Tea Tree	Prev. L. flavescens	3m
Lomandra longifolia	Spiny Matrush	Plant as tubes	1m
Melaleuca ericifolia	Swamp paperbark		4-5m
M. styphyloides	Prickly Paperbark		10m
Pomaderris spp	Pomaderris		2m
Rulingia dasyphylla	Kerrawang	Spreading shrub	1-2m

PLANTS FOR ZONE 4:

Plant species	Common Name	Comments	Height
Acacia decurrens	Green Wattle	Similar to A. mearnsii	6m
A. mearnsii	Black wattle	Doesn't sucker	6m
A. parramattensis	Wattle	Similar to A. mearnsii	10m
Allocasuarina verticillata	Drooping she oak		10m
Banksia ericfolia	Heath Banksia	Plant as tube stock	5m

Plant species	Common Name	Comments	Height
B. integrifolia	Coast Banksia	Plant as tube stock	15m
B.marginata	Silver Banksia	Plant as tube stock	4m
B.serrata	Saw Banksia	Plant as tube stock	10m
B.spinulosa	Hairpin Banksia	Plant as tube stock	3m
Brachychiton populneum	Kurrajong		15m
Callistemon citrinus	Crimson Bottlebrush		1-2m
Casuarina cunninghamiana	River she oak	Plant as pots	30m
Daviesia mimosoides	Bacon & Eggs Pea Flower		2m
Eucalyptus angophoroides	Apple Top Box	Similar to E. bridgesiana	20m
E. blakelyi	Blakely's Red Gum		25m
E. bridgesiana	Apple Box		25m
E. melliodora	Yellow Box		30m
E. pauciflora	Snow Gum	Frost pockets	15m
E.rubida	Candle Bark	Frost pockets	25m
E. stellulata	Black Sally	Frost pockets	15-20m
Jacksonia scoparia	Dogwood		4m
Leptospermum polygalfolium	Tea Tree	Prev. L flavescens	3m
Melaleuca styphyloides	Prickly tea tree		10m

9.3 Appendix C Not in use

9.4 Appendix D Development application checklist

Development application checklist

All development applications must be accompanies by an electronic copy (on CD or USB of all relevant documentation required by Appendix D. Additionally, two hard copies of the documentation must be submitted.

Note: Ancillary residential developments such as sheds, garages, carports, decks/pergolas or the like that do not exceed 50 square metres in floor area may be accepted without an electronic copy of the documentation.

The list following list of requirements must be identified in a development application

- site layout;
- development site including building envelope;
- soil and water management plan (including soil profile and effluent disposal envelope);
- location of internal access roads to the development site(s);
- location of proposed gateway(s);
- new public roads;
- rights of way (proposed and existing);
- easements (proposed and existing);
- heritage items (if any) on and surrounding the site;
- services (existing and proposed);
- full land owners consent; and
- correct prescribed fees (including fees for integrated development and related concurrences)

The application should be accompanied by a statement of environmental effects (SEE) specifying:

- effect on any threatened species, populations or ecological communities, or their habitats. At a minimum this will require the submission of an eight part test pursuant to section 5A of the EP&A Act. At a maximum depending on the eight part test outcome this will require a species impact statement (SIS). The SIS preparation will require consultation with the Office of Environment and Heritage;.

- contaminated land assessment (Refer to State Environmental Planning Policy No 55 – Remediation of Land Planning Guidelines for potential land contamination issues/uses);
- bushfire assessment (refer to Planning for Bush Fire Protection 2006 Guidelines);
- neutral/beneficial effect assessment (refer to State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011;
- an assessment of the impact of the proposal on any watercourse, including the location of any watercourse crossings or works proposed in proximity to a watercourse, the nature and extent of vegetation cover in the watercourse corridor, any actively eroding areas within watercourse corridors and any existing or proposed work designed to protect or restore the watercourse and corridor;
- degraded land, including land affected by salinity or erosion, any measures, existing or proposed, designed to manage or minimise that degradation;
- clearing proposed and required;
- erosion and sediment control;
- drainage and flooding, including any identified waterways;
- solar access;
- traffic generation including the provision of all-weather access to and within the subdivision allotments; and
- assessment of the proposal against the relevant clauses of the *Goulburn Mulwaree LEP* .

Information to accompany applications for development on flood prone lands

For development within identified flood prone lands, the following information must accompany a development application for any type of development requiring consent under this plan:

A survey plan showing:

- position of the existing building an/or proposed building;
- existing ground levels to the Australian Height Datum (AHD) around the perimeter of the building, as determined by a registered surveyor;
- level of the 1% AEP flood event, determined by a registered flood engineer;
- proposed flood levels to AHD; and
- where earthworks or filling of land is proposed, contour intervals of 0.25 metres, and relative levels to AHD.

A report from a suitably qualified engineer that describes the impact of the proposed development on flood levels and the impact of the proposed development on peak flood flow velocities on adjacent properties up to the 1% AEP flood event. The report must also

certify that the proposed structure is capable of withstanding the conditions that would be experienced during the 1% AEP event.

Where substantial alterations to landform, including excavation, are proposed, a hydrologist's report to examine the impact of a proposed development on the flow of floodwater and flood behaviour.

A flood emergency response plan for the site, clearly showing proposed excavation routes during flood events.

9.5 Appendix F Telecommunications policy

Telecommunications policy

Lodgement requirements

The facility provider is to provide information as requested by Council about the applicant's existing facilities in the area to assist with consideration of this application. The applicant is to provide Council with a statement of environmental effects, and site and locality analysis.

The following controls apply to radiocommunication facilities specifically:

- an EMR assessment in accordance with the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) prediction methodology and report format as described in the Australian Communications Industry Forum (ACIF) Code;
- a prediction map of exposure levels at 1.5m above publicly accessible surfaces within 300 metres of the facility for sites listed as likely community sensitive location at clause 5.1.4(c) in the ACIF Code, or for other sites upon request; and
- photo montage of the proposed facility in context of the location.

Upon request, the applicant is to provide additional documentation such as a heritage report/ impact statement, should the site be identified as a heritage item or as being located within an area of environmental conservation/ significance.

Telecommunication facility (i.e. mobile), providers must provide compliance evidence that indicates that exposure details contained in the application are true and accurate, consistent with the ACIF Code.

Other radiocommunication facility providers must provide an EMR compliance certificate as to exposure details in the application.

Site and locality analysis

A site and locality analysis establishes the development context by identifying the constraints and opportunities of the proposed site in relation to existing land uses and existing buildings in the immediate surroundings and the environment generally. It should influence the suitability of the proposed location and the design. For all proposed radiocommunication sites a site and locality analysis plan is to be submitted with all

development applications and should indicate in relation to the proposed site for a radius of 300 metres:

- existing vegetation
- site boundaries and dimensions
- topography
- location of existing buildings
- views to and from the proposed site; and
- location of any sensitive land use within the adjacent area, such as schools, child care centres, parks and recreational areas/reserves.

The site and locality analysis must be to scale.

Council requires that in the circumstance where a facility is proposed within 300 metres of a sensitive land use as highlighted above and including special areas, heritage items, streetscapes and conservation areas, an alternative location be considered where possible outside a 300 metres radius from any one of these sites/areas.

Statement of environment effects

A written statement is to be prepared and must explain how the proposed facility has responded to the site analysis and the objectives of this plan.

This statement is to demonstrate how the precautionary principle has been applied in the siting, design and operation of the proposed facility, included in sections 5.1, 5.2 and 5.7 of the ACIF Code.

Public consultation

The following public consultation objectives and controls relate to all facilities defined as Non-Low Impact facilities and which require a development application.

The following consultation requirements apply:

- Development applications should comply with Council's requirements on notification and signage;
- Service Providers are to make available all information regarding radiofrequency electromagnetic radiation in accordance with ACIF Code requirements;
- For each facility, a permanent and legible weatherproof sign must be publicly visible in the immediate proximity of the facility and visible to the general public, to identify the name and contact details of the operator or the site manager.

- For each facility, a sign must be erected notifying the intention of the service provider to erect infrastructure on site and providing the name and contact details of the service provider, consistent with the ACIF Code.

Conditions of development consent

The applicant is advised that the approval may be subject to a number of conditions, including but not restricted to the following:

- The approved facility and all related infrastructure must be maintained and repaired to an acceptable standard at all times.
- The approved facility and all related infrastructure must be removed if no longer in use.
- Prior to the operation of the approved facility, a permanent and legible weatherproof sign must be publicly visible, in the close proximity of the facility, displaying the name and contact details of the operator or site manager.
- If the approved facility is located on public infrastructure, such as road and rail infrastructure, public buildings and pedestrian footpaths, and the infrastructure requires replacement or removal, the owner and/or operator will be responsible for the cost of removing/replacing their own facility.
- If the approved facility is located on public infrastructure, such as road and rail infrastructure, public buildings and pedestrian footpaths and requires replacement or removal, the owner and/or operator will be responsible for the cost of removing/replacing their own infrastructure.

9.6 Appendix G: Landscape Policy, Site Analysis and Preparing a Landscape Plan

Site analysis

A good understanding of the site and its surrounds is essential for a successful landscape design. A Site Analysis puts the site in its context for both the design and evaluation of the proposal. It is mandatory for all Development Applications and forms the basis for the Statement of Environmental Effects in providing evidence that the options investigated have resulted in the optimum use, rather than the maximum use, of the site.

What information is necessary?

The extent of the information required will be dependent on the type and scale of the proposed development, e.g. an application for two-storey house extension, a multi-unit residential development or a proposed industrial development will not necessarily require all the same information. Additional information may also be required for specific sites where there are particular opportunities and constraints caused by the characteristics of the site itself or the surrounding area.

The Site Analysis may be presented in a number of ways, depending on which method best presents site characteristics, e.g. a notated plan at a suitable scale or in text form with graphics and photographs. There also needs to be an explanatory statement.

Explanatory statement

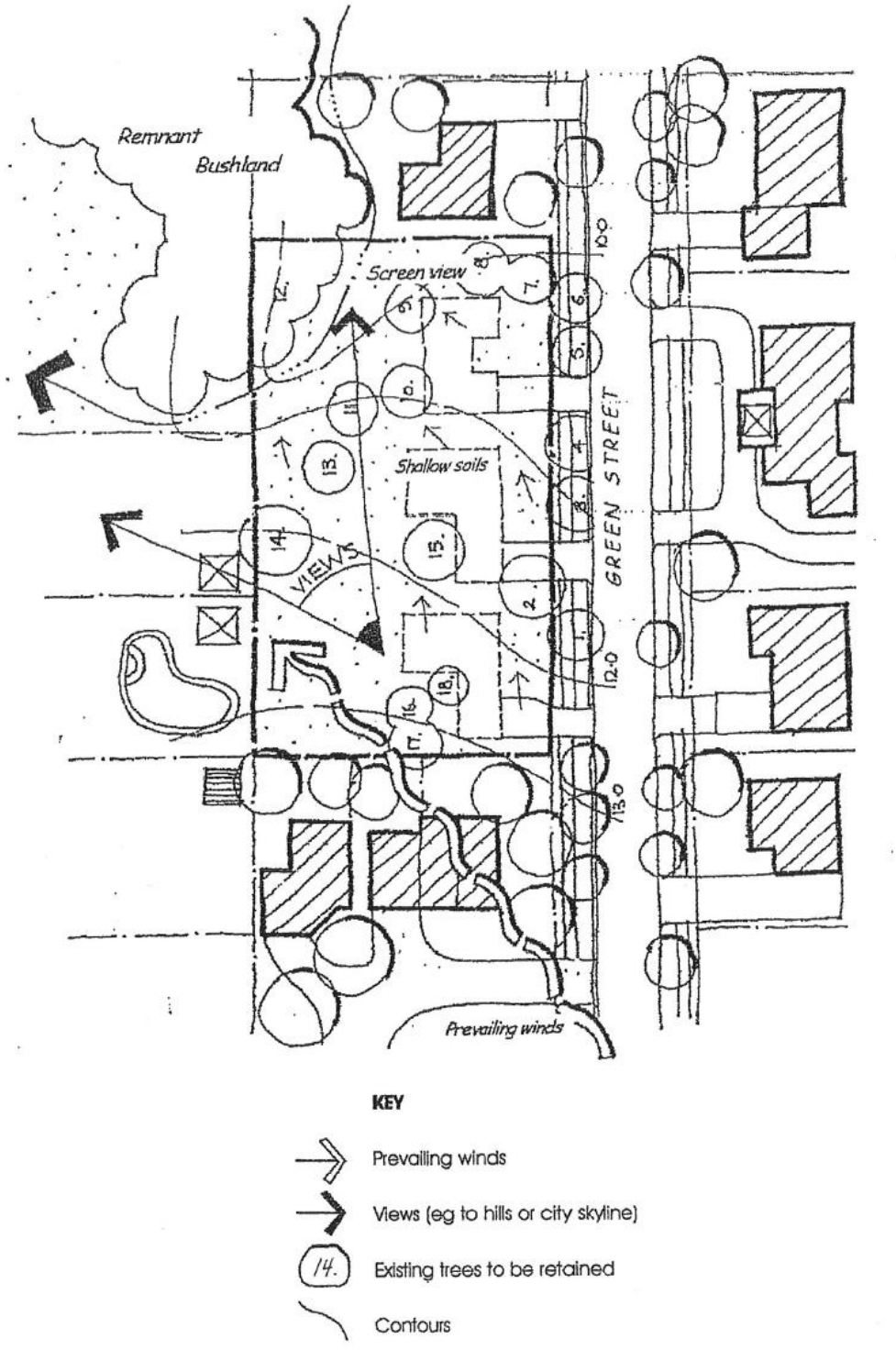
It is not sufficient to prepare a Site Analysis and then ignore it during the design process.

The Site Analysis will have identified the opportunities and constraints of a particular site and the relevant surrounding area. The purpose of the site analysis is to inform the design process. Some of the information will form the basis for preparing Management Plans for vegetation, erosion and sedimentation control, stormwater and waste (refer to Appendix for more information on these Plans).

Therefore a statement must be prepared explaining how the proposed development has responded to the Site Analysis. The statement may be in written form or presented as an annotate plan. Such a statement would greatly assist the design and assessment processes, and is likely to result in a significant improvement in the quality of the development.

It will also indicate the way in which the specific requirements of this DCP are to be achieved. Different categories of development require varying levels of detail in the preparation of landscape proposals.

An example of a Site Analysis in plan form



Information required for Site Analysis

The following list indicates the sort of information to be collected and presented in the site analysis depending upon the site and the complexity of the proposal.

Site Survey

Identifies the lot and its boundaries

Plan Information

Scale of plan at 1:100 or 1:200 (use ONLY these scales) plus bar scale

North point

Name and qualifications of person preparing the site analysis

Existing site features

Location and uses of any existing buildings and structures on the site showing those to be removed and retained

Location and height of walls and fences built to the boundary

Heavily shaded areas from existing structures, mature trees or dominant landform, such as rock ledges

Archaeological and heritage sites

Any easements and rights-of-ways and their restrictions

Services

Location of existing overhead and underground utility services (electricity, gas, telephone, water, sewer and stormwater drainage lines, inlets and collection points).

Use of adjacent land

Location and uses of adjacent buildings

Ridge levels and floor levels of adjacent buildings

Potential for overlooking into and from window openings in walls adjacent to the development site

Potential for shading on adjacent properties

The form and character of adjacent and nearby development, including characteristic styles e.g. style of dwellings, landscaping, scale and bulk of buildings

Street frontage features e.g. street trees, poles, kerb crossovers, bus stops

Potential sources of nuisance dust or noise (e.g. flight path, main road, railway line).

Landform

Topography will affect the use of the site

Show height contours at 1 metre intervals (and any relevant road benchmark) and areas of steep slope (20% or more)

Existing natural features (cliffs, rock outcrops)

Orientation of site (e.g. south-facing slope).

Soils (this forms the basis for an Erosion and Sedimentation Control Plan,

Condition – fertility, whether it has been compacted, cut or filled

Erosion problems, contamination or salinity

Plants

Many sites should have a tree and/or bushland survey done – this is the basis for a Vegetation Management Plan

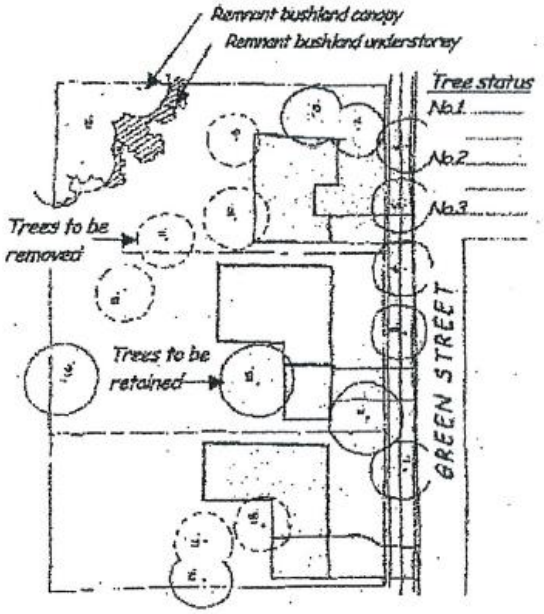
Existing established individual or stands of trees and massed shrub planting with their height and spread, condition and common/botanical name – particularly note any trees listed as “Significant”

Existing ground levels around the base of trees

The extent and name of any weed infestation

The plants growing well or characteristic of the local area

Any ‘endangered ecological community’ on the site and nearby land – refer to Council’s State of the Environment Report



Wildlife

Any habitats on the site and nearby land

Fauna habitat possibilities e.g. niches in rockeries, ponds for frogs, habitat plants (nectar for small birds).

Climate

Directions of pleasant and unpleasant summer and winter winds

Windbreaks and their likely perfomance

Frost pockets

Areas of full or partial shade in winter and summer at 9am, midday and 3pm

Direction and extremity of bushfire threat

Water (this forms the basis for a Stormwater Management Plan)

Sources of water flowing on to the site and the general quality of that water

Drainage patterns on the site, areas of concentrated run-off, pounding, possible flooding

Adjoining riparian zone if within 40m of a waterway

Characteristics of the drainage system immediately downstream of the site (e.g. bushland creek or a constructed stormwater drainage channel).

Views

Good and unsightly views from the site

Views into the site and privacy problems

Qualities of the site that are important in the view to and from the site (e.g. major trees)

Preparing a landscape plan

Introduction

When submitting a Development Application (DA) to Goulburn Mulwaree Council, you may be required to submit a Landscape Plan depending on the nature of the proposed development. Council's aim in requiring a Landscape Plan is to enhance and protect the amenity of new and existing development areas. This will be achieved by setting reasonable standards for development including protection of the existing environment.

A Landscape Plan must contain information on a development sites existing features and the proposed development. The plan must illustrate the function and character of the development. This will include the extent of works, layout, design and the types of materials to be used. It may also address certain details of the construction methods. Council has a minimum standard of information required for an application to be considered.

For clarification of Landscape Plan requirements for a specific property, please contact Councils Planning and Community Services Department at the Civic Centre in Bourke Street or telephone (02) 4823 4454.

Reference should be made to the following Council documents where relevant:

- Goulburn Street Master Study

The use of qualified Landscape Architects or Horticulturalists to prepare Landscape Plans is recommended but not required by Council. The use of such professionals may assist to reduce the time taken to assess an application.

Landscape character

Landscape character varies according to an areas age and location. Generally, Council will be looking for proposed development to reflect elements of the surrounding landscape character.

Existing vegetation

Goulburn Mulwaree has a "green" heritage. Contributing to the areas character are the plants that have been planted by residents in the past and restricted areas of valuable remnant native vegetation.

To protect the character of the area Council wishes to retain as much as possible of a development sites significant existing vegetation. This includes both native and introduced species. Remnant native vegetation including grasslands, shrubs and trees is a limited, non-renewable resource. Applicants should give careful consideration to retaining existing vegetation when planning developments.

Landscape plan features

Existing Development

For the existing development a plan of the site should show:

- A title block containing the title of the Plan, the location/address of the property, the applicant's name and the name of the consultants who prepared the plan (if any).

The scale shown as:

- Site plan 1:500 or 1:200
- Landscape plan 1:200 or 1:100 (including paths, planting etc.)
- Construction details 1:50 to 1:5
- Site section (as necessary)

North Point

The site boundary, fences, driveways, existing buildings, paving, retaining walls, pools and tennis courts and any other structures must be shown. Any rock outcrops or other landscape feature must also be shown.

All trees and vegetation affected by the proposed works must be accurately positioned on the plan of the site. For trees show type/species, trunk location and diameter plus eight and an accurate spread of canopy. Show all vegetation over 3m in height or over 100mm

in trunk diameter measured 1000mm above ground level. Clearly identify vegetation to be retained and that to be removed.

Water Supply, gas, electricity, stormwater (above and below ground), sewer, manholes and drainage pits etc. and easements on and adjacent to the site, including the nature strip.

Existing ground levels shown as spot heights or contours over the site may be necessary if significant changes to levels are being proposed.

Proposed development

For the proposed development the following must be shown:

New buildings or extensions and associated works eg. Pools, tennis courts, fences, retaining walls, steps, paving, service/utilities, lighting, signage, stormwater drainage, surface materials and finishes.

Details of the finished ground levels for the works including cut and fill areas, mounding of the site and finished levels at adjoining boundaries are required.

Proposed planting. The function and location of plantings should be shown eg. Deciduous/evergreen shade trees, windbreaks, screen plantings, shrub areas, ground covers, grass etc. Information regarding the plant species, container sizes, numbers & planting method is required.

Sections through the site may be necessary if significant level changes are being proposed. These should include existing and proposed ground lines, building elevations, retaining walls, steps, etc. and proposed planting.

Run off and erosion control measures where required by Council must be incorporated in plans and details. There may be a need to prepare a soil erosion and drainage management plan. Guidelines are available from Councils Engineering Department.

Materials and construction details including pavements, drainage, drainage falls and collection points, retaining walls, steps, fences, edging, structures (pergolas, decks etc.), lighting, signage, water points, pools, planting methods, etc.

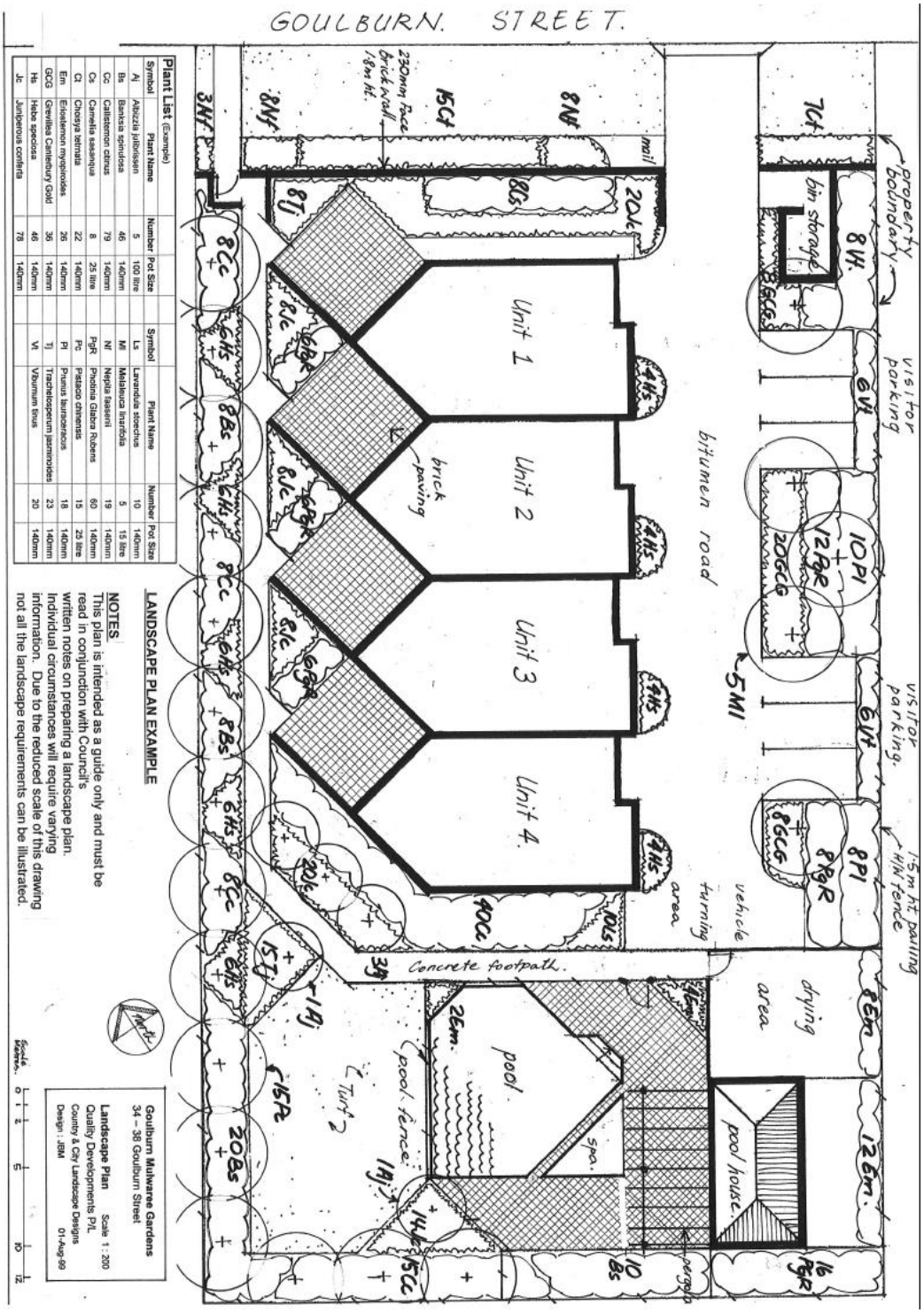
Tree surgery details including protective fencing where required by Council.

Maintenance must be clearly specified.

Paving samples may be required to be submitted for approval when proposed for use on nature strips, etc.

Landscape plan example

A sample Landscape Plan is attached. This plan is intended as a guide only and must be read in conjunction with these notes. Individual circumstances will require varying information. Not all landscape requirements have been illustrated on the plan.



Plant List (Example)

Symbol	Plant Name	Number	Pot Size
Aj	Abiezia jollonisen	5	100 litre
Bs	Banksia spinulosa	46	140mm
Cc	Callistemon citrus	79	140mm
Cs	Camellia sasanqua	8	25 litre
Ct	Choisya ternata	22	140mm
Em	Eriostemon myoporoides	26	140mm
GCG	Grevillea Canterbury Gold	36	140mm
Hs	Hebe speciosa	46	140mm
Jc	Juniperous conferta	78	140mm
Ls	Lavandula stoechus	10	140mm
Ml	Melaleuca linarifolia	5	15 litre
Nf	Nepita faasenii	19	140mm
PgR	Photinia Glabra Rubens	60	140mm
Pc	Pittosp chinensis	15	25 litre
Pi	Prunus laurocerasus	18	140mm
Tj	Trachelospermum jasmonides	23	140mm
Vt	Vburnum tinus	20	140mm

9.7 Appendix H Heritage Impact Statement Requirements

When is a Heritage Impact Statement and Heritage Conservation Management Plan required?

Heritage Impact Statement (HIS) is required to be submitted with all development applications involving heritage items, adjacent streetscapes and buildings and properties forming part of the 'visual curtilage' of heritage items listed under Schedule 5, Goulburn Mulwaree LEP .

Heritage Conservation Management Plan (HCMP) is required to be submitted with any Development Application affecting a heritage-listed item assessed as being of State Heritage significance. A *Conservation Management Plan* is a document establishing the heritage significance of an item / place and which identifies conservation policies and management mechanisms that are appropriate to enable the heritage significance to be retained.

Heritage Impact Statement Preparation Guidelines

The following guidelines should be followed when preparing a Statement of Heritage Impact to accompany a Statement of Environmental Effects. These guidelines are based on the Heritage Office, NSW Department of Planning, publication titled 'Guidelines for Preparing a Statement of Heritage Impact'.

A Statement of Heritage Impact should include:

1. an assessment of the heritage significance of the building or feature and its curtilage and a 'Statement of Heritage Significance'.

2. details of the contribution of the item to the heritage conservation area or historical landscape, generally contextual analysis, considering the setting of the item and its contribution to the heritage significance of the area.

3. a detailed description of the proposed works, change of use and / or any physical alterations to the place.

4. details of whether or not the additions / changes are sympathetic to the character of the item and the historical landscape in which the item is placed.

5. description of how any negative impacts of the proposal are to be mitigated.

The length of the Statement of Heritage Impact will vary depending on the scale and complexity of the proposal. A brief one to two page account included in the 'Statement of Environmental Effects' will usually be sufficient for minor works that will have minimal impact on the heritage significance of an item. A comprehensive report is required for more complex proposals or those that have potential for a major impact on the item or place. Physical condition reports and any consultant reports, relevant to the application, should be included.

9.8 Appendix I Goulburn Mulwaree Good Design Statement 2005

Goulburn Mulwaree Good Design Statement



Adopted by Council on 20 September 2005 Minute No. 05/501

Effective from 28 September 2005

Contents

1. Introduction

1.1 Vision

1.2 Aims and objectives of this plan

2. Expected Outcomes

2.1 Context

2.2 Strategies and Policies

3. Good Design Approach

3.1 Landmark Sites

3.2 Non Landmark/Heritage Sites

3.3 Belmore Park

3.4 Urban Landscape Design

Appendix - List of Landmark and Heritage Sites within the CBD

1 INTRODUCTION

1.1 Vision

The broad vision for the CBD can be encapsulated in the following statement:

The Vision is to maintain and enhance Goulburn's CBD and its historic charm as a visually attractive destination for its people and visitors.

NOTE: "Historic charm" includes reference to "Heritage value or significance".

1.2 Aims and objectives of this plan.

The overall aims and objectives of this plan are:

- To encourage good design outcomes in the City Centre.
- To articulate the desirable design outcomes for the Central Business District.
- To preserve the desirable design elements within the Central Business District.

2. EXPECTED OUTCOMES

2.1 Context

The Goulburn CBD has several unique features that distinguish it from other provincial city's commercial centres. It is dominated by a single retail mainstreet, Auburn Street., with many grand institutional buildings imposing their presence on the streetscape. The features include:

- A range of Heritage or Landmark Buildings such as the Post Office, former AMP Building, Goulburn Post, Town Hall, Elmslea Chambers, former Lilac Time Hall.
- Historic Belmore Park
- Two lane mainstreet with angle parking and separating median

These landmark buildings are located at prominent sites within the CBD often at road intersections. Sites in the vicinity of these "landmarks" provide an opportunity, through redevelopment, to complement these buildings while making their own architectural statement.

Prominent buildings or landmarks are also located off the mainstreet at the periphery of the CBD such as cathedrals and churches, courthouse, police station and civic centre.

The CBD is a place where people will visit not only to purchase goods and services but because of the attractions and appeal of the social and physical environment. The appeal is not only the retail outlets and what they have to offer, but the design of the various buildings that will ensure the CBD is a whole and not a series of unrelated sections.

2.2 Strategies and Policies

- To manage physical change within the city through the promotion, protection, conservation of heritage items and precincts that contribute to the distinctive character, community tradition and special sense of place of the City of Goulburn.
- To create an appreciation and awareness of the extent and diversity of the environmental heritage of the City of Goulburn by identifying buildings, works, items, structures, relics or places which merit conservation by virtue of their particular aesthetic, archaeological, architectural, cultural, ecological, historic, landscape, natural, scientific, emotional, social or traditional significance to the City; and
- To achieve appropriate conservation and enhancement of heritage items and precincts identified in this plan through controls on demolition and alteration and on the form and character of new development in the proximity of such items, and by the discretionary provision of conservation incentives to protect environmental heritage.

While heritage features in the CBD are a dominant theme these are not the only features that contribute to the overall appearance and the design in the City – there is a broader perspective, which is partially implied in the Statement of Strategies and Policies. This broader perspective is reflected in the Vision Statement.

To assist with the “vision” the following broad design ideas have been established:

- Landmarks are identifiable features that serve as reference points or meeting places. These are desirable in Goulburn and may include memorials, fountains, public spaces, corner sites as well as feature buildings.
- The height of buildings should be lower than the Post Office tower to maintain its prominence as the highest building n the CBD.
- The built form (including street surfaces) at street level needs to maintain a human scale particularly in pedestrian locations through building scale and design.
- The buildings should face public spaces for passive surveillance and lighting must be provided to minimise the potential for personal risk.
- There is an emphasis on the retention and reuse of buildings rather than demolition and replacement.
- If existing multi storey buildings are to be replaced the new development should also include multiple storeys to retain the City scale and character.



3. GOOD DESIGN APPROACH

3.1 Landmark and Heritage Sites

Landmark Sites are prominent corner sites and/or notable heritage buildings and must:

- Provide a positive contribution to the City's architectural landscape.
- Preserve where possible any identified significant heritage features.
- Provide reference points for users of the CBD.
- The preferred design approach to dealing with landmark sites and their redevelopment is to:

- Ensure that the overall height is lower than the Post Office tower.
- Ensure they "fit in" with the heritage character of the CBD.
- Have human scale building design at street level and in pedestrian locations.
- Have weather protection provided at street level.
- Design buildings to face public spaces for passive surveillance.
- Improve lighting around the site to reduce risk to personal safety.
- Ensure that buildings address the rear of the site (eg secondary building entrance, integration of private car parking area with public spaces/parking areas).
- Outdoor advertising must also be reflective of the design approach

In addition to the above, if the site is a:

Heritage Sites

- The primary objective is building retention.
- All features of significance (identified in a Heritage Study) should be conserved or reinstated. Any inappropriate alteration should be identified for future removal or removed and the original features reconstructed as well as possible. For buildings on the State Heritage Register or Register of the National Estate reference should be made to the Statement of Significance to ensure that the important elements and features are retained.
- Whenever there is a choice, do whatever will improve the appearance and unity of the street. Particular consideration should be given to:
  - Pitch and form of roof
  - Style, size, portion and position of the openings for windows and doors
  - Compatibility of material with other existing buildings in the locality

Landmark Sites (not listed as a heritage site)

- New development should be compatible with the existing visual, historical, built and landscape character of the CBD utilising design cues from the surrounding to help create linkages and unity in the streetscape. Important design cues to consider are:
  - Fabric (external materials)
  - Height
  - Common horizontal lines (ridges, gutters, awnings, window heads, etc)
  - Strong vertical lines to exaggerate the building height.
  - Overall size, shape and proportion of neighbouring buildings
  - Architectural features/decoration (including awnings, parapets, cornices, mouldings, openings, recesses, articulation of walls)
  - Pitch and form of roof
  - Style, size, portion and position of the openings for windows and doors
  - Compatibility of material with other existing buildings in the locality
- A building design should make its own architectural statement and not mimic other buildings.
- A building proposal should avoid monotonous facades with little relief or detail
- Landmark Sites require special/additional attention with regard to street presentation. Incorporation of a landmark “feature” is appropriate to create interest and provide the building with a “recognisable” identity. For corner sites this should include or retain a “tower” element.
- Outdoor advertising must also be reflective of the design approach

Landmark and Heritage Sites are identified in the Appendix.



3.2 Non Landmark or Non Heritage Sites

Design at these sites must:

- Not dominate adjoining or nearby heritage buildings in the scale and massing of the new development.
- Provide a positive contribution to the City's architectural landscape.
- Be clearly modern buildings but complement the design of nearby buildings.

The preferred design approach to dealing with the redevelopment of sites not identified as landmarks or heritage sites is to:

- Utilise design cues from the surrounding to help create linkages and unity in the streetscape. Important design cues to consider are:
  - Fabric (external materials)
  - Height
  - Common horizontal lines (ridges, gutters, awnings, window heads, etc)
  - Strong vertical lines to exaggerate the building height.
  - Overall size, shape and proportion of neighbouring buildings
  - Architectural features/decoration (including awnings, parapets, cornices, mouldings, openings, recesses, articulation of walls)
  - Pitch and form of roof
  - Style, size, portion and position of the openings for windows and doors
  - Compatibility of material with other existing buildings in the locality

- Make its own contemporary architectural statement and does not mimic other buildings.
- Avoid monotonous facades with little relief or detail
- Design buildings to face public spaces for passive surveillance.
- Provide weather protection at street level. Reinstatement of verandah and balcony forms is encouraged.
- Improve lighting around the site to reduce risk to personal safety.
- Ensure buildings address the rear of the site (eg secondary building entrance, integration of private car parking area with public spaces/parking areas)
- Retain buildings that, while not heritage listed, contribute to the heritage significance and character of the CBD. "Contributory" buildings from the "Goulburn Heritage Study" (1983), "Goulburn Main Street Study" (1992) and those identified by the Goulburn Heritage Group are included in Appendix.
- Outdoor advertising must also be reflective of the design approach

Guidelines for Infill Development prepared by the NSW Heritage Office are also a useful document to assist with developing design solutions.

3.3 Belmore Park

This park will continue to be maintained and developed as a historic park and as a central meeting place. It also has a role to play as a venue for community events. Maintenance, management and development within the park will be undertaken in accordance with adopted Plans of Management and Landscape Master Plan.

3.4 Urban Landscape Design

The urban landscape design approach for the CBD is based on:

- Formal exotic street tree planting.
- Formal planting areas at mid block crossing points.
- Pavement reconstruction at corners and mid block crossing points in Auburn Street.
- Public art works incorporated into streetscapes.
- Streetscape furniture and detailing to reflect historic streetscapes.


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SOAP WORLD

APPENDIX – List of Landmark and Heritage Sites within the CBD

Note: This list was compiled in 2005. For the up to date list of Heritage Items refer to Schedule 5 of the LEP 2009.

Abbreviations

RoNE IndicativeRegister of National Estate (Indicative Listing)

RoNE Registered	Register of National Estate (Registered Listing)
AHC	Australian Heritage Commission
SHR	State Heritage Register
HC	NSW Heritage Council
NT Classified	National Trust Classified
NT Recorded	National Trust Recorded
IAS	Industrial Archaeological Site
RAIA	Royal Australian Architects Institute

Notes on Heritage Lists

There are several lists of Heritage Lists of items and places:

Register of National Estate

The Register of National Estate is a list of places and items of National heritage significance. This register is compiled by the Federal Government body the Australian Heritage Commission (AHC). The register began in 1976 and has different legal status for listed places. The categories that affect Goulburn are Indicative and Registered.

An indicative status means that:

"Data provided to or obtained by the Commission has been entered in to the database and the place is at some stage in the assessment process. The Commission has not made a decision on whether the place should be entered in the Register."

A Registered listing means:

"The place is in the Register of the National Estate. Although some places may be legally registered because they are within a larger registered area they may not necessarily posse intrinsic significance."

Legal/Statutory Implications of Register

The Commonwealth Government is the only body whose actions are constrained as a result of listings in the Register of the National Estate.

Under Section 30 of the Australian Heritage Commission Act 1975, the Commonwealth Government is prohibited from taking any action, which would adversely affect a place in the Register, unless there are no feasible and prudent alternatives to the action.

State Heritage Register

The State Heritage Register is a list of places and items of State heritage significance endorsed by the NSW Heritage Council and the Minister, which came into effect on 2 April 1999.

The Register, established under the Heritage Amendment Act 1998, replaces the old system of Permanent Conservation Orders as a means of protecting items of State significance, although the process of listing and of monitoring their conservation and protection are essentially the same

Legal/Statutory Implications of Register

An item or place listed on the SHR is legally protected under the NSW Heritage Act and requires approval from the Heritage Council of NSW and/or Local Council for certain kinds of work. Listing also makes the item or places eligible for financial incentives.

National Trust Register

The National Trust Register maintained by the National Trust of Australia, which is one of the most comprehensive of the non-statutory registers. It was first established nearly 50 years ago and is a reference for the compilation of statutory registers, particularly local government heritage studies. It has no legal/statutory implications.

There are two (2) categories of listing; classified and recorded.

There are five (5) organisations that register heritage items.

Royal Australian Institute of Architects' Register of 20th Century Buildings

This register is an important resource in assessing the heritage of our own time. It has no legal/statutory implications.

Art Deco Society Register

This register lists important buildings from the interwar (1918-39) period. It has no legal/statutory implications.

Geological Society Register

This register lists important geological sites.

Australian Institution of Engineers

AIE has a list of sites or objects of engineering significance. It has no legal/statutory implications.

Professional Historians Association (NSW) Register of Historic Places and Objects

This register lists sites and objects of historical significance. It has no legal/statutory implications.

Building	Site Address	Landmark Site	Heritage Site	Complementary Building	Comments
Tattersalls Hotel	76 Auburn Street (corner Clinton Street)	Yes	No	No	
Astor Hotel/Motel	Corner Auburn/Clinton Streets	Yes	No	No	
	90-100 Auburn Street	No	No	Yes	
	105-121 Auburn Street	No	No	Yes	
	110-116 Auburn Street	No	No	Yes	
	126-132 Auburn Street	No	No	Yes	
	127-131 Auburn Street	No	No	Yes	
	137 Auburn Street	No	No	Yes	
	139-153 Auburn Street	No	No	Yes	
	146-150 Auburn Street	No	No	Yes	
Goulburn Town Hall	163 Auburn Street	Yes	Yes	No	RoNE Registered/ NT Classified
	164-166 Auburn Street	No	No	Yes	
Post Office	165 Auburn Street	Yes	Yes	No	RoNE Registered/ NT

Building	Site Address	Landmark Site	Heritage Site	Complementary Building	Comments
					Classified
Former Mechanics Institute Building	167-173 Auburn Street	Yes	Yes	No	NT Classified
	174-178 Auburn Street			Yes	
Belmore Park	Auburn Street	Yes	Yes	No	RoNE Registered/ NT Classified
Site of former Knowlmans' Store	Corner Auburn/Market Streets	Yes	No	No	
Former Young's Department Store	180-186 Auburn Street	Yes	Yes	No	NT Classified/RAIA
Former AMP Building	191 Auburn Street	Yes	Yes	No	RoNE Indicative/RAIA

Building	Site Address	Landmark Site	Heritage Site	Complementary Building	Comments
Hollis Group (commercial buildings)	194-204 Auburn Street	Yes	Yes	No	NT Classified
	197-203 Auburn Street	No	No	Yes	
Former CML	207 Auburn	Yes	Yes	No	NT

Building	Site Address	Landmark Site	Heritage Site	Complementary Building	Comments
Building	Street (Corner Clifford Street)				Classified/HC
	212-214 Auburn Street	No	No	Yes	
	228-232 Auburn Street	No	No	Yes	
	245-247 Auburn Street	No	No	Yes	
	253-257 Auburn Street	No	No	Yes	
Former Goulburn Permanent Building Society	256 Auburn Street (corner Clifford Street)	Yes	Yes	No	RoNE Registered/ NT Classified/RAIA
	264-294 Auburn Street	No	No	Yes	
	312 Auburn Street	No	No	Yes	
Commercial Buildings	314-324 Auburn Street	No	Yes	No	NT Recorded
	330-362 Auburn Street	No	No	Yes	

Building	Site Address	Landmark Site	Heritage Site	Complementary Building	Comments
	376 Auburn Street	No	No	Yes	
Commercial Buildings	380-386 Auburn Street	No	Yes	No	NT Recorded
	396-408 Auburn Street	No	No	Yes	

Building	Site Address	Landmark Site	Heritage Site	Complementary Building	Comments
Railway Gate House	Blackshaw Road	No	Yes	No	NT Recorded
Dwellings	101 Bourke Street	No	Yes	No	NT Recorded
Dwellings	167-171 Bourke Street	No	Yes	No	NT Recorded
Dwellings	175-177 Bourke Street	No	Yes	No	NT Recorded
Dwelling	60 Bradley Street	No	Yes	No	NT Recorded
Uniting Church	Clifford Street	Yes	Yes	No	NT Recorded
Our Lady of Mercy Convent and Chapel	Clinton Street	Yes	Yes	No	NT Classified
Dwelling	110 Goldsmith	No	Yes	No	NT Recorded

Building	Site Address	Landmark Site	Heritage Site	Complementary Building	Comments
	Street				
Dwellings	62-66 Goldsmith Street	No	Yes	No	NT Recorded
Methodist Church	Goldsmith Street	Yes	Yes	No	NT Recorded
Goulburn Club	Market Street	Yes	Yes	No	NT Classified
Bull and Woodward Archway	Market Street	Yes	Yes	No	RoNE Registered/ NT Classified
Business Group	5-19 Montague Street (excluding 13 & 15)	No	Yes	No	NT Classified
Existing Court House	Montague Street	Yes	Yes	No	RoNE Registered/SHR/NT Classified
Mulwaree Private Hotel	158-160Sloane Street	Yes	Yes	No	RoNE Registered/ NT Classified
Terraces	168-174 Sloane Street	No	Yes	No	RoNE Registered

Building	Site Address	Landmark Site	Heritage Site	Complementary Building	Comments
Terraces and	176-186	No	Yes	No	RoNE

Building	Site Address	Landmark Site	Heritage Site	Complementary Building	Comments
former shop	Sloane Street				Registered/ NT Classified
Coolavin Hotel	188-190 Sloane Street	Yes	Yes	No	RoNE Registered/ NT Classified
Coffee House Palaces	244-248 Sloane Street	No	Yes	No	SHR/NT Recorded
Railway Station and Station Master's House	Sloane Street	Yes	Yes	No	RoNE Registered/SHR/NT Recorded
Old Court House	Sloane Street	Yes	Yes	No	RoNE Registered/ NT Classified
Police Station (at old Court House)	Sloane Street	Yes	Yes	No	RoNE Registered/ NT Classified
Railway Barracks	Sloane Street	No	Yes	No	NT Recorded
Existing Police Station	Sloane Street	Yes	Yes	No	AHC/NT Recorded
Connolly's Old Mill and Swimming Baths	Sloane Street	Yes	Yes	No	HC/NT Recorded/IAS

Building	Site Address	Landmark Site	Heritage Site	Complementary Building	Comments
RJ Sidney Craig Funeral Directors	Sloane Street	No	Yes	No	NT Recorded
Terraces	310-312 Sloane Street	No	Yes	No	NT Recorded
St Claire Museum	318 Sloane Street	Yes	Yes	No	AHC/HC/NT Classified
RC Bishop's Residence and Presbytery	36 Verner Street	Yes	Yes	No	NT Classified/RAIA
St Peter and St Paul Cathedral	Corner Verner and Bourke Streets	Yes	Yes	No	NT Recorded/AHC