

PLANNING PROPOSAL

Part LOT 2 DP 1198749

GUNNING NSW 2581

April 2015

For the use of

Upper Lachlan Shire Council

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Client: Link Management Pty Ltd
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QUALIFICATIONS:

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2. This report is current at the date of publication only.
3. This report is to be read in its entirety and in association with other relevant documentation and documents submitted as part of this application.

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1. INTRODUCTION

Knight Frank Town Planning has been engaged by Link Management Pty Ltd to prepare a Planning Proposal to accompany a request to Upper Lachlan Shire Council to amend the *Upper Lachlan Local Environmental Plan 2010 (ULLEP)* in order to rezone land for primary production small lots consistent with the environmental and drainage features of the land and its strategic setting. The Planning Proposal in turn seeks to confirm that the basis of the current zoning in terms of the drainage catchment for the Gunning town water supply is not correct.

The land subject to the Planning Proposal forms part of a larger holding of which the majority is already zoned for primary production small lots. Development consent for subdivision over part of the land has previously been issued by Upper Lachlan Shire Council. The Planning Proposal will be consistent with the character of the locality in terms of size of allotments and settlement patterns, both existing and proposed.

The land is in close proximity and to the immediate north of Gunning village. Locating smaller lots adjacent to the Gunning urban area is consistent with the planning principle of locating closer settlement near established services. The Planning Proposal is justified and supportable in terms of its strategic and site specific merit.

The land subject to the Planning Proposal is part Lot 2 DP 1198749 – refer to **Figure 1**



Figure 1: Aerial view of site (source: Six Maps)

1.1 Background

The land is currently zoned RU2 Rural Landscape by the ULLEP. The ULLEP was a comprehensive whole of local government area plan based on environmental studies at that scale. The ULLEP was not a site specific plan based on specific environmental and drainage studies. No detailed plotting of the drainage catchment was done to inform the locating of the boundary between the RU2 and RU 4 zones despite the catchment being the apparent basis for the zone boundary. A subsequent detailed survey confirms that the zone boundary does not reflect the catchment boundary – refer to **Figure 2**.

An overall master plan for the subdividing of the entire holding including both the land already zoned RU4 Primary Production Small Lots and that part subject to the Planning Proposal, was previously submitted to Upper Lachlan Shire Council. That part already zoned RU4 has been the subject of two development applications coinciding with the staged release of lots in a layout generally consistent with the master plan. The remaining part is subject to rezoning by the Planning Proposal – see overall master plan at **Figure 3** with the current zone boundary overlayed.

As part of the overall master planning, environmental studies have previously confirmed that the entire holding including that part subject to the Planning Proposal is suitable and capable of being developed for primary production small lots. Those studies have also largely informed this Planning Proposal. The master planning ensures that the remaining land once rezoned can be developed as part of a coordinated approach to the layout of lots and the local road network.

Prior discussions have been held with Upper Lachlan Shire Council on the lodgement of the Planning Proposal.

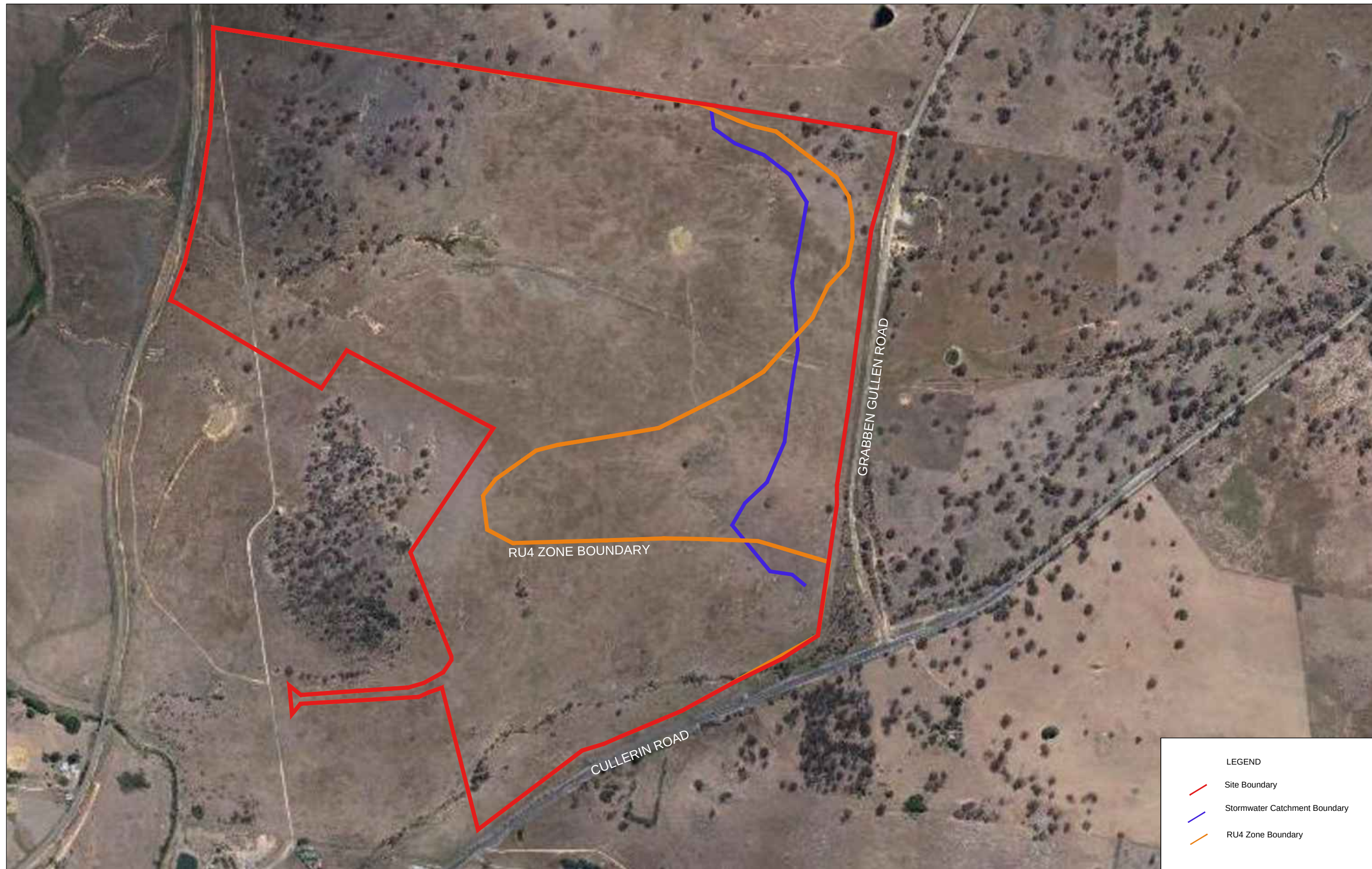
1.2 Purpose of this Planning Proposal

The purpose of this Planning Proposal and supporting attachments is to seek the following amendments to the Upper Lachlan Local Environmental Plan 2010 (ULLEP) so as to enable the development of the land for primary production small lots by:

1. Amending of the ULLEP in order to rezone the land from RU2 Rural Landscapes to RU4 Primary Production Small Lots.
2. Amending of the ULLEP in order to amend the minimum lot size map as it applies to the land from 100 hectares to 10 hectares.

The Planning Proposal aims to;

1. Demonstrate that the current RU2 zone boundary does not coincide with the Gunning town water supply catchment boundary.
2. Outline how the proposed development is consistent with the proper and strategic planning principle of locating closer settlement adjacent to existing urban areas.
3. Outline the merits of the development based on an integrated whole of land holding/master planned approach.



Lot 2 DP 1198749 Gunning

Stormwater Catchment Boundary

Figure 2



- LEGEND**
- INDICATIVE BUILDING ENVELOPE
 - ZONE BOUNDARY
 - OVER 20% SLOPE
 - STAGE BOUNDARY

Figure 3

AMDT	DATE	DESCRIPTION	PROJECT MANAGER	DEVELOPER	PLANNING CONSULTANT	PROPOSED SUBDIVISION OF LOT 2
A	07 AUGUST 2014	COUNCIL SUBMISSION		P J SHAW & ASSOCIATES PTY LTD SET DEVELOPMENTS PTY LTD SUSAN TAYLOR PETER SHAW	KNIGHT FRANK AUSTRALIA PTY LTD	DP 1198749
						STAGE 4 - LOTS 9 TO 13
						L591- 400 A

4. Demonstrate that the proposed rezoning is supportive and justified in terms of both strategic and site specific merit.
5. Seek the endorsement of Upper Lachlan Shire Council to amend the ULLEP in the manner described in the Planning Proposal so as to facilitate the development of the land for primary production small lots.

1.3 Planning Proposal Structure

The Planning Proposal structure reflects the statutory requirements and inclusions for Planning Proposals outlined in Section 55 of the Environmental Planning & Assessment Act, 1979 (EP&A Act) and the Guide to Preparing Planning Proposals as issued by the Department of Planning and Infrastructure in October 2012.

The structure of this Planning Proposal is summarised below:

Section 1	Introduction
Section 2	Description of the site, context.
Section 3	Existing planning framework.
Section 4	A statement of the objectives and intended outcomes of the Proposal.
Section 5	An explanation of proposed instrument or LEP amendments.
Section 6	Justification including need for the proposal; relationship to the relevant strategic planning framework; potential environmental social and economic impacts; State & Commonwealth interests.
Section 7	Description of the proposed map amendments.
Section 8	Details of the likely community consultation processes to be undertaken.
Section 9	An indicative project timeline.

1.4 Supporting Documentation

This Planning Proposal has been prepared having regard to the supporting reports listed in the table below.

Report	Prepared by:	Appendix Number
Ecological Assessment	Kevin Mills and Associates Pty Ltd	1
Bush Fire Risk Assessment	Graham Swain, ABPP Pty Ltd	2
Land Capability, Effluent and Water Management for Rural Residential Subdivision	Soil and Land Conservation Consulting (SLCC)	3

2. SITE DESCRIPTION AND LOCALITY

2.1 Proponent

The proponent for the Planning Proposal is Link Management Pty Ltd on behalf of the landowners being PJ Shaw & Associates Pty Ltd, SET Developments Pty Ltd, Peter Shaw and Susan Taylor.

2.2 The Locality - surrounding context and setting

The subject land is located adjacent to Gunning village and might otherwise be described as 'village fringe'. The land forms part of a larger holding that has already been partly developed for primary production small lots.

With a general north – south orientation, the main frontages of the land are to the Grabben Gullen Road to the east and the smaller primary production holdings development to the west. The Grabben Gullen Road acts as a practical demarcation between broad acre agricultural lands and more intensive rural/agricultural lots which limits the likelihood of land use conflict and limit the practical use of the lot for broadacre agricultural pursuits.

The balance of the overall land holding is already zoned and now partly developed for primary production small lots. The minimum lot size of ten hectares and the low density 'rural living' character is consistent with the proposed rezoning to RU4 and a minimum lot size of 10 hectares of the subject land.

To the immediate south of the subject land is the existing village fringe of Gunning characterised by a mix of cottages and vacant lots. The proposed development will not be to the detriment of the existing village character.

Gunning village provides a limited range of daily goods and services including:

- Post office
- Primary school
- Service station
- Police station
- Council offices
- Cafes/restaurants

The proposed development will be accessible to all Gunning Village services.

2.3 Description of Subject Site

The land subject to this Planning Proposal is described as follows:

Land area

The subject land has an area of 34.5 hectares. As otherwise noted, the land forms part of a larger overall master planned primary production small lots subdivision with a total area of the existing 'residue' of 84.13 hectares.

Land ownership

Title description	Land owner
Part Lot 2 DP 1198749	PJ Shaw & Associates Pty Ltd, SET Developments Pty Ltd, Peter Shaw and Susan Taylor

Current land uses

The land is currently used for limited grazing. In terms of broad acre agriculture, the land is not contiguous with other lands held in the same ownership and is physically separated from most of the adjacent broad acre lands by road. It is also now bordered along much of its boundary by the RU4 Primary Production Small Lots zone. Accordingly it is not capable of being used as a viable broad acre grazing property. There are no physical improvements to the land apart from boundary fencing principally along the road frontage – see site plan at **Figure 3**.

There are no known sources of contamination on the subject land

Landscape setting

The land whilst visible from the Grabben Gullen Road is not prominent. The existing landscape character of a broad acre pastoral setting will not be adversely affected by a low density of 10 hectare size lots allowing for significant separation between dwellings/outbuildings. It can be characterised as more rural residential than rural.

The land is not visible nor therefore within the view shed of Gunning village. The proposed rezoning will not adversely impact on the rural setting of the village

Landform/topography

The subject land is generally undulating with a moderate eastward slope. The edge of the water catchment flowing eastwards is identified on the site plan at **Figure 2**. There are no known major physical constraints to the low density development of essentially 1 house / 10 hectares. There are no permanent water courses traversing the land.

The land is covered by the Garland soil landscape which comprises gently undulating elevated lands and intervening drainage lines, with Wyangala soil landscape representing the rocky hills and steep sideslopes.

Hydrology

The land is part elevated terrain comprising hillcrests and sideslopes. The site forms headwater catchments for minor drainage lines. The hilltops across the site are in stable, well grassed condition, and display no signs of sheet erosion or salinity.

A report prepared by Soil and Land Conservation Consulting (SLCC) concludes that the site has soils with low erosion hazard and that no special measures would be required for erosion and sediment control. The main risk to soil stability is generated by road construction, dwelling construction and service provision, including power, telecoms and possibly water.

A land capability analysis was undertaken by SLCC. This demonstrated that there is an extensive area of land suitable for dwelling construction on the overall holding of which the land forms part, being the gently undulating land which makes up most of the site. Refer to Figure 2 of the Land Capability, Effluent and Water Management Report included in Appendix 2.

Options for providing non-potable water were assessed by SLCC. The assessment concluded that the catchment has the potential to yield sufficient runoff to sustain a surface water supply for the proposed subdivision includes the subject land (refer to the Land Capability, Effluent and Water Management Report included in Appendix 2). The recent subdivision of the adjacent land is serviced by the Gunning town reticulated water supply and it is expected that the land subject to the Planning Proposal will also be connected to the same reticulated service.

Flora and fauna

The site has largely been cleared of its original woodland vegetation and is currently used for sheep and cattle grazing.

A Flora and Fauna Assessment (refer to Appendix 1) of the overall land of which the Planning Proposal, forms part and undertaken by Kevin Mills & Associates, recommended that the woodland remnants and the scattered trees on the adjoining land to the immediate west of the subject land and already zoned RU4 be accounted for in the design of the subdivision. That has formed part of the assessment of the development applications for the subdivision of the adjoining lands.

Archaeology

The Upper Lachlan LEP 2010 Heritage Map confirms that no heritage items, heritage conservation areas or archaeological sites are present within the subject site.

3. EXISTING PLANNING FRAMEWORK

3.1 Local Planning Controls (Upper Lachlan Local Environmental Plan 2010)

The site is currently zoned RU2 Rural Landscape under the Upper Lachlan *Local Environmental Plan 2010* (ULLEP).

RU2 Rural Landscape

The objectives of the RU2 Rural Landscape zone are:

- *To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.*
- *To maintain the rural landscape character of the land.*
- *To provide for a range of compatible land uses, including extensive agriculture.*
- *To preserve environmentally sensitive areas including waterways and prevent inappropriate development likely to result in environmental harm.*
- *To protect the Pejar catchment area from inappropriate land uses and activities and minimise risk to water quality.*
- *To minimise the visual impact of development on the rural landscape.*
- *To minimise the impact of development on the existing agricultural landscape character.*
- *To protect and enhance the water quality of watercourses and groundwater systems and to reduce land degradation.*
- *To maintain areas of high conservation value vegetation*

The range of uses permitted with development consent in the RU2 zone are:

Bed and breakfast accommodation; Cellar door premises; Dwelling houses; Farm stay accommodation; Garden centres; Hardware and building supplies; Landscaping material supplies; Light industries; Plant nurseries; Restaurants or cafes; Roads; Roadside stalls; Rural supplies; Secondary dwellings; Timber yards; Any other development not specified in item 2 or 4.

In addition to the land use zoning controls, the ULLEP also specifies a number of development standards and other environmental overlays relevantly the following:

Upper Lachlan LEP 2010 - Provision	Control
Minimum lot size	The applicable minimum lot size is 100 hectares
Natural Resource Sensitivity Maps - • Water map • Sensitive lands map • Biodiversity map	

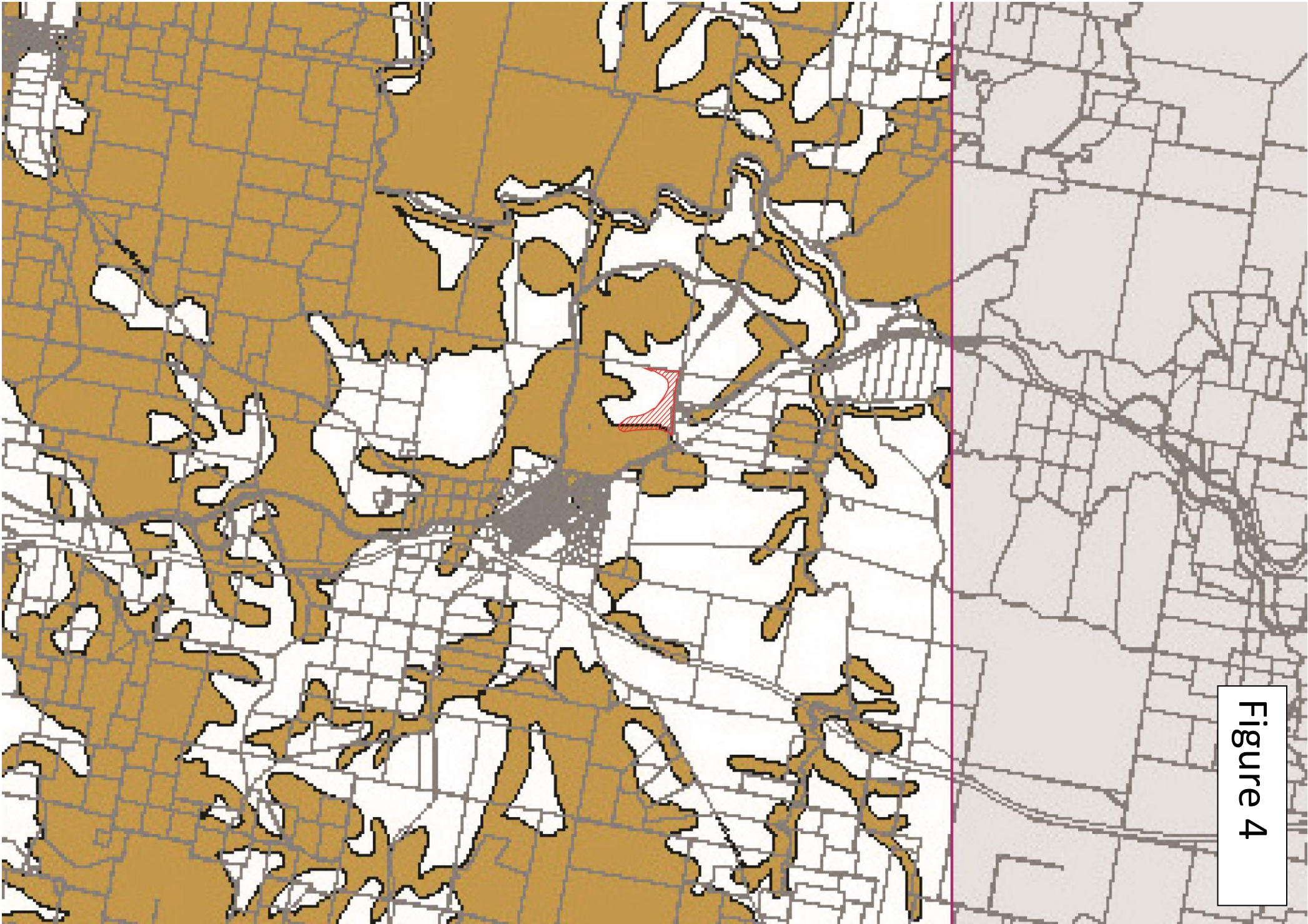


Figure 4



Figure 5

Clauses 6.2 – 6.4 Part 6 Local Provisions of the ULLEP sets out a range of matters Council must take into account before determining a Development Application over land on which the above natural resource features have been identified by way of Sensitivity maps that form part of the ULLEP	water capability assessment of the overall land has been previously undertaken by SLCC.
Heritage	There are no listed heritage items on the land.

3.2 State and Regional Environmental Planning Policies

The State and Regional Planning Policies relevant to the Planning Proposal are:

State Environmental Planning Policy (Rural Lands)

The State Environmental Planning Policy (Rural Lands) (SEPP) came into effect in 2008 and seeks to outline the planning approach to the development of rural lands. In considering the proposal to rezone the land from rural landscapes to primary production small lots, the Rural Lands SEPP is considered to be a relevant matter. The SEPP contains a number of rural planning principles to guide land use decisions as follows:

- *The promotion and protection of opportunities for current and potential productive and sustainable economic activities in rural areas*
- *Recognition of the importance of rural lands and agriculture and the changing nature of agriculture and of trends, demands and issues in agriculture in the area, region and or State*
- *Recognition of the significance of rural land uses to the State and rural communities, including the social and economic benefits of rural land use and development*

Comment: The site adjoins the existing urban edge of Gunning with only limited agricultural potential for broad acre agriculture considering it is not contiguous with other land holdings, is physically separated from adjacent rural lands by roads and with an extensive edge to primary production small lots.

The proposed primary production small lots with a minimum lot size of 10 hectares still retain the potential for more intensive agricultural uses

Rather than being regarded as the loss of agriculture to the area, the rezoning to primary production small lots is an opportunity to make a positive contribution to a diversified local agricultural base. It

acknowledges the adaptive and changing nature of agriculture as a contributor to the local economy. This is consistent with the SEPP rural planning principles.

State Environmental Planning Policy No 55 – Remediation of Land

The State Environmental Planning Policy No 55 – Remediation of Land (SEPP) and accompanying Planning Guidelines on managing land contamination (1998) seek to ensure that any contamination of land on its use, say for rural residential purposes is addressed to reduce the risk of harm to human health.

There are no known sources of potential contamination on the land.

3.3 Regional Strategies – Sydney to Canberra Corridor Regional Strategy

The Upper Lachlan Shire Council local government area falls within the Sydney to Canberra Corridor Regional Strategy. Whilst the Regional Strategy is under review, it is still relevant and applicable to the Planning Proposal. The Regional Strategy sets out a series of Outcomes to guide land use, most relevantly, Housing/Settlement Outcomes and Rural Lands/Primary Industry Outcomes.

Housing and Settlement Outcomes

Whilst the proposed rezoning is not for urban purpose, it will result in closer settlement adjacent to Gunning. In that regard, the relevant Housing and Settlement Outcomes are:

a. Future residential growth is predominantly accommodated within existing centres or contiguous to existing settlements

Comment: The land is located adjacent to Gunning and is in close proximity to existing services

*b. A more appropriate mix for future housing that reflects the Region's changing housing needs (ie 70 percent greenfield and 30 percent medium density/infill averaged across the Region) is achieved
An appropriate mix of housing for a range of regional and local choices in housing and lifestyle will be available*

Comment: The proposed rezoning is consistent with providing for a diversity of local housing and lifestyle choice.

c. Adequate infrastructure, community services and transport is provided to service both greenfield and additional infill development. A reticulated water supply will be provided which will be subject to satisfying the water supply planning principles.

Comment: Infrastructure is able to be provided consistent with the low density nature of the proposed primary production small lots. Sealed road access will be provided together with a reticulated water supply and on-site effluent disposal. The land capability, effluent and water management assessment by SLCC confirms the suitability of the land for effluent disposal. The master planning of the overall holding of which the land forms part will ensure a coordinated approach to the provision of infrastructure.

Rural Lands and Primary Industry Outcomes

Whilst the rezoning will result in closer settlement, it is for the purposes of primary production small lots. In that regard, the following rural lands and primary industry outcome is relevant:

The contribution and ongoing development of primary production and agriculture to the Region's economy and identity, particularly its many towns and villages, is recognised by ensuring a coordinated approach to settlement planning, the protection of agricultural lands as a resource asset for the production of food and fibre, the minimisation of land use conflict, and the appropriate protection of environmental values.

Comment: The proposed rezoning will not adversely impact on the use of the land for agricultural purposes. As otherwise mentioned, the use of the land for broad acre agriculture is limited however, the rezoning for primary production small lots will still provide for a diversity of more intensive agricultural activities. It is also noted that the subject land has an area of only 34.5 hectares despite a ULLEP minimum lot size of 100 hectares.

3.4 Local Planning Strategies

In terms of local planning strategies, the following are relevant to the Planning Proposal

Strategy	Commentary
Upper Lachlan Local Environmental Plan 2010 (ULLEP)	The ULLEP is the principal statutory plan for the LGA. The LEP was in part informed by a LGA wide Local Environmental Study however this was not specific to individual lots. A site specific survey has since confirmed that the catchment boundary does not coincide with the boundary of the RU2 and RU4 zones.
Upper Lachlan Strategy Vision 2020	The Upper Lachlan Strategy Vision 2020 identifies a number of future direction statements for Gunning based on local community consultation. They are: □ Gunning has preserved the treasures of the past, but progressed without sacrificing or eroding the environment and its community values. We promote viable commercial activities, social infrastructure and cultural sensitivity. We have planned for growth and our strategies are forward reaching. □ A community that uses environmentally sustainable transport and resources, and allows for well planned, controlled development on appropriately zoned land, whilst protecting and enhancing prime agricultural land and promoting tourism as a new industry for the area. □ Gunning should be a community with strong rural values and amenity, with a good road network (bitumen) linking our towns to Crookwell, Taralga, Boorowa, Collector, South Coast and Bathurst. Emphasis on aged care, employment opportunities and serrated tussock eradication should be paramount. □ Our vision for Gunning is a town that is successfully balancing its rural heritage with population and commercial growth, and which fosters a strong sense of community and respect for the old and new. <u>Comment:</u> The proposed rezoning for primary production small lots is consistent with and will help meet the desired future directions for Gunning by retaining the rural values of the village and promoting well planned new development
Upper Lachlan	Whilst not directly relevant to the Planning Proposal, the overall layout for the

Development Control Plan 2010 as amended	future potential subdivision of the holding of which the land forms part has been prepared having due regard to the DCP.
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4. OBJECTIVES AND INTENDED OUTCOMES (PART 1)

The Gunning Planning Proposal seeks to support and facilitate the orderly and economic development of primary production small lots on land adjacent to land already zoned RU4 and in close proximity to Gunning village.

Intended Outcomes

The specific intended outcomes of the Planning Proposal are outlined below:

- To confirm the suitability of the land for rural primary production small lots
- To provide for a diversified local agricultural and economic base
- To contribute to a diversity of local lifestyle choices.
- To enable the progressive and orderly development of land consistent with an overall master planned approach to the holding of which it forms part.

5. EXPLANATION OF PROVISIONS (PART 2)

The Planning Proposal seeks to achieve the above objectives and intended outcomes by amending the Upper Lachlan Local Environmental Plan 2010 (ULLEP) in the following manner:

5.1 Land Use zoning

The rezoning of the land from RU2 Rural Landscapes to RU4 Primary Production Small Lots – refer to draft land use zoning map at **Figure 6**.

5.2 Minimum lot sizes

The amending of the ULLEP minimum lot size map as it applies to the subject land from 100 hectares to 10 hectares – refer to **Figure 7**.



Upper Lachlan Local Environmental Plan 2010

Land Zoning Map - Sheet LZN_003E

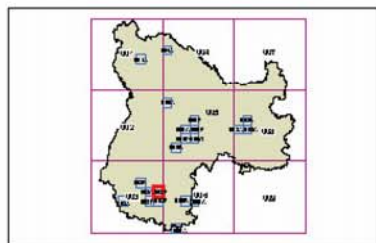
Zone

B2	Local Centre
B4	Mixed Use
E1	National Parks and Nature Reserves
E2	Environmental Conservation
E3	Environmental Management
IN2	Light Industrial
R2	Low Density Residential
R5	Large Lot Residential
RE1	Public Recreation
RU1	Primary Production
RU2	Rural Landscape
RU3	Forestry
RU4	Rural Small Holdings
RU5	Village
SP1	Special Activities
SP2	Infrastructure

Figure 6

Cadastral

Cadastral 1/9/08 © LPMA NSW

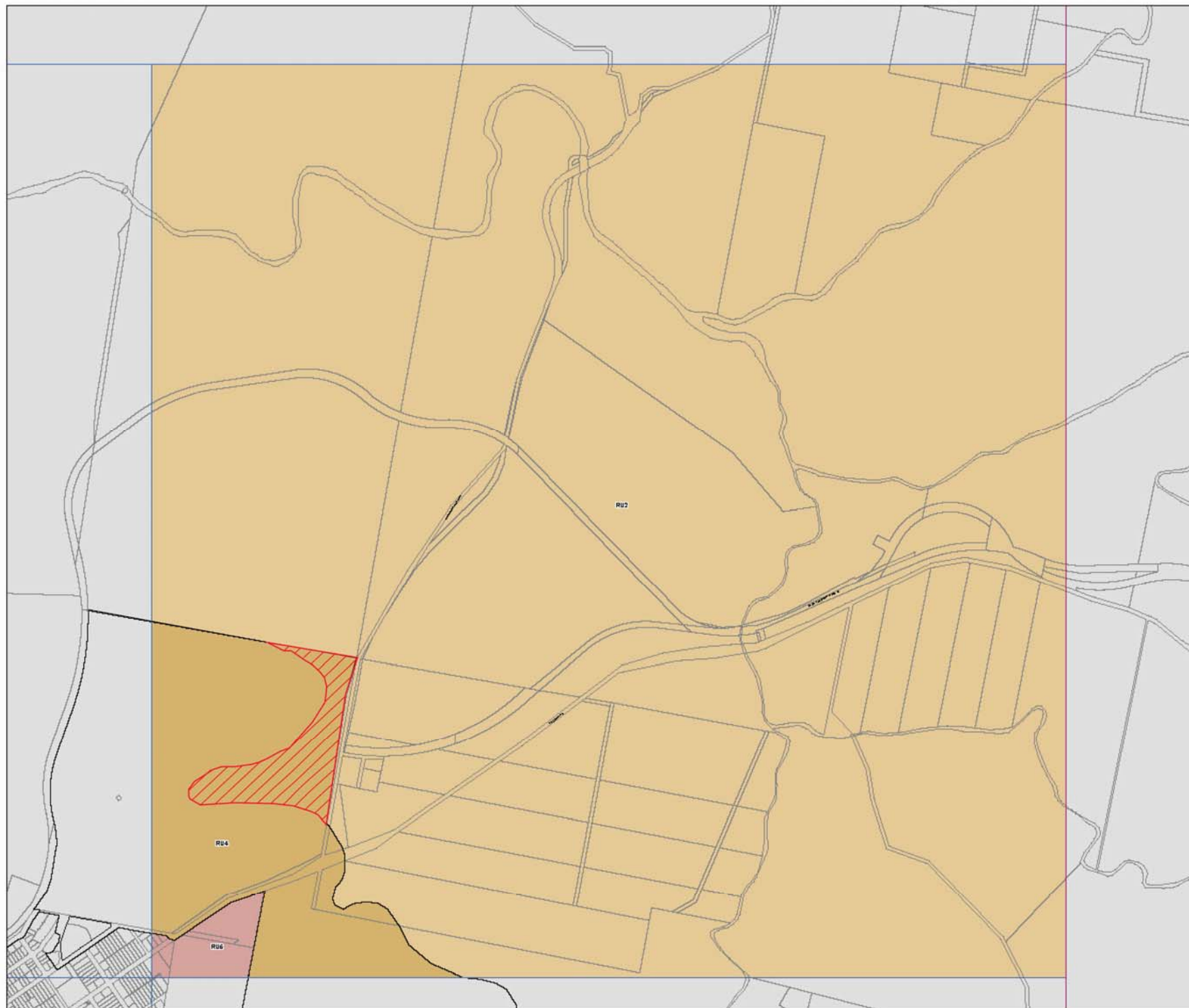


Redecloned OPA 1994
Zone 55

0 250 500
METRES

Scale 1:20000 @ A3

Map Identification Number:
764100 M_LZN_003E_001_20100227





Upper Lachlan Local Environmental Plan 2010

Lot Size Map - Sheet LSZ_003E

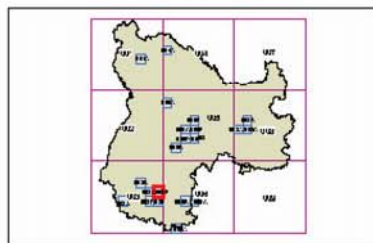
Minimum Lot Size (sq m)

S	800
U	1000
V	2000
W	4000
Z	2 ha
AA	5 ha
AB1	10 ha
AB2	40 ha
AC	80 ha
AD	100 ha
AE	200 ha

Cadastre

Cadastre 1/9/08 © LPMA NSW

Figure 7

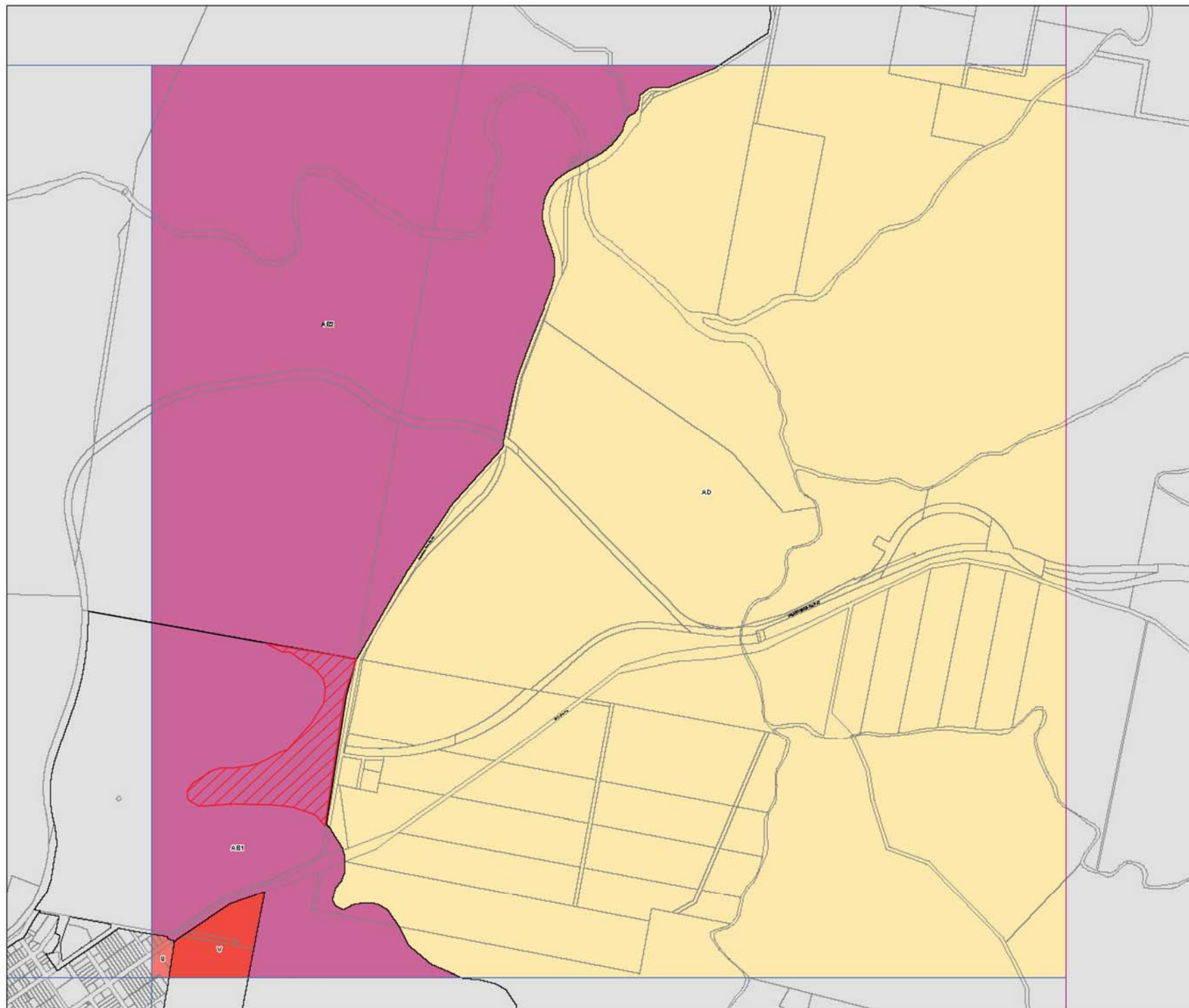


Redecloned ODA 1994
Zone 55

0 250 500
METRES

Scale 1:20000 @ A3

Map Identification Number:
7643_00 M_LSZ_003E_20100315



6. JUSTIFICATION (PART 3)

6.1 Introduction

The Planning Proposal responds in part to the site surveys undertaken subsequent to the local environmental studies that informed the current RU 2 zone boundary. The subsequent survey work confirms that the majority of the land does not form part of the Gunning town water supply catchment. The proposed zoning to RU4 Primary Production Small Lots will compliment and be consistent with the same zoning and development that has already occurred on the adjoining lands to the immediate west. Accordingly the Planning Proposals will be consistent with the character of the wider holding of which it forms part. More broadly, the development of primary production small lots on the land is consistent with the planning principle of locating closer settlement adjacent to services and facilities, in this case, Gunning village.

In establishing how the Planning Proposal 'fits' in terms of the wider strategic setting of the Upper Lachlan LGA and the broader regional setting, a review has been undertaken of the proposal against the local (Upper Lachlan) and regional (NSW Government) policy framework. The Planning Proposal is considered to be justified and supportable in terms of its strategic and site specific merit.

6.2 Section A - Need for the Planning Proposal

Is the Planning Proposal a result of any strategic study or report?

Whilst the Planning Proposal is not the result of any specific strategic study or report, due regard has been given to the Upper Lachlan Strategy Vision 2020 (Strategy) which notes that the purpose of the Strategy is *"..to provide Council with a Strategy to manage growth and to provide strategic direction for urban and rural development.."* (p3 Upper Lachlan Strategy Vision 2020, February 2009). Relevantly the Strategy sets out the vision for Gunning based on local community consultations by reference to future direction statements. The strategic 'vision' of Council has been given considered in the preparing and justification of the Planning Proposal.

Section 5.7.1 of the Strategy documents specific community growth issues and constraints for key villages in the Upper Lachlan Shire including Gunning. Relevantly, the Strategy notes a community preference for a suggested minimum lot size of 800- 1000m² for the town and 2-10 hectares for the rural residential areas surrounding the village and that rural residential development should be clustered to avoid ribbon development with suggested locations for rural residential development including to the north of the existing village boundary. The Planning Proposal is entirely consistent with the community expectations over the size of rural residential lots and preferred areas

Is the Planning Proposal the best means of achieving the objectives or intended outcomes, or is there a better way?

The Planning Proposals is the best means for providing for rural small lots on the land in terms of permissibility and the purpose (objectives) of the RU4 zone, in particular, noting the zone objective of

- *To encourage and promote diversity and employment opportunities in relation to primary industry enterprises, particularly those that require smaller lots or that are more intensive in nature.*

The Planning Proposal is the also the best way of achieving a consistent approach to planning and land uses over the wider land holding and locality of which it forms part being that area bounded by the Grabben Gullen Road, Gunning village and tributary of the Lachlan River.

6.3 Section B - Relationship to the Strategic Planning Framework

Is the Planning Proposal consistent with the objectives and actions of the applicable regional or sub-regional strategy.

The Planning Proposal has been reviewed against the relevant Outcomes of the Sydney to Canberra Corridor Regional Strategy. The Planning Proposal is considered consistent and justified against the Regional Strategy Outcomes.

It is noted that the Department of Planning and Environment is preparing a series of Regional Growth Plans to replace the existing Regional Strategies. Under the Regional Growth Strategy framework, Upper Lachlan Valley will fall under the South East and Tablelands region.

For the purpose of this Planning Proposal, the Sydney to Canberra Corridor Regional Strategy remains the relevant strategic planning framework as required by the S117 Local Planning Direction 5.1 – *Implementation of Regional Strategies*.

Is the Planning Proposal consistent with a council's plan, local strategy, or another local strategic plan?

By reference to s 3.4 of the Planning Proposal, a review has been undertaken of the Planning Proposal against the following policies and plans of Upper Lachlan Shire Council:

1. Upper Lachlan Local Environmental Plan 2010 and;
2. Upper Lachlan Strategy Vision 2020.

The Planning Proposal is consistent with both the ULLEP in terms of the complimenting the adjoining land already zoned RU4 and the Strategy Vision in terms of the community preferred future direction and density of development for growth in Gunning.

Is the Planning Proposal consistent with applicable State Environmental Planning Policies?

An assessment of the Planning Proposal against the applicable State Environmental Planning Policies (SEPP's) is provided in the table below.

State Environmental Planning Policy (SEPPs)	Consistent		N/A	Comment
	Yes	No		
SEPP No.1 Development Standards			✓	No longer applies to Upper Lachlan LEP 2010
SEPP (Rural Lands)	✓			A review of the Planning Proposal has been

				undertaken against the Rural Planning Principles within the SEPP. Relevantly: • Recognition of the importance of rural lands and agriculture and the changing nature agriculture and of trends, demands and issues in agriculture in the area, region or State. • Recognition of the significance of rural land uses to the State and rural communities, including the social and economic benefits of rural land use and development. • The provision of opportunities for rural lifestyle, settlement and housing that contribute to the social and economic welfare of rural communities and; • The consideration of impacts on services and infrastructure and appropriate location when providing for rural housing. The Planning Proposal will provide for a greater diversity of agricultural uses in a location adjacent to village based services. In doing so will contribute both to the local economy and welfare of the local community.
SEPP No.55 – Remediation of Land	✓			There are no known potential sources of contamination on the subject land.
SEPP No.60 Exempt and Complying Development	✓			The SEPP (Exempt and Complying Development Codes) 2008 applies to the site.
SEPP No.70 Affordable Housing (Revised Schemes)			✓	Not relevant to the proposed amendment.
SEPP (Affordable Rental Housing) 2009			✓	Not relevant to the proposed amendment.
SEPP (Exempt and Complying Development Codes) 2008	✓			The SEPP may apply to any future development of the site.
SEPP (Infrastructure) 2007	✓			The SEPP may apply to future development

Is the Planning Proposal consistent with applicable Section 117 Ministerial Directions (s 117 directions)?

The Planning Proposal is consistent with the relevant Section 117 Directions in that it achieves and/or gives effect to the principles, aims, objectives or policies set out in the Directions noted in the table below.

Ministerial Direction	Comment
1. Employment and Resources	
1.2 Rural Zones The objective of the Direction is to protect the agricultural production value of rural land When this direction applies (3) This direction applies when a relevant planning authority prepares a planning proposal that will affect land within an existing or proposed rural zone (including the alteration of any existing rural zone boundary). What a relevant planning authority must do if this direction applies: (4) A planning proposal must: (a) not rezone land from a rural zone to a residential, business, industrial, village or tourist zone. (b) not contain provisions that will increase the permissible density of land within a rural zone (other than land within an existing town or village). Consistency (5) A planning proposal may be inconsistent with the terms of this direction only if the relevant planning authority can satisfy the Director-General of the Department of Planning (or an officer of the Department nominated by the Director-General) that the provisions of the planning proposal that are inconsistent are: (e) justified by a strategy which: (i) gives consideration to the objectives of this direction, (ii) identifies the land which is the subject of the planning proposal (if the planning proposal relates to a particular site or sites), and (iii) is approved by the Director-General of the	Whilst the Planning Proposal will increase the permissible density in terms of a reduction in the minimum lot size from 100 hectares to 10 hectares this is considered to be of minor significance in terms of the extent of land subject to the Planning Proposal and the proposed zoning to RU4. The RU4 zone does by way of zone objectives seek to provide for a greater diversity of agriculture..

Department of Planning, or (b) justified by a study prepared in support of the planning proposal which gives consideration to the objectives of this direction, or (c) in accordance with the relevant Regional Strategy or Sub-Regional Strategy prepared by the Department of Planning which gives consideration to the objective of this direction, or (d) is of minor significance.	
4. Hazard and Risk	
4.3 Flood Prone Land A planning proposal must include provisions that give effect to and are consistent with the NSW Flood Prone Land Policy and the principles of the Floodplain Development Manual 2005 (including the Guideline on Development Controls on Low Flood Risk Areas). A planning proposal must not contain provisions that apply to the flood planning areas which: (a) permit development in floodway areas, (b) permit development that will result in significant flood impacts to other properties, (c) permit a significant increase in the development of that land, (d) are likely to result in a substantially increased requirement for government spending on flood mitigation measures, infrastructure or services, or (e) permit development to be carried out without development consent except for the purposes of agriculture (not including dams, drainage canals, levees, buildings or structures in floodways or high hazard areas), roads or exempt development. A planning proposal must not impose flood related development controls above the residential flood planning level for residential development on land, unless a relevant planning authority provides adequate justification for those controls to the satisfaction of the Director-General (or an officer of the Department nominated by the Director-General). For the purposes of a planning proposal, a relevant planning authority must not determine a flood planning level that is inconsistent with the Floodplain Development Manual 2005 (including the Guideline on	The subject land is traversed by only minor local drainage lines. There is no known extent of mapped flooding.

Development Controls on Low Flood Risk Areas) unless a relevant planning authority provides adequate justification for the proposed departure from that Manual to the satisfaction of the Director-General (or an officer of the Department nominated by the Director-General).	
4.4 Planning for Bushfire Protection	
The objectives of the Direction are to protect life, property and the environment from bushfire hazards by discouraging the establishment of incompatible land uses in bush fire prone areas and; to encourage sound management of bush fire prone areas. 4.4 Planning for Bushfire Protection Objectives (1) The objectives of this direction are: (a) to protect life, property and the environment from bush fire hazards, by discouraging the establishment of incompatible land uses in bush fire prone areas, and (b) to encourage sound management of bush fire prone areas. Where this direction applies (2) This direction applies to all local government areas in which the responsible Council is required to prepare a bush fire prone land map under section 146 of the <i>Environmental Planning and Assessment Act 1979</i> (the EP&A Act), or, until such a map has been certified by the Commissioner of the NSW Rural Fire Service, a map referred to in Schedule 6 of that Act. When this direction applies (3) This direction applies when a relevant planning authority prepares a planning proposal that will affect, or is in proximity to land mapped as bushfire prone land. What a relevant planning authority must do if this direction applies (4) In the preparation of a planning proposal the relevant planning authority must consult with the Commissioner of the NSW Rural Fire Service following receipt of a gateway determination under section 56 of the Act, and prior to undertaking community consultation in satisfaction of section 57 of the Act, and take into account any comments so made, (5) A planning proposal must: (a) have regard to <i>Planning for Bushfire Protection 2006</i>, (b) introduce controls that avoid placing inappropriate developments in hazardous areas, and	A bushfire risk assessment has been undertaken by ABPP for the land as part of the overall development and holding. The bushfire risk assessment has identified a number of mitigation measures that have already been incorporated into the design and layout of the first two stages of the rural small lots development.

(c) ensure that bushfire hazard reduction is not prohibited within the APZ. (6) A planning proposal must, where development is proposed, comply with the following provisions, as appropriate: (a) provide an Asset Protection Zone (APZ) incorporating at a minimum: (i) an Inner Protection Area bounded by a perimeter road or reserve which circumscribes the hazard side of the land intended for development and has a building line consistent with the incorporation of an APZ, within the property, and (ii) an Outer Protection Area managed for hazard reduction and located on the bushland side of the perimeter road, (b) for infill development (that is development within an already subdivided area), where an appropriate APZ cannot be achieved, provide for an appropriate performance standard, in consultation with the NSW Rural Fire Service. If the provisions of the planning proposal permit Special Fire Protection Purposes (as defined under section 100B of the <i>Rural Fires Act 1997</i>), the APZ provisions must be complied with, (c) contain provisions for two-way access roads which links to perimeter roads and/or to fire trail networks, (d) contain provisions for adequate water supply for firefighting purposes, (e) minimise the perimeter of the area of land interfacing the hazard which may be developed, (f) introduce controls on the placement of combustible materials in the Inner Protection Area. Consistency (7) A planning proposal may be inconsistent with the terms of this direction only if the relevant planning authority can satisfy the Director-General of the Department of Planning (or an officer of the Department nominated by the Director-General) that the council has obtained written advice from the Commissioner of the NSW Rural Fire Service, to the effect that, notwithstanding the noncompliance, the NSW Rural Fire Service does not object to the progression of the planning proposal.	
Regional Planning	
5.1 Implementation of Regional Strategies	
5.1 Implementation of Regional Strategies Objective	The Planning Proposal has been assessed against and is consistent with the relevant

(1) The objective of this direction is to give legal effect to the vision, land use strategy, policies, outcomes and actions contained in regional strategies. Where this direction applies (2) This direction applies to land to which the following regional strategies apply: (a) Far North Coast Regional Strategy (b) Lower Hunter Regional Strategy (c) Illawarra Regional Strategy (d) South Coast Regional Strategy (e) Sydney–Canberra Corridor Regional Strategy (f) Central Coast Regional Strategy, and (g) Mid North Coast Regional Strategy. When this direction applies (3) This direction applies when a relevant planning authority prepares a planning proposal. What a relevant planning authority must do if this direction applies (4) Planning proposals must be consistent with a regional strategy released by the Minister for Planning. Consistency (5) A planning proposal may be inconsistent with the terms of this direction only if the relevant planning authority can satisfy the Director-General of the Department of Planning (or an officer of the Department nominated by the Director-General), that the extent of inconsistency with the regional strategy: (a) is of minor significance, and (b) the planning proposal achieves the overall intent of the regional strategy and does not undermine the achievement of its vision, land use strategy, policies, outcomes or actions.	outcomes of the Regional Strategy being Settlement/Housing and Rural Lands/Primary Industry Outcomes.
6 Local Plan Making	
6.1 Approval and Referral Requirements A planning proposal must: (a) minimise the inclusion of provisions that require the concurrence, consultation or referral of development applications to a Minister or public authority, and (b) not contain provisions requiring concurrence, consultation or referral of a Minister or public authority unless the relevant planning authority has obtained the approval of: (i) the appropriate Minister or public authority, and (ii) the Director-General of the Department of	The Planning Proposal does not propose any such provisions listed in Direction 6.1.

Planning (or an officer of the Department nominated by the Director-General), prior to undertaking community consultation in satisfaction of section 57 of the Act, and (c) not identify development as designated development unless the relevant planning authority: (i) can satisfy the Director-General of the Department of Planning (or an officer of the Department nominated by the Director-General) that the class of development is likely to have a significant impact on the environment, and (ii) has obtained the approval of the Director-General of the Department of Planning (or an officer of the Department nominated by the Director-General) prior to undertaking community consultation in satisfaction of section 57 of the Act.	
6.2 Reserving Land for Public Purposes A planning proposal must not create, alter or reduce existing zonings or reservations of land for public purposes without the approval of the relevant public authority and the Director-General of the Department of Planning (or an officer of the Department nominated by the Director-General).	No new reservations are proposed, nor are they proposed to be reduced by the Planning Proposal.
6.3 Site Specific Provisions A planning proposal that will amend another environmental planning instrument in order to allow a particular development proposal to be carried out must either: (a) allow that land use to be carried out in the zone the land is situated on, or (b) rezone the site to an existing zone already applying in the environmental planning instrument that allows that land use without imposing any development standards or requirements in addition to those already contained in that zone, or (c) allow that land use on the relevant land without imposing any development standards or requirements in addition to those already contained in the principal environmental planning instrument being amended. A planning proposal must not contain or refer to	The Planning Proposal does not include site specific provisions

drawings that show details of the development proposal.	
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6.4 Section C - Environmental, Social and Economic Impacts

Are there any other likely environmental effects as a result of the planning proposal and how are they proposed to be managed?

There are no specific environmental effects likely as a result of the Planning Proposal. The land has been historically used for grazing and can otherwise be characterised as a modified rural landscape. The flora and fauna study by KMA did not identify any specific flora or fauna values on the overall holding of which the subject land forms part.

This land is not located on an area identified as Natural Resource Sensitive lands in terms of sensitive land or biodiversity.

The land capability, effluent and water management study by SLCC, noted that the hilltops across the land are in stable, well grassed condition and display no signs of sheet erosion or salinity. The study also confirmed that there are no specific physical constraints to the development of the land for small primary production lots.

The SLCC report concludes that the land has soils with low erosion hazard and that no specific measures will be required for erosion and sediment control except for those normally required for construction works.

In terms of heritage and Aboriginal archaeological impacts, the Upper Lachlan LEP 2010 Heritage Map (Sheets 003C/003E) confirms that there no heritage items, heritage conservation areas or archaeological sites present.

The subject land is traversed by only minor local drainage lines. There is no known extent of mapped flooding

There are no known potential sources of contamination on the subject land.

In summary there are no known major constraints nor will the proposed rezoning have any known adverse environmental impacts.

Accordingly, the Planning Proposal is considered to have site specific merit.

Has the planning proposal adequately addressed any social and economic effects?

The Planning Proposal will contribute to a diversifying of the local economy by providing for smaller rural/agricultural lots and a wider lifestyle choice. By providing for additional local housing, it will make a positive contribution to the local Gunning community by supporting local businesses and services. The

locating of closer settlement adjacent to existing village services is supported by the Sydney – Canberra Corridor Regional Strategy.

6.5 Section D – State and Commonwealth Interests

Is there adequate public infrastructure for the planning proposal?

The land subject to the Planning Proposal is part of an overall master planned approach to the overall holding of which the subject land forms part. In doing so, road access is proposed to be provided via internal roads to be constructed as part of the subdivisions of the adjoining lands already zoned RU4.

Consistent with the low density of 1 lot /10 hectares and a minimum lot size of 10 hectares, no reticulated sewer will be provided. As otherwise noted, reticulated water is connected to all lots subdivided in the adjacent RU 4 zone and it is the intention to also provide a reticulated service to the subject land.

The Planning Proposal is located adjacent to the general range of community support services available in Gunning, in particular, the primary school and the Gunning administrative centre of Council.

What are the views of State and Commonwealth public authorities consulted?

No specific discussions have been held with State or Commonwealth public authorities.

7. MAPPING (PART 4)

The proposed amendments to the current Upper Lachlan LEP 2010 are as indicated in Section 5.

Should the Planning Proposal progress through the Gateway Determination and plan making process, additional mapping would be undertaken in accordance with the *Standard technical requirements for LEP maps* as issued by the Department of Planning and Environment.

8. COMMUNITY CONSULTATION (PART 5)

Community consultation by way of public exhibition will be undertaken by Council as the Relevant Planning Authority following the issuing of the Gateway Determination.

The Planning Proposal has also had due regard to the Gunning specific community consultation undertaken by Council as part of the Upper Lachlan Vision Strategy 2020.

9. INDICATIVE PROJECT TIMELINE (PART 6)

Assuming the Planning Proposal is endorsed by Council, the timeframe for the consideration and completion of the Planning Proposal is dependent upon a number of variables including:

- Council's consideration of the proposal and need or otherwise for additional information,
- The need or requirement for referrals to any relevant Government agencies, and
- The extent and duration of community consultation (public exhibition).

The Department's Guide to Preparing Planning Proposals (October 2012) requires an indicative project timeline to be included with the Proposal. This is provided below and it assumes Council's endorsement of the Proposal and issue of a Gateway determination.

Stage	Estimated timetable
Consideration by Council of Planning Proposal	June / July 2015
Referral to Department of Planning & Environment for Gateway Determination	July 2015
Gateway Determination	September 2015
Timeframe for completion of any technical information and any government agency referrals	October 2015
Public exhibition	November 2015
Timeframe for consideration of submissions and consideration of Planning Proposal following public exhibition	January 2016
Anticipated date the RPA will make the plan (assuming delegation to Council)	March 2016
Overall estimated timetable	May 2015 – March 2016 (10 months)

CONCLUSION

The Planning Proposal provides for a properly planned and strategic outcome for land that is most appropriately developed for rural primary production small lots. The supporting site summary confirms that the majority of the land is not within the Gunning water supply catchment. Regardless, the Planning Proposal is consistent with and will complement the land uses and rural small lots character of the wider holding of which it forms part. The Planning Proposal is consistent with both the local and regional strategic policy framework. There are also no known major physical constraints to the use of the land for closer settlement provided for by the primary production small lots density of 1 lot/10 hectares.

Accordingly, the Planning Proposal is considered justified and supportable in terms of both its strategic and site specific merit.

APPENDIX 1

BUSHFIRE PROTECTION ASSESSMENT

FOR THE PROPOSED

RURAL RESIDENTIAL SUBDIVISION

OF

**LOT 1 in DP 815478,
THE OLD HUME HIGHWAY
GUNNING**



Australian Bushfire Protection Planners Pty Limited

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BUSHFIRE PROTECTION ASSESSMENT

FOR THE PROPOSED

RURAL RESIDENTIAL SUBDIVISION

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**LOT 1 in DP 815478,
THE OLD HUME HIGHWAY,
GUNNING**

Assessment Number	Document	Preparation Date	Issue Date	Directors Approval
B111406 -1	Final	10.3.2011	21.9.2011	<i>G.L. Swain</i>

EXECUTIVE SUMMARY

Australian Bushfire Protection Planners Pty Limited, at the request of *CB Richard Ellis Pty Ltd*, has prepared a Bushfire Protection Assessment report for the proposed subdivision of Lot 1 in DP 815478, The Old Hume Highway, Gunning.

The proposed subdivision will be undertaken over a number of development stages with Stage 1 creating eight [8] rural residential allotments [Lots 1 – 8] and a residual lot [Lot 9]. Future stages have the potential to create another thirteen [13] rural residential lots [Lots 9 – 21] with each lot having a minimum area of 10.00 hectares.

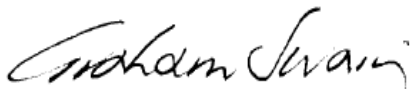
The land over which the subdivision proposal is being undertaken is located on the northern side of The Old Hume Highway, northeast of the township of Gunning and is bound to the east by Gunning Road and to the west by the Main Southern Railway. The northern boundary adjoins rural agricultural landuse. The land within the development site is vacant rural grazing land.

Rural farming land adjoins the Old Hume Highway and Gunning Road reserves and beyond the Main Southern Railway Line whilst residential development extends to the south of the development site.

The Upper Lachlan Shire Council Bushfire Prone Land Map indicates that the development site contains two areas of vegetation which have been identified as being bushfire prone with the northern most area connecting to bushfire prone vegetation on the rural land to the north of the development site – within Lot 1 in DP 743173.

As the land within the development site is identified as containing Bushfire Prone Vegetation and the buffer zone to the Bushfire Prone Vegetation, the subdivision application is integrated development under the provisions of Section 91(1) of the *Environmental Planning & Assessment Act 1997* and requires the issue of a Bushfire Safety Authority under Section 100B of the *Rural Fires Act*.

This report uses the methodology provided by *Planning for Bushfire Protection 2006* to validate the proposed subdivision's compliance with the Asset Protection Zone requirements of Table A2.4 of *Planning for Bushfire Protection 2006* and examines the requirements of Section 44 of the *Rural Fires Regulation 2008*, necessary to provide compliance with Section 100B of the *Rural Fires Act 1997 (Amended)*.



Graham Swain,
Managing Director,
Australian Bushfire Protection Planners Pty Limited.

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SECTION 1

INTRODUCTION

1.1 Aim of this Report.

The aim of this report is to prepare a Bushfire Protection Assessment Report which examines the following items in order to determine compliance with the deemed-to-satisfy provisions of *Planning for Bushfire Protection 2006*.

- Review the capability of the site to provide a safe development in accordance with *Planning for Bushfire Protection 2006*;
- Review the potential to carry out hazard management over the landscape;
- Review the evacuation capability of the area;
- Provided advice on the adequacy of the design/construction to meet the requirement of *Planning for Bushfire Protection 2006*;
- Undertake an assessment to determine bushfire protection strategies for the proposed subdivision, including the preferred location of the dwelling sites, that address the following matters:
 - (i) The provision of building setbacks (Asset Protection Zones) from vegetated areas and the siting of buildings to minimize the impact of radiant heat and direct flame contact;
 - (ii) Fire fighting water supplies;
 - (iii) Access requirements for emergency service vehicles;
 - (iv) Construction standards to be used for the future buildings within the proposed development to minimize the vulnerability of buildings to ignition from radiation and ember attack;
 - (v) Land management responsibilities; and
 - (vi) Evacuation management.

1.2 Development Proposal.

The development proposal is for the subdivision of Lot 1 in DP 815478, The Old Hume Highway, Gunning. The subdivision creates one into twenty one rural residential allotments each containing more than 10.00 in area.

The proposed subdivision will be undertaken over a number of development stages with Stage 1 creating eight [8] rural residential allotments [Lots 1 – 8] and a residual lot [Lot 9]. Future stages have the potential to create another thirteen [13] rural residential lots [Lots 9 – 21] with each lot having a minimum area of 10.00 hectares. The subdivision layout creates a new internal through road which links Biala Street to Gunning Road and two short cul-de-sac roads.

Figure 1 – Stage 1 Subdivision Plan.



Figure 2 – Possible Future Subdivision Plan.



1.3 Statutory Requirements.

This report has been prepared having regard to the following legislative and planning requirements:

1.3.1 Legislation.

(a) *Environmental Planning and Assessment Act (EPA Act)*

Planning and development within NSW is regulated by the *Environmental Planning & Assessment Act, 1979* (EPA Act). In relation to bushfire planning for new Rural Residential and Residential in bushfire prone areas in NSW, the following section of the EPA Act applies:

- **Section 91(1)** defines the subdivision of Bushfire Prone Land for Rural Residential and Residential subdivision and the construction of special protection developments that are located in a Bushfire Prone Area as integrated development, which requires authorization under Section 100B of the *Rural Fires Act 1997*.

(b) *Rural Fires Act 1997*

The objectives of the *Rural Fires Act* are to provide:

- The prevention, mitigation and suppression of fires;
- Coordination of bushfire fighting and prevention;
- Protection of people and property from fires; and
- Protection of the environment.

In relation to bushfire planning for new rural residential, residential and special fire protection developments in bushfire prone areas in NSW, Section 100B of the Act applies and provides for the issue, by the Commissioner of the NSW Rural Fire Service, of a Bushfire Safety Authority for development which creates the subdivision of bushfire prone land for rural residential and residential development and construction of special fire protection developments located within a Bushfire Prone Area.

Application for a Bushfire Safety Authority must be lodged as part of the development application process and must demonstrate compliance with *Planning for Bushfire Protection 2006* and other matters which are considered necessary, by the Commissioner, to protect persons, property and the environment from the impact of bushfire.

(c) *Rural Fires Regulation 2008.*

Section 44 of the *Rural Fires Regulation 2008* relates to planning for new Rural Residential and Residential and special fire protection developments in bushfire prone areas in NSW and provides details of the matters that are required to be addressed for the issue of a *Bushfire Safety Authority* under Section 100B of the *Rural Fires Act*.

(d) Threatened Species Conservation Act 1995 (TSC Act).

The TSC Act aims to protect and encourage the recovery of threatened species, populations and communities as listed under the Act. The TSC Act is integrated with the EP&A Act and requires consideration of whether a development or an activity (such as the implementation of hazard reduction and asset protection) is likely to significantly affect threatened species, populations and ecological communities or their habitat.

1.3.2 Planning Policies.

Planning for Bushfire Protection – 2006 (Rural Fire Service).

This document provides guidance on the planning and development control processes in relation to bushfire protection measures for Rural Residential subdivision and Special Protection Developments in bushfire prone areas.

The Commissioner may determine, under Section 100B of the *Rural Fires Act*, additional measures that are considered necessary to protect the development against the impact of bushfire.

1.4 Documentation reviewed in the preparation of this Assessment.

The following documents were reviewed in the preparation of this report:

- Plan of proposed Stage 1 subdivision over Lot 1 in DP 815478 prepared by Link Management Pty Ltd;
- Plan of possible future subdivision stages over Lot 1 in DP 815478 prepared by Link Management Pty Ltd;
- Aerial Photograph of the development site and surrounding lands;
- Upper Lachlan Shire Council Bushfire Prone Land Map;
- *Planning for Bushfire Protection 2006* prepared by the NSW Rural Fire Service;
- Australian Standard AS3959 – 2009 – ‘*Construction of Buildings in Bushfire Prone Areas*’;
- *Rural Fires Regulation 2008*.

1.5 Site Inspection.

Graham Swain of *Australian Bushfire Protection Planners Pty Limited* inspected the site and surrounding areas on the 22nd November 2010 to assess the topography, slopes and vegetation classification within and adjoining the development site and to validate the proposed subdivision’s compliance with the requisite deemed-to-satisfy Asset Protection Zones and access provisions.

Adjoining properties were also inspected to determine the surrounding land use / vegetation communities, land management and the extent of bushfire prone vegetation.

1.6 Meeting with the NSW Rural Fire Service.

A meeting between Mr. Dan Copland of the NSW Rural Fire Service and Graham Swain, Managing Director, Australian Bushfire Protection Planners Pty Ltd took place on the 8th December and resolved the following matters in relation to bushfire protection measures to the proposed rural residential subdivision:

1. That due to the low bushfire risk from the grassy woodland vegetation on the adjoining rural properties there will be not requirement to provide a perimeter road to the northern and western boundaries of the development site;
2. There will be not requirement to provide a perimeter fire trail in lieu of the perimeter road as access is available across each of the proposed lots.
3. The access road from Gunning Road shall link to Biala Street to provide a two-way through public road which meets the deemed-to-satisfy provisions of Section 4.1.3(1) of *Planning for Bushfire Protection 2006*.

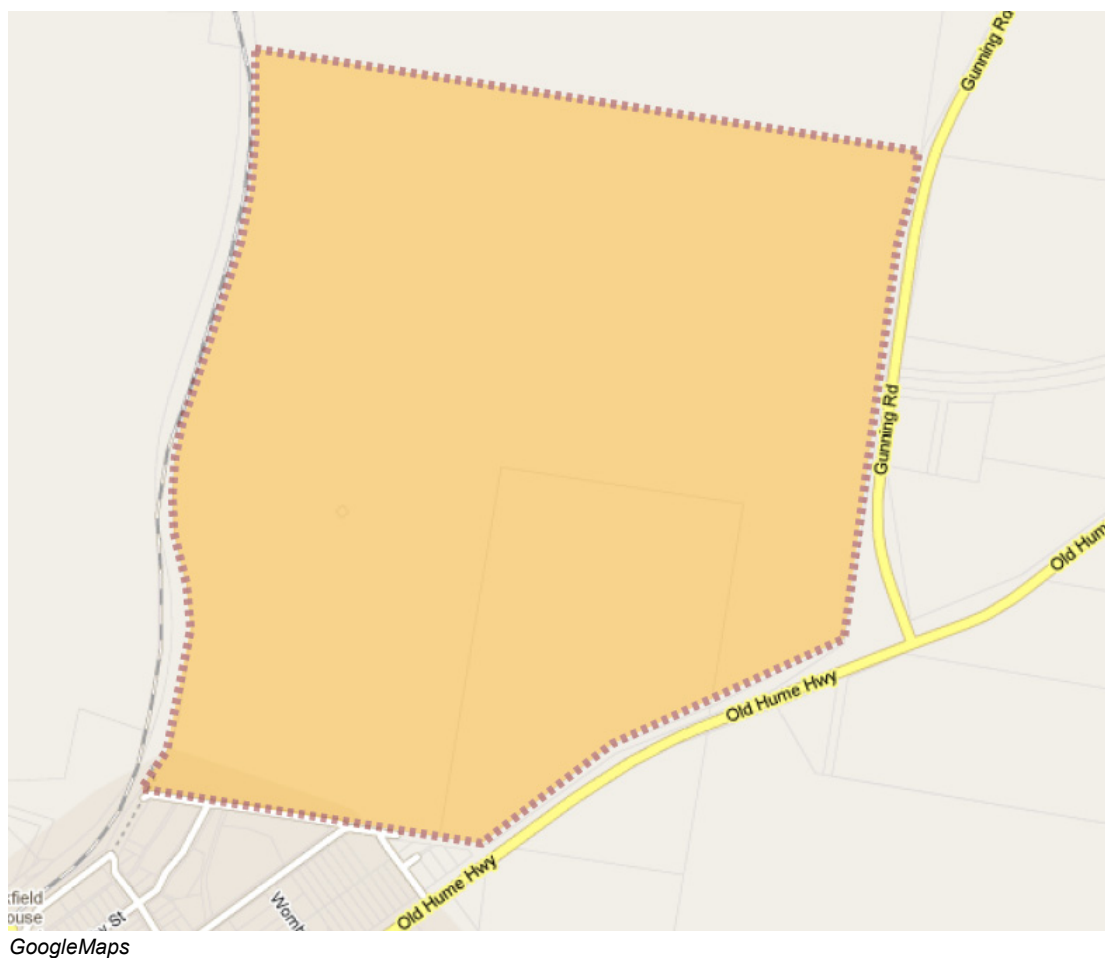
SECTION 2

PROPERTY DESCRIPTION

2.1 Location.

The property over which the proposed subdivision is planned is known as Lot 1 in DP 815478, The Old Hume Highway, Gunning and contains approximately 224 hectares of agricultural land on the northern side of The Old Hume Highway, opposite the intersection of The Old Hume Highway and Gunning Road. The eastern boundary adjoins the Gunning Road reserve whilst the western boundary is formed by the Main Southern Railway Line

Figure 3 – Site Location Plan.



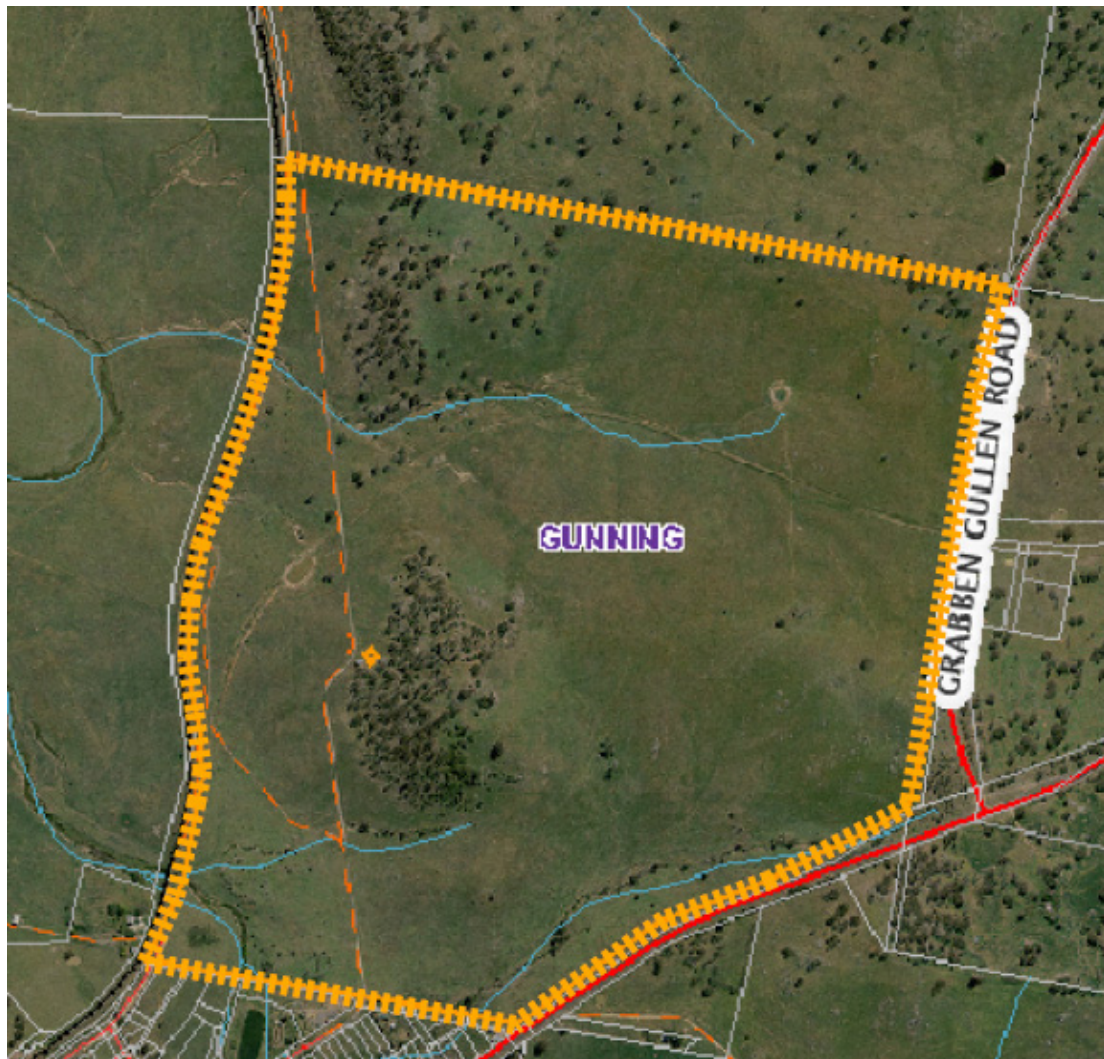
2.2 Existing Land Use.

The development site is vacant and is currently used for grazing.

2.3 Surrounding Land Use.

The landuse to the north, east, southeast and west of the development site consists of agricultural grazing/farming land. The land to the south of the development site contains existing residential development within the Gunning Township.

Figure 5 – Aerial Photograph of Lot 1 in DP 815478 & adjoining landuse.



2.4 Topography.

Appendix 2 of *Planning for Bushfire Protection 2006* states that slopes should be assessed, over a distance of at least 100m from a development site and that the gradient of the land should be determined which will most significantly influence the fire behaviour to the site.

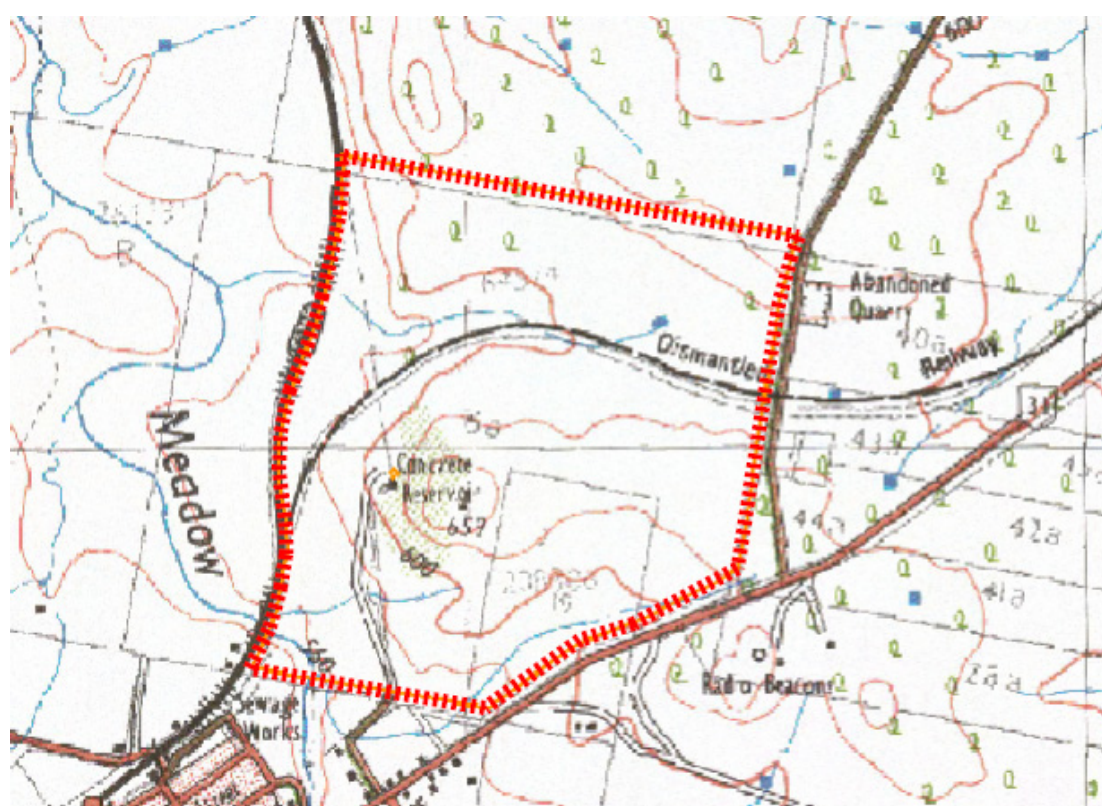
The land within the development site consists of level land within the eastern portion of the site, falling to the west and southwest into the tributaries to Meadow Creek which flows across the south-western corner of the site passing under the Main Southern Railway Line.

The topography of the land within the western portion of the site is dominated by a knoll which rises to RL 640 metres with the land falling to the north, west, southwest and southeast into the tributaries. The gradient to these slopes ranges from 8 – 11 degrees.

The land beyond the development site to the north is level and falls to the northeast beyond Gunning Road at less than one [1] degree. The land to the southeast of the development site rises at < 8 degrees to a low knoll located to the southeast of the intersection of the Old Hume Highway/Gunning Road intersection.

The residential land to the south of the development site falls to the southwest at less than 5 degrees whilst the agricultural land to the west of the Moan Southern Railway Line falls to the west into Meadow Creek at less than 3 degrees.

Figure 6 – Topographic Map.



SixViewer

2.5 Vegetation.

Appendix A2.3 of *Planning for Bushfire Protection 2006* provides a methodology for determining the predominant bushfire prone vegetation for at least 140 metres in all directions from the development on the site.

Vegetation is classified using Table A2.1 of *Planning for Bushfire Protection 2006*, which classifies vegetation types into the following groups:

- (a) *Forests [wet & dry sclerophyll forests];*
- (b) *Woodlands;*
- (c) *Plantations – being pine plantations not native plantations;*

- (d) *Forested Wetlands;*
- (e) *Tall Heaths;*
- (f) *Freshwater Heaths;*
- (g) *Short Heaths;*
- (h) *Alpine Complex;*
- (i) *Semi – arid Woodlands;*
- (j) *Arid Woodlands; and*
- (k) *Rainforests.*

2.5.1 Vegetation within the Development site.

The vegetation within Lot 1 in DP 815478 consists of grazed grassland with pockets of grassy Woodland occupying the land on the knoll and within the north-western corner of the site.

2.5.2 Vegetation within 140 metres of the Development Site.

The predominant vegetation on the rural lands to the north, east, southeast and west of the development site consists of grassland or open grassy woodland.

Except for the retained grassy woodland within proposed Lots 3 and 7 and future Lots 16 & 17 the predominant vegetation within the future dwellings on the lots created by the subdivision is grassland. The rehabilitated riparian corridors to the Meadow Creek tributaries will contain grassy woodland vegetation.

2.6 Site Photographs.

Photograph No. 1 – View looking northwest from Gunning Road across the farming land to the north of the development site showing open grassland with scattered trees.



Photograph No. 2 – View taken looking northeast across Gunning Road showing open grassland with scattered trees on the farming land to the east of the development site.



Photograph No. 3 – View looking west from Gunning Road across the development site.



Photograph No. 4 – View looking west & northwest from knoll within the development site showing the open grazing farmland – the Main Southern Railway Line runs across the centre of the photograph and represents the western boundary of the development site.



Photograph No. 5 – View looking north from knoll within the development site showing the open grazing farmland, the Main Southern Railway Line, internal farms track that follows the water line easement, the vegetated knoll in the north-western corner to the development site and the northern tributary to Meadows Creek.



Photograph No. 6 – View looking south from knoll within the development site showing the township of Gunning located to the south of the development site.



2.7 Significant Environmental Features within the Development Site.

The land within the development site does not contain significant environmental features such as SEPP 14 Wetland; SEPP 44 Koala Habitat; SEPP 26 Littoral Rainforests; land slip areas; National Parks Estate; areas of geological interest. The development site contains the riparian corridor to the tributaries of Meadows Creek.

2.8 Known Threatened Species, Population or Ecological Community within the Development Site.

The development site contains Yellow Box/Brown Box Woodland which is classified as an Endangered Ecological Community.

The construction of a future dwelling on proposed Lot 3, Lot 7 and the future Lots 16 & 17, being the proposed lots which contain this vegetation, will not impact on this vegetation community.

2.9 Details and location of Aboriginal Relics or Aboriginal Place.

No Aboriginal relics or Aboriginal places are known to be located within the development site.

SECTION 3

FIRE MANAGEMENT RESPONSIBILITIES

Fire management within and adjoining the development site is the responsibility of:

3.1 Upper Lachlan Shire Council City Council.

Upper Lachlan Shire Council Shire Council, being a local authority, has responsibility, under Section 100E(1) of the *Rural Fires Act 1997 [as amended]*, to issue a notice in writing requiring an owner / occupier of private land within the LGA to carry out bushfire hazard reduction on that land.

3.2 New South Wales Rural Fire Service.

The NSW Rural Fire Service (RFS) has the responsibility for undertaking fire suppression activities, hazard management activities and other functions relative to emergency management, within its areas of operation. *Section 73* of the *Rural Fires Act (1997)* enables the Commissioner to carry out bush fire hazard reduction works on any land as required by a bush fire risk management plan if the work has not been carried out satisfactorily. Incurred costs can be recovered as a debt owed to the Crown.

3.3 Fire & Rescue New South Wales.

The Fire & Rescue NSW has the responsibility for undertaking fire suppression activities, and other functions relative to emergency management, within its area of operation and through Mutual Aid Agreements, provide assistance to the NSW Rural Fire Service, particularly for structural fire operations within the NSW Rural Fire Brigade Districts. Hazmat management within New South Wales is the responsibility of the Fire & Rescue NSW.

3.4 Upper Lachlan Shire Council Bushfire Management Committee.

Upper Lachlan Shire Council Bushfire Management Committee has the responsibility for planning for coordinated fire fighting activities / hazard management activities on a local government level. It is not an operational organization, a fire fighting organization or a funding source for fire management activities.

The Bush Fire Management Committee is supported by the following provisions of the Rural Fires Act 1997:

- **Section 52** requires each Bush Fire Management Committee to prepare a draft bush fire management plan for their local areas which includes a plan of operations and a bush fire risk management plan.
- **Section 54** of the Act specifies that a draft bush fire risk management plan is to 'set out schemes for the reduction of bush fire hazards in the rural fire district or other part of the State'.

A draft bush fire risk management plan may also restrict or prohibit the use of fire or other fire hazard reduction activities in all or specified circumstances or places to which the plan applies.

3.5 Public Authorities & owners/occupiers of land.

The Rural Fires Act, 1997 provides several legislative opportunities to require Public Authorities, land owners and occupiers to manage hazardous fuels. These are listed below:

- **Section 63(1)** states that it is the duty of a public authority to take any practicable steps to prevent the occurrence of bushfires on, and to minimise the danger of the spread of a bushfire on or from:
 - (a) any land vested in or under its control or management, or*
 - (b) any highway, road, street, land or thoroughfare, the maintenance of which is charged on the authority.*
- **Section 63(2)** states that *'it is the duty of the owner or occupier of land to take the notified steps (if any) and any other practicable steps to prevent the occurrence of fires on, and to minimise the danger of the spread of fires on or from that land'.*
- **Section 65A** states that the *'Commissioner may nominate a member of the Service as a hazard management officer'.*
- **Section 65(2)** states that *'an authorised person may, with the permission of the fire fighting authority or other authority responsible for unoccupied Crown land or managed land or a person nominated by the authority to give such permission, enter the land and carry out bushfire hazard reduction work with the assistance of such other persons as the authorised person considers to be necessary for the purpose'.*
- **Section 65(3)** states that *'the authority responsible for unoccupied Crown land or managed land is to be taken to have given the permission under this section to the extent necessary to give effect to a bushfire risk management plan'.*
- **Section 65(4)** states that *'if permission under this section is given subject to conditions, the conditions must be complied with'.*
- **Section 66(1)** states that *'a hazard management officer may, by notice in writing, require the owner or occupier [not being a public authority] of any land to carry out bushfire hazard reduction work specified in the notice on the land'.*

- **Section 66(2)** states that *'a hazard management officer must serve a notice under this section if required to do so by a bushfire risk management plan applicable to the land that is in force'*.
- **Section 66(3)** states that *'a hazard management officer must issue a bushfire hazard reduction certificate in respect of any bushfire hazard reduction work required by a notice issued in accordance within section (2)'*.
- **Section 66(6)** states that *'the requirements and conditions so specified must include any requirements in a bushfire risk management plan that is applicable to the land and is in force and may include a requirement or condition that the burning of fire breaks or of combustible material;*

(a) must in fire district constituted under the Fire Brigades Act 1989 be carried out by or under the supervision of the fire brigade or an officer in charge of the fire brigade;

(b) must outside a fire district, be carried out by or under the supervision of the rural fire brigade specified in the notice or an appropriate officer of the rural fire brigade or any hazard management officer.

- **Section 66(7)** states that *'a notice requiring the establishment of a firebreak cannot require an occupier or owner to kill or remove any trees that are reasonably necessary for shade, shelter, windbreak or fodder purposes or the protection of threatened species, populations, ecological communities or critical habitats within the meaning of the 'Threatened Species Conservation Act 1995'.*
- **Section 66(8)** states that *'an occupier or owner to whom a bushfire hazard reduction notice is given must, despite the fact that a fire permit has not been granted under Division 5, comply with the requirements specified in the notice'.*
- **Section 70(2)** states that *'if within the time specified in the relevant notice the owner or occupier to whom it is given fails to comply with any requirement of the notice, the Commissioner may, without prejudice to liability of the owner or occupier, enter on the land and carry out the bushfire hazard reduction work the owner or occupier was required to do under the notice'.*
- **Section 70(3)** states that *'any costs incurred by the Commissioner in carrying out such work may be recovered from the owner or occupier of the land as a debt due to the Crown in a court of competent jurisdiction'.*
- **Section 87** allows the removal of hazards in the bush fire danger period by the provision of a permit system. The permits are valid for 21 days, excluding TOBAN [Total Fire Ban] days.

Section 10 permits are not required to adhere to *Part V* provisions of the EPA Act 1979 in the assessment of impact, except for public authorities. An owner/occupier of private land must obtain from the NSW Rural Fire Service, a bushfire hazard reduction certificate before undertaking hazard reduction works on that land (Section 100E of the *Rural Fires Act 1997*).

3.6 Bushfire Hazard Management within the development site.

The development site is grazed and this management practice will continue within the proposed new lots created by the subdivision of the land.

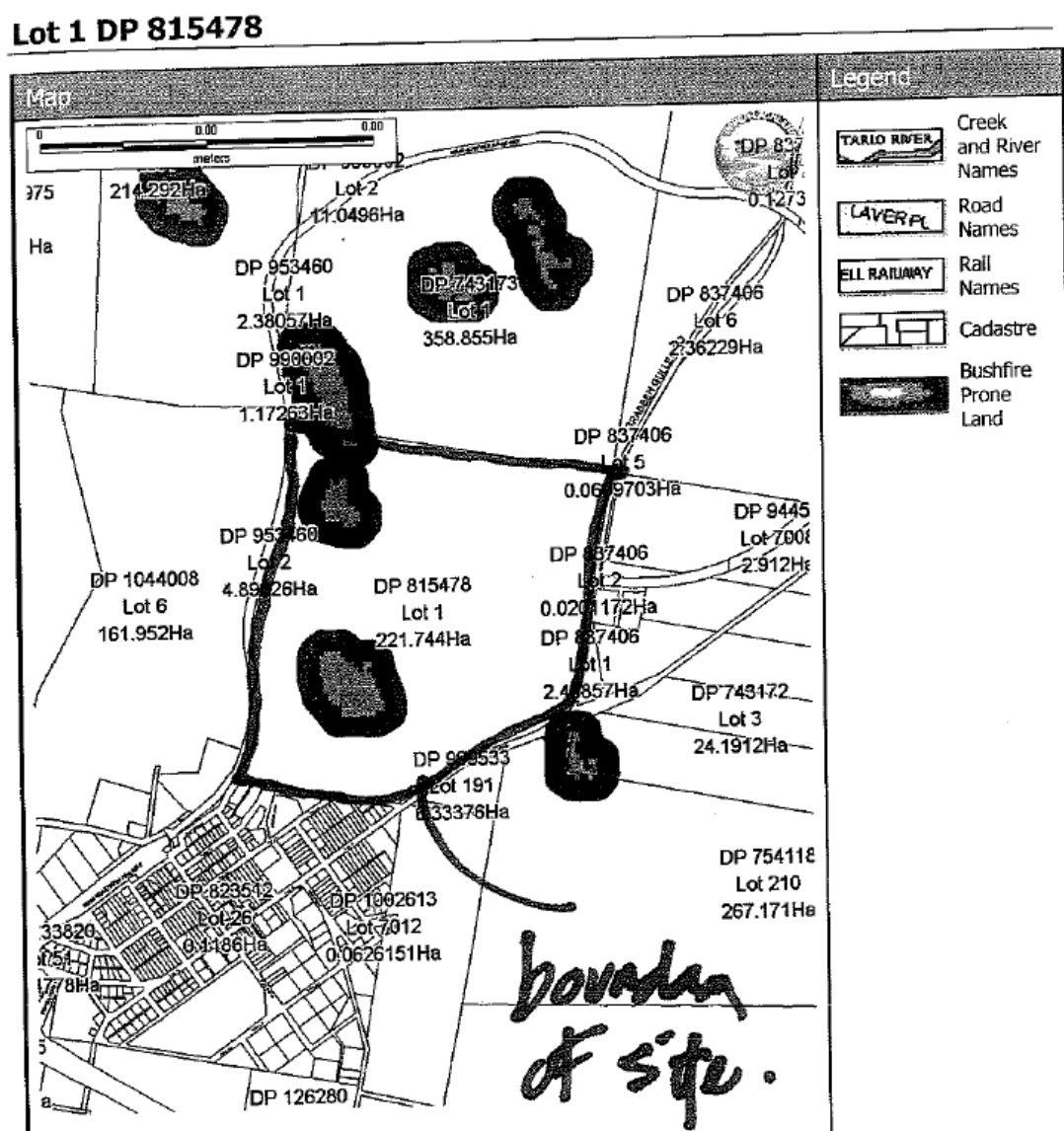
SECTION 4

PRECINCT LEVEL ASSESSMENT

4.1 Certified Bushfire Prone Land Map

The following Figure 7 is a copy of an extract of the Certified Upper Lachlan Shire Council Bushfire Prone Land Map showing the extent of the Category 1 Bushfire Prone Vegetation recorded as being on the development site.

Figure 7 – Plan of Bushfire Prone Land Map.



The Upper Lachlan Shire Council Bushfire Prone Land Map accurately records the extent of the Category 1 Bushfire Prone Vegetation within the development site and on the adjoining land to the north.

SECTION 5

BUSHFIRE PROTECTION ASSESSMENT

5.1 Introduction.

Section 44 of the *Rural Fires Regulation 2008* requires that an application for a *Bushfire Safety Authority*, for development which is shown to be located in a bushfire prone area, must include a bushfire assessment for the proposed development (including the methodology used in the assessment) that addresses the extent to which the development provides:

- *asset protection zones,*
- *the siting and adequacy of water supplies for fire fighting operations,*
- *capacity of public roads to handle increased volumes of traffic during a bushfire emergency,*
- *whether or not public roads link with the fire trail network and have two way access,*
- *the adequacy of access and egress for the purposes of emergency response,*
- *the adequacy of bushfire maintenance plans and fire emergency procedures,*
- *the construction standards to be used for building elements.*

Planning for Bushfire Protection 2006 provides a methodology to determine the Asset Protection Zones required for habitable buildings in Rural Residential subdivisions that are designated as bushfire prone. Section 5.2 examines these requirements for the proposed subdivision. *Planning for Bushfire Protection 2006* and Australian Standard A.S. 3959 – 2009 provide a methodology to determine the construction standards to dwellings erected within 100 metres of Bushfire Prone Vegetation.

Section 5.3 of this report uses the methodology provided by *Planning for Bushfire Protection 2006* and A.S. 3959 - 2009 to determine the Asset Protection Zones and construction standards required for the construction of the dwellings on the lots created in the proposed subdivision.

The remaining items identified by Section 44 of the *Rural Fires Regulation 2008* are examined in Sections 5.4 – 5.9 of this report.

5.2 Determination of Asset Protection Zones.

Appendix 2 of *Planning for Bushfire Protection 2006* provides the following procedure for determining setback distances (Asset Protection Zones):

- (a) *Determine vegetation formations as follows:*
 - Identify all vegetation in all directions from the site for a distance of 140 metres;
 - Consult Table A2.1 to determine the predominant vegetation type; and
 - Select the predominant vegetation formation as described in Table A2.1.
- (b) *Determine the effective slope of the land under the predominant vegetation Class;*
- (c) *Determine the appropriate fire [weather] area in Table A2.2;*
- (d) *Consult Table A2.5 and determine the appropriate setback [Asset Protection Zone] for the assessed land use, vegetation formation and slope range.*

Proposed Lots 2 & 8; Lot 9; Lots 10 – 14 and Lots 19 – 21 contain grassland vegetation which is not deemed to be bushfire prone vegetation and therefore there is no statutory requirement to provide Asset Protection Zones to the future dwelling erected on these lots. However, it is recommended that a minimum 30 metre wide managed curtilage be provided to all aspects of the future dwellings.

Lot 1, Lots 4 – 6; Lots 15 & 16 and Lot 18 contain the riparian corridor to the tributaries of Meadow Creek. These riparian corridors will contain rehabilitated grassy woodland vegetation on land which may have an effective slope of not more than 5 degrees. *Planning for Bushfire Protection 2006* requires that in this situation an Asset Protection Zone of minimum 15.0 metres to be provided between the unmanaged grassy woodland vegetation and the future dwelling. However, it is recommended that a minimum 30 metre wide managed curtilage be provided to all aspects of the future dwellings on these allotments.

Lots 3, 7 & 9 and Lots 16 & 17 contain larger areas of retained grassy woodland vegetation and therefore it is recommended that a minimum 30 metre wide managed curtilage be provided to all aspects of the future dwellings in order to reduce the potential risk from a fire occurrence in this vegetation.

5.3 Assessment of Bushfire Attack (Construction Standards).

The 2010 amendment of Appendix 3 of *Planning for Bushfire Protection 2006* provides the following procedure for determining bushfire attack on a building within a designated bushfire prone area:

- (a) Determine vegetation formation types and sub-formations around the building as follows:
 - (i) Identify all vegetation types within 140 metres of the site using Keith [2004];
 - (ii) Classify the vegetation formations as set out in Tables A2.1 in Appendix 2; and
 - (iii) Convert Keith to Specht classifications using Table A3.5 of Appendix 3 [2010].
- (b) Determine the separation distance between each vegetation formation and the structure;
- (c) Determine the effective slope of the ground for each vegetation group;
- (d) Determine the relevant Fire Danger Index [FDI] for the Council area from Table A2.3 in Appendix 2;
- (e) Match the relevant FDI, appropriate vegetation, distance and effective slope to determine the bushfire attack levels using the relevant tables of a.s.3959 – 2009 as indicated below:
 - (i) FDI 100 – Table A2.4.2;
 - (ii) FDI 80 – Table A2.4.3; and
 - (iii) FDI 50 – Table A2.4.4.

There are four levels of bushfire construction with deemed-to-satisfy arrangements accepted by the NSW Rural Fire Service. These are BAL 12.5; BAL 19; BAL 29 and BAL 40 as defined by A.S 3959 – 2009.

Where more than one facade is exposed to a hazard, then the highest construction is required to that facade with the other facades being constructed to a level lower than the highest determined level of construction.

For those lots not containing bushfire prone vegetation – i.e. Lot 2, Lot 8, Lot 9, Lot 10 – 14 and Lots 18 – 21, there is no requirement to address the provisions of the Building Code of Australia in respect to bushfire construction standards. However, in order to reduce the risk of ember ignition to the future dwellings/buildings, all structures shall be designed and constructed to have a minimum level of protection in accordance with BAL 12.5, pursuant to A.S. 3959 – 2009.

For those lots that contain bushfire prone vegetation or that may contain future bushfire prone vegetation – i.e. Lot 1, Lots 3 – 7 and Lots 15 – 17, there is a requirement to address the provisions of the Building Code of Australia in respect to bushfire construction standards.

These provisions will be determined as part of the development application for the construction of the future dwellings in order to address the provisions of Section 79BA of the *Environmental Planning & Assessment Act 1979*.

The recommendation that a managed curtilage of 30 metres be provided to each of the future dwellings has been assessed to determine the likely bushfire construction standards to the dwellings erected on Lot 1, Lots 3 – 7 and Lots 15 – 17. The assessment has determined that for Grassy Woodland vegetation on an effective slope of not more than 5 degrees the radiant heat rating is less than 19 kW/m².

Therefore it is recommended that the buildings erected on Lot 1, Lots 3 – 7 and Lots 15 – 17 shall be constructed to comply with BAL 19 standards as defined by A.S. 3959 – 2009.

5.4 Water Supplies for Firefighting Operations.

The future dwellings in the proposed subdivision of the land will be connected to a communal water supply fed from bores or dams. In order to provide a guaranteed water supply for fire-fighting operations it is recommended that a minimum 10,000 litre static water supply be provided to each dwelling.

The static water supply shall be stored in a concrete or steel tank fitted with a 65mm outlet complete with a 65mm Ball Valve, Stortz Coupling and Blanking Cap. The tank shall be located no closer than 10 metres from the dwelling and be accessible from the access road to the future dwelling with a gravel hardstand provided within 4.0 metres of the tank.

It is also recommended that the static water supply be connected to at least one 30m x 19mm I.D fire hose reel, via a diesel powered pump. The fire hose reel/s shall be installed in a location/s which provides coverage to the external walls of the dwelling.

A Static Water Supply [SWS] sign shall be provided at the entry gate to each property.

5.5 Access for Fire Fighting Operations.

5.5.1 Public Roads:

The subdivision of the land within Lot 1 in DP 815478 will create allotments which will be accessed directly off the public through road and short cul-de-sac roads.

These new roads shall be designed and constructed to comply with the deemed-to-satisfy provisions of Section 4.1.3(1) of *Planning for Bushfire Protection 2006* and shall have a minimum paved width of 6.5 metres with compacted gravel shoulders to provide a trafficable width of 8.0 metres, capable of carrying a 24 tonne [GVM] Bulk Water Tanker.

5.5.2 Emergency Response Access / Egress.

Direct emergency response and fire-fighting access to the proposed lots is available from the new public road network via future private access roads.

The entry driveway to the new lots shall be designed, by recessing the entry gate to each lot, to provide a “T” turning area for heavy rigid trucks [Fire Appliances].

The new access driveways shall be designed and constructed to comply with Section 4.1.3(2) of *Planning for Bushfire Protection 2006*. The road width shall be a minimum of 4.0 metres with an additional one [1] metre to both sides kept clear of grasses and shrubs. The surface of the private access roads shall be capable of carrying a vehicle of 15 tonnes GVM with passing bays provided at 200 metre intervals.

An all weather turning/hardstand area shall be provided adjacent to the dwelling and within 4.0 metres of the static water supply tank.

5.6 Adequacy of Bushfire Maintenance Plans and Fire Emergency Procedures.

It is recommended that the future owners of the proposed lots in the subdivision prepare a Bushfire Maintenance Plan and also a Bushfire Survival Plan. The Bushfire Maintenance Plan shall examine the requirement necessary to maintain the land within each of the lots to minimise the chance of ignition of the grassland vegetation and the spread of fire across the landscape.

5.7 Bushfire Hazard Management.

Hazard reduction programs aim to reduce the severity of a bushfire, by reducing the amount of fuel (vegetation) available to burn during a bushfire.

This makes the bushfire easier to control and reduces the level of bushfire damage to community and environmental / ecological assets. Hazard reduction burning is the most common way to reduce the bushfire hazard, as it is the most cost-effective method available. However, other methods of hazard reduction such as slashing or mowing, grazing or hand clearing are used when appropriate, particularly within the Asset Protection Zones.

Hazard reduction must be conducted with due regard to the principles of Ecologically Sustainable Development (ESD).

It is important to recognise that situations may arise where the necessary objectives for life and property protection are in conflict with ESD objectives. Wherever possible, solutions which achieve both life/property protection and ESD principles will be sought.

5.7.1 Management Responsibilities.

The Rural Fires Act, 1997 provides several legislative opportunities to require land owners and occupiers to manage hazardous fuels.

Section 63(2) states that *'it is the duty of the owner or occupier of land to take the notified steps (if any) and any other practicable steps to prevent the occurrence of fires on, and to minimise the danger of the spread of fires on or from that land'*.

In this section; '*notified steps*' means:

- (a) any steps that a bush fire risk management plan (or the Co-ordinating Committee) advises a person to take;
- (b) that are included in a bush fire risk management plan applying to the land.

Section 87 allows the removal of hazards in the bush fire danger period by the provision of a permit system.

The permits are valid for 21 days, excluding TOBAN days. Section 10 permits are not required to adhere to the *Part V* provisions of the EPA Act 1979 in the assessment of impact, except for public authorities.

An owner / occupier of private land must obtain from the NSW RFS/local authority a bushfire hazard reduction certificate before undertaking hazard reduction works on that land (Section 100E of the *Rural Fires Act 1997*).

5.7.2 Fuel Management.

A diligent approach to the management of fuel levels is required to lands within the subdivision precinct and the management of the 30.0 metre wide curtilage to each building shall comply with the recommendations of Appendix 5 of *Planning for Bushfire Protection 2006* and the NSW Rural Fire Service document '*Specifications for Asset Protection Zones*' – copy attached as Appendix A.

Management of the curtilage to the future dwellings, to the widths as nominated in this report shall comply with the following:

- Minimal fine fuel loading at ground level (nominally 3 tonnes / hectare);
- Fuels are discontinuous to avoid transfer of fire to the development from fires burning in the adjoining vegetation;
- Trees and shrubs are acceptable provided that they are spread out and do not form a continuous canopy, are not species that retain dead material and are located away from the buildings to minimize radiant heat and direct flame attack;
- In grassland vegetation, fuel (dry material such as cured grasses) shall be maintained to a maximum height of 150mm.

An 88B covenant shall be applied to the title of the proposed lots to ensure the long term maintenance of the Asset Protection Zones / managed curtilage and vegetated areas within each lot.

5.8 Evacuation.

Evacuation of residents living in the subdivision may be required due to the potential for fire over-run through the vegetation to the northeast, north, northwest, west and southwest of the development site. In the event that evacuation is deemed necessary, occupants of the future dwellings in the proposed subdivision can relocate to the safety of the Gunning Township via the new public road.

5.9 Adequacy of Sprinkler Systems & other Fire Protection Measures.

There are no sprinkler systems required or recommended.

5.10 Staged Development.

The subdivision design provides for the works to be undertaken in stages with Stage 1 containing rural residential Lots 1 – 8 with a residual lot [Lot 9] and later stages containing rural residential Lots 9 – 21.

In order to address the bushfire protection measures to the Stage 1 precinct the recommendations in this report which relate to the provision of a managed curtilage to the dwellings; bushfire construction standards to buildings; water supply for fire-fighting operations and road design and construction standards shall prevail.

In addition to these recommendations the following shall apply:

1. A temporary access link/fire trail shall be constructed, within the carriageway of the future road extension, to link the temporary terminus of the new public road to Gunning Road;

2. There shall be provided a temporary managed fire break of 50.0 metre width on the land to the northeast of the Stage 1 boundary. This fire break shall be provided by either grazing or slashing the land so as to maintain a cured grass height of not more than 150mm.

SECTION 6

RECOMMENDATIONS

Recommendation 1:

Asset Protection Zones:

A minimum 30 metre wide managed curtilage [Asset Protection Zones] shall be maintained to all aspects of each future dwelling/building.

The remainder of the land within the proposed lots shall be managed as an Outer Protection Area [OPA] to minimise the build-up of combustible ground fuel [except for the retained vegetation within the riparian corridor/retained vegetation].

Grassland vegetation shall be maintained to a maximum height of 150mm during the defined Bushfire Danger Period [1st October – 30th March unless otherwise declared].

Recommendation 2:

Management of Asset Protection Zones:

Management of the curtilage to the future dwellings/buildings, to the widths as nominated in this report, shall comply with the following:

- Minimal fine fuel loading at ground level (nominally 3 tonnes / hectare);
- Fuels are discontinuous to avoid transfer of fire to the development from fires burning in the adjoining vegetation;
- Trees and shrubs are acceptable provided that they are spread out and do not form a continuous canopy, are not species that retain dead material and are located away from the buildings to minimize radiant heat and direct flame attack.
- In grassland vegetation, fuel (dry material such as cured grasses) shall be maintained to a maximum height of 150mm.

Recommendation 3:

Easement for the Management of the Asset Protection Zone/residue land:

An 88b covenant shall be created on the title of the future lots created in the subdivision to ensure the ongoing management of the Asset Protection Zone/managed curtilage and the residue vegetation.

Recommendation 4:***Construction Standards to the future dwellings:***

The application of the bushfire construction standards, in accordance with Australian Standard AS3959 - 2009 shall apply to the future dwellings/buildings. The minimum bushfire construction standard to the future buildings shall be BAL 12.5.

The buildings erected on Lot 1, Lots 3 – 7 and future Lots 15 – 17 shall be constructed to comply with BAL 19 standards as defined by A.S. 3959 – 2009.

Recommendation 5:***Public Access Roads:***

Public access roads within the development shall be constructed to comply with the specifications of Section 4.1.3(1) of *Planning for Bushfire Protection 2006*. The minimum sealed pavement width shall be 6.5 metres with compacted gravel shoulders to provide a trafficable width of 8.0 metres, capable of carrying a 24 tonne [GVM] Bulk Water Tanker.

Recommendation 6:***Private Access Roads:***

The entry driveway to the new lots shall be designed, by recessing the entry gate to each lot, to provide a “T” turning area for heavy rigid trucks [Fire Appliances].

The new access driveways shall be designed and constructed to comply with Section 4.1.3(2) of *Planning for Bushfire Protection 2006*. The road width shall be a minimum of 4.0 metres with an additional one [1] metre to both sides kept clear of grasses and shrubs. The surface of the private access roads shall be capable of carrying a vehicle of 15 tonnes GVM with passing bays provided at 200 metre intervals.

An all weather turning/hardstand area shall be provided adjacent to the dwelling and within 4.0 metres of the static water supply tank.

Recommendation 7:***Water supply for Fire-fighting operations:***

A minimum 10,000 litre static water supply shall be provided to each dwelling.

The static water supply shall be stored in a concrete or steel tank, located no closer than 10 metres from the dwelling, and fitted with a 65mm outlet complete with a 65mm Ball Valve, Stortz Coupling and Blanking Cap. It is also recommended that the static water supply be connected to at least one 30m x 19mm I.D fire hose reel, via a diesel powered pump. The fire hose reel/s shall be installed in a location/s which provides coverage to the external walls of the dwelling.

A Static Water Supply [SWS] sign shall be provided at the entry gate to each property.

Recommendation 8:

Bushfire Maintenance Plans and Fire Emergency Procedures:

It is recommended that the future owners of the proposed lots in the subdivision prepare a Bushfire Maintenance Plan and also a Bushfire Survival Plan. The Bushfire Maintenance Plan shall examine the requirement necessary to maintain the land within each of the lots to minimise the chance of ignition of the grassland vegetation and the spread of fire across the landscape.

Recommendation 9:

Staged Development:

In addition to the recommendations listed above the following shall apply to Stage 1 of the proposed subdivision:

1. A temporary access link/fire trail shall be constructed, within the carriageway of the future road extension, to link the temporary terminus of the new public road to Gunning Road;
2. There shall be provided a temporary managed fire break of 50.0 metre width on the land to the northeast of the Stage 1 boundary. This fire break shall be provided by either grazing or slashing the land so as to maintain a cured grass height of not more than 150mm.

SECTION 7

CONCLUSION

Australian Bushfire Protection Planners Pty Limited, at the request of *CB Richard Ellis*, has undertaken the bushfire consultancy on the proposed subdivision of the land within Lot 1 in DP 815478, The Old Hume Highway, Gunning.

The development proposal creates one into twenty one [21] lots with access directly off a new internal public road network which links Gunning Road to Biala Street within the Gunning Township.

Upper Lachlan Shire Council Bushfire Prone Land Map records the pockets of grassy woodland vegetation within the site as Category 1 Bushfire Prone Vegetation. In addition, further bushfire prone vegetation may occur within the rehabilitated riparian corridors to the tributaries of Meadow Creek, potentially increasing the extent of unmanaged bushfire prone vegetation within the site.

This report therefore examines the extent of the bushfire prone vegetation adjacent to and within the development site and confirms:

- Proposed Lots 2, 8 and future Lots 10 – 14 and Lots 18 - 21 do not contain vegetation which is deemed-to-be bushfire prone vegetation and therefore the future dwellings and ancillary buildings do not require the provision of bushfire protection measures. However, this report recommends a suite of measures, including the provision of a managed curtilage and construction standards to the buildings which are designed to mitigate the risk from grass fire events within and external to the subdivision;
- Proposed Lot 1, Lots 3 – 7 and future Lots 15 – 17 contain grassy woodland vegetation or riparian corridors which will potentially contain unmanaged grassy woodland vegetation;
- The siting of the future dwellings/ancillary buildings on proposed Lot 1, Lots 3 – 7 and future Lots 15 – 17 will be determined as part of the future application for the construction of the building however a minimum width of 30 metres has been recommended as managed curtilage to all buildings and construction standards to the buildings which are designed to mitigate the risk from grass fire events within and external to the subdivision;
- Hazard management can be undertaken of the landscape within each of the proposed lots in accordance with the prescriptions of Appendix 5 of *Planning for Bushfire Protection 2006* and the NSW Rural Fire Service's – '*Specifications for Asset Protection Zones*'; and

- The design of the proposed subdivision adequately addresses the requirements of *Planning for Bushfire Protection 2006* in respect to:
 - The provision of complying setbacks [APZs] from bushfire prone vegetation;
 - Access for fire-fighting operations;
 - Water supplies for fire-fighting operations;
 - Landscape Management;
 - Construction standards to future buildings; and
 - Emergency management.

The development proposal and the recommendations contained within this report also address the requirements of Section 44 of the *Rural Fires Regulation 2008* as a prerequisite for the issue of a *Bushfire Safety Authority* under Section 100B (4) of the Rural Fires Act. The following table summarises the extent to which the proposed development conforms with or deviates from the requirements of Section 44 of the *Rural Fires Regulation 2008* and the deemed-to-satisfy specifications of *Planning for Bushfire Protection 2006*.

Table 1. Compliance with the deemed-to-satisfy provisions of *Planning for Bushfire Protection 2006*.

Bushfire Protection Measure	Compliance with deemed-to-satisfy provisions of <i>Planning for Bushfire Protection 2006</i>.
Asset Protection Zone setbacks	YES – Managed Curtilage/Defendable space recommended
Siting & adequacy of water supplies for firefighting operations	YES – Static water supply recommended.
Capacity of public roads to handle increased volumes of traffic in the event of a bushfire emergency	YES – The new public roads provide complying access for emergency service vehicles.
Public roads that link with the fire trail network have two – way access	No fire trail required
Adequacy of emergency response access and egress	YES – Emergency response to the future dwellings to comply with Section 4.1.3(2) of <i>Planning for Bushfire Protection 2006</i> .
Adequacy of bushfire maintenance plans and fire emergency procedures	A Bushfire Management Plan & Survival Plan is to be prepared by the future landowners.
Building construction standards	Minimum construction standards to the future dwellings / ancillary buildings shall be BAL 12.5. The buildings erected on Lot 1, Lots 6 – 7 and future Lots 15 – 17 shall be constructed to comply with BAL 19 standards as defined by A.S. 3959 – 2009.
Adequacy of sprinkler systems and other fire protection measures	Not applicable

The proposed development, as represented by the subdivision layout, complies with the “Deemed-to-Satisfy” specifications set out in Chapter 4 (Performance Based Control) and the aim and objectives of *Planning for Bushfire Protection 2006*.

REFERENCES:

- N.S.W Rural Fire Service – *Planning for Bushfire Protection 2006*;
- *Environmental Planning & Assessment Act – 1979*;
- *Rural Fires Act – 1997*;
- *Rural Fires Regulation 2008*;
- NSW Rural Fire Service – *Guideline for Bushfire Prone Land Mapping 2002*;
- *Bushfire Environmental Assessment Code 2003*;
- Australian Standard A.S 3959-2009 “*Construction of Buildings in Bushfire Prone Areas*”;
- Upper Lachlan Shire Council Bushfire Prone Land Map;
- SixViewer;
- NearMaps.

APPENDIX 2

**FLORA AND FAUNA ASSESSMENT
LAND NORTHEAST OF GUNNING
NEW SOUTH WALES**



prepared by

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10/44

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Cover Photograph:

View to the north from the top of the knoll in the central-western part of the land.

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1 Introduction

The study area is a large area of land immediately to the northeast of Gunning, on the Southern Tablelands of New South Wales. The land is currently used for sheep and cattle grazing and has largely been completely cleared of its original woodland vegetation. The purpose of this investigation is to identify the flora and fauna conservation values present on the land and provide advice on proposed subdivision of the land into large rural lots.

This preliminary report covers the following key matters:

- i. a description of the vegetation in the study area;
- ii. a description of the fauna habitats in the study area;
- iii. lists of the flora and fauna species observed in the study area at the time of the field surveys;
- iv. identification of significant features known or likely to occur on the land, particularly those matters listed under the *NSW Threatened Species Conservation Act 1995* and/or the *Commonwealth Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).
- v. based on the above, a discussion of constraints to subdivision of the land and advice on protecting identified features of importance.

2 Location and Character of the Study Area

The study area is a large parcel of land on the north-eastern edge of the town of Gunning; it is about 800 metres by 800 metres in extent; see **Figure 1**. The western side abuts the main southern railway, while the eastern side fronts Grabben Gullen Road. Except for two knolls in the western half of the land, it is gently undulating. The area has been cleared of its original woodland cover for many decades and has a long history of sheep and cattle grazing, its current use. An old railway embankment crosses the central part of the land from east to west.

The underlying geology is composed of granite-like rocks of the Wyangala Batholith. Watercourses occur in the south and in the central-north of the land. Drainage is to the west into Meadow Creek and then to the Lachlan River further to the north.

3 Survey Methods

Preliminary diurnal flora and fauna surveys were undertaken during a visit on 10 November 2010. Bearings were taken from a colour aerial photograph showing the extent of the study area. The extent of the land in question is obvious from the aerial photograph.

Flora

The main purpose of the flora survey was to classify and describe the vegetation, to map the distribution of the plant communities, to record as many as possible of the plant species present and to search for threatened plant species and identify significant vegetation types.

The vegetation survey techniques combined multiple traverses of the study area, with targeted searches where native vegetation was observed. During the current investigation, plant species found on the study area were sought throughout the land, with particular searches being carried out wherever indigenous plants were likely to be found. Both indigenous (native) and exotic (weed) species were identified and recorded.

Notes were made on the structure and condition of the vegetation, and the height and proportional coverage of each layer. The general description of each plant community is based largely on the data collected during these vegetation sampling surveys. The native vegetation occurring in the study area was marked onto a copy of the colour aerial photograph in the field.

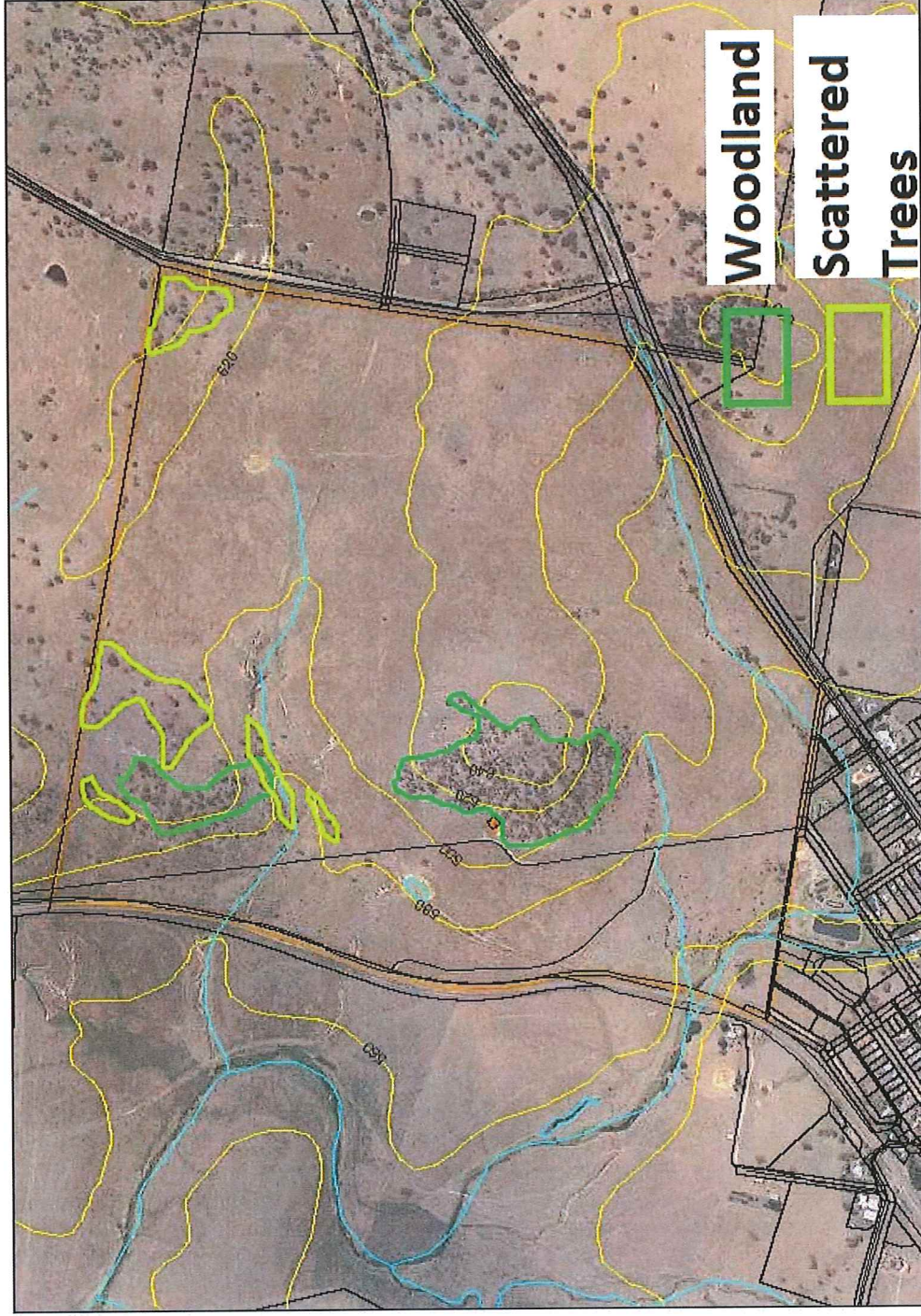


Figure 1. The Study Area at Gunning.

Fauna

Mammals were identified by sight and also involved a ground search for scats, tracks and diggings. No nocturnal surveys were carried out. The birds in the study area were also identified by sight and by interpreting their calls. Searches for reptiles were conducted wherever timber or other ground debris was encountered. Frogs in the study area were identified by interpreting their distinctive calls. A search was conducted for frogs in moist areas and habitat niches, especially under rocks, wood and debris. Notes were made on habitat features in the study area that were important for fauna.

Targeted Surveys

In addition to general flora and fauna surveys in the study area, the survey program carried out targeted surveys for threatened species habitat and listed threatened communities.

Definitions

The following definitions used in this report are widely accepted in the botanical literature; most of those relating to grasslands are largely from the report by Rehwinkel (1997).

Forest: a community of relatively closely spaced trees (projective foliage cover >30%) growing taller than 10 metres.

Woodland: a community of well spaced trees (projective foliage cover 10-30%) growing to a height of 4 to 30 metres.

Open Woodland: a community of scattered trees (projective foliage cover <10% growing to a height of 4 to 30 metres.

Grassland: vegetation dominated by grasses and forbs, with <10% tree and/or shrub cover.

Native Grassland: grassland with >50% of vegetation cover composed of indigenous species, >50% of all species are native, and the minimum vegetation cover, alive or dead, is >10%.

Natural Grassland: native grassland considered to have had <10% tree and/or shrub cover at the time of European settlement.

Secondary Grassland: a native grassland remaining after the removal or dieback of previously occurring trees and/or shrubs, where these occupied >10% cover.

Native Pastures: containing native and introduced species, where introduced species occupy >50%, but <75% of both cover and species present, where pasture species have often been mechanically sown.

Exotic Grassland: where >75% of species and cover are composed of introduced plants.

Sown Pasture: where the dominant plants are sown exotic species (>75% cover), usually fertilised land used for grazing (e.g. Ryegrass and Clover).

Cropland: a species that is sown, usually following ploughing, for commercial harvest (e.g. Wheat) or stock feed.

Natural Temperate Grassland: a threatened grassland community listed under the Commonwealth *Environment Protection and Biodiversity Conservation Act*. The Recovery Plan for Natural Temperate Grassland (Environment ACT 2006) provides the following information:

"The community is dominated by moderately tall (25-50cm) to tall (50cm – 1.0m), dense to open tussock grasses with up to 70% of the species being forbs. The community may be treeless or contain up to 10% cover of trees, shrubs or sedges. In the Southern Tablelands, Natural Temperate Grasslands are located at altitudes between 560 and 1200 metres in valleys influenced by cold air drainage and in broad plains. The community occurs within the geographical region of the Southern Tablelands of NSW and ACT, which extends southwards from the Abercrombie River to the Victorian Border, from Boorowa and Jindabyne to the west and Goulburn to Braidwood and Bombala to the east."

"Natural Temperate Grassland is a native ecological community that is dominated by native species of perennial tussock grasses. The dominant grasses are *Themeda triandra* [australis], *Austrodanthonia* species, *Bothriochloa macra* and *Poa* species. The upper canopy stratum generally varies in height from mid-high (0.25-0.5m) to tall (0.5-1.0m). There is also a diversity of native herbaceous plants (forbs), which may comprise up to 70% of species present. The community is naturally treeless or has less than 10% projective foliage cover of trees or shrubs in its tallest stratum. The ecological community that makes up

NTG-ST [Natural Temperate Grassland – Southern Tablelands] is defined by the vegetation structure thought to have been present at the time of European settlement."

4 Flora

4.1 Description of the Vegetation

The original vegetation covering the study area was woodland, as demonstrated by the remnants that exist on the land today. The whole area appears to have supported Yellow Box *Eucalyptus melliodora* - Blakely's Red Gum *Eucalyptus blakelyi* Woodland (Box-Gum Woodland). This Box-Gum Woodland/Open Woodland would have had a grassy understorey. Given the topography and obvious presence of a tree cover, Natural Temperate Grassland probably did not occur in the area.

Several stands of native vegetation occur in the study area; these are described below and their locations are shown on **Figure 1**.

Northern Knoll

This woodland contains mainly Yellow Box *Eucalyptus melliodora*, with some Blakely's Red Gum *Eucalyptus blakelyi* and Apple Box *Eucalyptus bridgesiana*. There is no native understorey and little native tree regeneration.

Southern Knoll

The trees present are mainly Blakely's Red Gum *Eucalyptus blakelyi*, with a few Yellow Box *Eucalyptus melliodora*. There is no native understorey and little native tree regeneration. The invasive shrub African Boxthorn *Lycium ferocissimum* is common.

Scattered Trees

The scattered trees shown on **Figure 1** are mainly near the northern woodland remnant. The main tree is Blakely's Red Gum *Eucalyptus blakelyi*, with occasional Yellow Box *Eucalyptus melliodora* and Candlebark *Eucalyptus rubida*. The understorey is completely exotic in all areas.

Watercourses

The vegetation associated with the watercourses is mainly exotic, although there are a few typical wetland species in the creeks, such as Cumbungi *Typha orientalis* and Rushes *Juncus* spp. There are also occasional native trees of the above species.

4.2 Plant Species Recorded

The plant species recorded in the study area are listed alphabetically under family name in **Appendix 1**. The list contains the names of indigenous species and exotic (introduced) species. No listed threatened plant species or rare species were found in the study area.

5 Fauna

5.1 Fauna Habitat

The fauna habitat in the study area is primarily exotic grassland that is used for grazing stock. The woodland patches noted above and the scattered trees provide some local habitat but the quality is poor, other than providing occasional tree hollows that are important for many species. Rocky areas are common on the two knolls.

5.2 Fauna Species Recorded

The fauna species recorded in the study area are listed in **Appendix 2**. This is a brief list compiled during the survey on 10 November 2010. Many other species would be present, although the habitats on the site are generally not of high value to native fauna.

6 Results of Threatened Species Surveys and Assessments

6.1 Threatened Plant Species

Threatened Plant Species

No threatened plant species were found in the study area. Given the level of field survey, the poor quality of the habitats there and the lack of records of such species locally, it is reasonable to assume that such species do not occur in the study area.

Box-Gum Woodland Listed Community

The vegetation survey identified and delineated remnant woodland and scattered trees in the study area; see **Figure 1**. These are remnants of the listed community known as White Box - Yellow Box - Blakely's Red Gum Woodland, listed by both NSW and the Commonwealth. The quality of the community in the study area is poor to very poor, nowhere is there a native understorey present.

6.2 Threatened Animal Species

The following fauna species were selected for targeted field surveys and/or assessment as they are known from the general region within which the study area occurs (source - NSW Wildlife Atlas).

Species, etc.	TSC	EPBC
Birds		
Brown Treecreeper	X	-
Diamond Firetail	X	-
Flame Robin	X	-
Gang-gang Cockatoo	X	-
Little Eagle	X	-
Powerful Owl	X	-
Regent Honeyeater	X	X
Scarlet Robin	X	-
Speckled Warbler	X	-
Square-tailed Kite	X	-
Superb Parrot	X	X
Varied Sittella	X	-
Mammals		
Eastern Bentwing-bat	X	-
Eastern False Pipistrelle	X	-
Eastern Pygmy-possum	X	-
Greater Broad-nosed Bat	X	-
Koala	X	-

The above species and community are listed under one or more of the following pieces of legislation:

- TSC – *Threatened Species Conservation Act 1995* (NSW);
- EPBC – *Environment Protection and Biodiversity Conservation Act 1999* (Commonwealth).

The potential for the threatened animal species listed above to occur in the study area are assessed below.

Woodland Birds

Brown Treecreeper; Diamond Firetail; Flame Robin; Regent Honeyeater; Scarlet Robin; Speckled Warbler; Superb Parrot; Varied Sittella

These species could occasionally occur in the woodland remnants in the study area or the scattered trees, but there is very little good quality habitat to attract them to the area.

Incidental Occurrences

Little Eagle; Square-tailed Kite

These birds of prey probably forage over the study area from time to time, but would find only minimal suitable foraging and breeding habitat there.

Other Birds

Gang-gang Cockatoo; Powerful Owl

These primarily forest species are unlikely to occur in the remnant woodland in the study area.

Mammals - Bats

Eastern Bentwing-bat; Eastern False Pipestrelle; Greater Broad-nosed Bat

These micro-bats could conceivably occur in the study area, the only habitat features valuable to the last two species in the study area are tree hollows. There is no roosting habitat for the Bentwing-bat.

Mammals - others

Eastern Pygmy-possum; Koala

Neither arboreal mammal species is likely to occur in the highly modified and isolated woodland habitat in the study area.

7 SUMMARY

The following is a summary of the preliminary assessment of the study area and the flora and fauna features and values present.

- i) The study identifies two stands of woodland on knolls in the central western part of the land. Elsewhere, there are scattered trees, but in total these areas cover a small part of the overall study area.
 - ii) The above woodland remnants and scattered trees are part of the community complex known as White Box - Yellow Box - Blakely's Red Gum Woodland, listed under NSW and Commonwealth legislation. There is virtually no native understorey at all in these areas and the quality of the community in the study area is poor to very poor.
 - iii) There are not likely to be any threatened plant species in the study area, based on the poor quality of the habitats there, the absence of any such records in the district and the field studies undertaken for this report.
 - iv) If threatened fauna occur on the land at all, they are most likely to be occasional or incidental visitors. The main habitats of value to these species and native fauna in general are the woodland remnants and scattered trees. Trees with hollows are always an important habitat for native animals.
 - v) If the land is subdivided, we recommend that the value of the woodland remnants and the scattered trees be recognised and steps taken to ensure that these features are not seriously compromised in the design of the subdivision or in the long term through unsympathetic land uses on the created lots.
-

8 **References**

Commonwealth of Australia (1999). *Environment Protection and Biodiversity Conservation Act 1999*. Commonwealth Government, Canberra.

Environment ACT (2006). National Recovery Plan for Natural Temperate Grassland of the Southern Tablelands (NSW and ACT): an Endangered Ecological Community. Environment ACT, Canberra, January, 54pp.

Rehwinkel, R. (1997). Grassy Ecosystems of the South Eastern Highlands. NPWS, Queanbeyan, July, 54pp.

Appendix 1

List of Plant Species for the Study Area

Ferns

Sinopteridaceae

Cheilanthes sieberi

Mulga Fern

Flowering Plants

Anthericaceae

Tricoryne elatior

Yellow Rush-lily

Apiaceae

Hydrocotyle laxiflora

Stinking Pennywort

Asteraceae

Chrysocephalum apiculatum

Common Everlasting

Cotula australis

Common Cotula

**Arctotheca calendula*

Capeweed

**Carthamus lanatus*

Saffron Thistle

**Chondrilla juncea*

Skeleton Weed

**Cirsium vulgare*

Spear Thistle

**Hypochaeris radicata*

Flatweed

**Lactuca serriola*

Prickly Lettuce

**Onopordium acanthium*

Scotch Thistle

**Sonchus asper* subsp. *glaucescens*

Prickly Sowthistle

**Sonchus oleraceus*

Common Sowthistle

Boraginaceae

**Echium plantagineum*

Paterson's Curse

Brassicaceae

**Hirschfeldia incana*

Hairy Brassica

**Rorippa nasturtian-aquaticum*

Watercress

Campanulaceae

Wahlenbergia communis

Tufted Bluebell

Wahlenbergia luteola

Yellowish Bluebell

Caryophyllaceae

Stellaria pungens

Prickly Starwort

**Cerastium fontanum*

Mouse-ear Chickweed

**Paronychia brasiliensis*

Chilean Whitlow Wort

**Petrorhagia nanteuillii*

Proliferous Pink

**Spergularia rubra*

Sandspurry

**Stellaria media*

Chickweed

Chenopodiaceae

Chenopodium pumilio

Clammy Goosefoot

Einadia nutans

Nodding Saltbush

Colchicaceae

Wurmbea dioica

Early Nancy

Convolvulaceae

Convolvulus erubescens

Australian Bindweed

Crassulaceae

Crassula sieberiana

Stonecrop

Fabaceae

Faboideae (subfamily)

Desmodium varians

Slender Tick-trefoil

<i>*Melilotis sp.</i>	<i>Melilot</i>
<i>*Trifolium arvense</i>	Haresfoot Clover
<i>*Trifolium augustifolium</i>	Narrow-leaf Clover
<i>*Trifolium dubium</i>	Yellow Suckling Clover
<i>*Trifolium repens</i>	White Clover
<i>*Trifolium subterraneum</i>	Subterranean Clover
Mimosoideae (subfamily)	
<i>Acacia dealbata</i>	Silver Wattle
Geraniaceae	
<i>Geranium solanderi</i>	Native Geranium
<i>*Erodium botrys</i>	Large Stork's-bill
Juncaceae	
<i>Juncus prismatocarpus</i>	Branching Rush
<i>*Juncus bufonius</i>	Toad Rush
Lamiaceae	
<i>*Marrubium vulgare</i>	Horehound
<i>*Salvia verbenaca</i>	Wild Sage
Lomandraceae	
<i>Lomandra filiformis</i>	Wattle Mat-rush
Loranthaceae	
<i>Amyema pendulum</i>	Drooping Mistletoe
Lythraceae	
<i>Lythrum hyssopifolia</i>	Hyssop Loosestrife
Malvaceae	
<i>*Malva neglecta</i>	Dwarf Mallow
<i>*Modiola caroliniana</i>	Red-flowered Mallow
Myrtaceae	
<i>Eucalyptus blakelyi</i>	Blakely's Red Gum
<i>Eucalyptus bridgesiana</i>	Apple Box
<i>Eucalyptus melliodora</i>	Yellow Box
<i>Eucalyptus rubida</i>	Candlebark
Orobanchaceae	
<i>*Orobanche minor</i>	Lesser Broomrape
Oxalidaceae	
<i>Oxalis ? perennans</i>	Grassland Wood Sorrel
Plantaginaceae	
<i>*Plantago lanceolata</i>	Ribbed Plantain
Poaceae	
<i>Austrodanthonia sp.</i>	Wallaby Grass
<i>Austrodanthonia carphoides</i>	Short Wallaby Grass
<i>Austrostipa bigeniculata</i>	Tall Speargrass
<i>Austrostipa scabra</i>	Corkscrew
<i>Cynodon dactylon</i>	Couch Grass
<i>Elymus scaber</i>	Wheatgrass
<i>Hemarthria uncinata</i>	Mat Grass
<i>Microlaena stipoides</i>	Weeping Grass
<i>Poa sieberiana</i>	Poa Tussock
<i>*Avena sp.</i>	Oats
<i>*Briza maxima</i>	Large Quaking Grass
<i>*Briza minor</i>	Lesser Quaking Grass
<i>*Bromus cartharticus</i>	Prairie Grass

* <i>Bromus diandrus</i>	Great Brome
* <i>Bromus hordeaceus</i>	Soft Brome
* <i>Dactylis glomerata</i>	Cocksfoot
* <i>Eragrostis curvula</i>	African Lovegrass
* <i>Holcus lanatus</i>	Yorkshire Fog
* <i>Hordeum</i> sp.	Barley Grasses
* <i>Lolium</i> sp.	Ryegrass
* <i>Nassella trichotoma</i>	Serrated Tussock
* <i>Paspalum dilatatum</i>	Paspalum
* <i>Phalaris aquatica</i>	Phalaris
* <i>Polypogon monspeliensis</i>	Annual Beardgrass
* <i>Vulpia</i> sp.	Fescue
* <i>Pentaschistis airoides</i>	False hair Grass

Polygonaceae

<i>Rumex brownii</i>	Swamp Dock
* <i>Acetosella vulgaris</i>	Sheep Sorrel
* <i>Polygonum aviculare</i>	Wireweed
* <i>Rumex crispis</i>	Curled Dock

Ranunculaceae

<i>Ranunculus papulentus</i>	Buttercup
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Rosaceae

<i>Acaena agnipila</i>	Sheep's Burr
<i>Rubus parvifolius</i>	Native Raspberry
* <i>Crataegus monogyna</i>	Hawthorn
* <i>Rosa rubiginosa</i>	Sweet Briar

Rubiaceae

* <i>Galium aparine</i>	Cleavers
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Santalaceae

<i>Exocarpos cupressiformis</i>	Native Cherry
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Solanaceae

* <i>Datura stromonium</i>	Common Thornapple
* <i>Lycium ferocissimum</i>	African Boxthorn
* <i>Solanum ? nigrum</i>	Black Nightshade

Typhaceae

<i>Typha orientalis</i>	Cumbungi
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Urticaceae

* <i>Urtica urens</i>	Small Nettle
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Appendix 2

List of Animal Species for the Study Area

* Introduced species are indicated by an asterisk (*).

Mammal Species

Eastern Grey Kangaroo	<i>Macropus giganteus</i>
Fox*	<i>Vulpes vulpes</i>
Rabbit*	<i>Oryctolagus cuniculus</i>

Bird Species

Australasian Pipit	<i>Anthus novaeseelandiae</i>
Australian Magpie	<i>Cracticus tibicen</i>
Australian Raven	<i>Corvus coronoides</i>
Australian Wood Duck	<i>Chenonetta jubata</i>
Black-faced Cuckoo-shrike	<i>Coracina novaehollandiae</i>
Brown Falcon	<i>Falco berigora</i>
Common Blackbird*	<i>Turdus merula</i>
Common Starling*	<i>Sturnus vulgaris</i>
Crimson Rosella	<i>Platycercus elegans</i>
Galah	<i>Eolophus roseicapillus</i>
House Sparrow*	<i>Passer domesticus</i>
Laughing Kookaburra	<i>Dacelo novaeguineae</i>
Magpie-lark	<i>Grallina cyanoleuca</i>
Masked Lapwing	<i>Vanellus miles</i>
Nankeen Kestrel	<i>Falco cenchroides</i>
Noisy Friarbird	<i>Philemon corniculatus</i>
Noisy Miner	<i>Manorina melanocephala</i>
Pacific Black Duck	<i>Anas superciliosa</i>
Pied Currawong	<i>Strepera graculina</i>
Red Wattlebird	<i>Anthochaera carunculata</i>
Red-rumped Parrot	<i>Psephotus haematonotus</i>
Sacred Kingfisher	<i>Todiramphus sanctus</i>
Sulphur-crested Cockatoo	<i>Cacatua galerita</i>
Superb Fairy-wren	<i>Malurus cyaneus</i>
Welcome Swallow	<i>Hirundo neoxena</i>
White-plumed Honeyeater	<i>Lichenostomus penicillatus</i>
Willie Wagtail	<i>Rhipidura leucophrys</i>
Yellow-rumped Thornbill	<i>Acanthiza chrysorrhoa</i>

Frog Species

Common Eastern Froglet	<i>Crinia signifera</i>
Eastern Banjo Frog	<i>Limnodynastes dumerilii</i>
Spotted Grass Frog	<i>Limnodynastes tasmaniensis</i>

Reptile Species

Bearded Dragon	<i>Pogona barbata</i>
Shingle-back	<i>Trachydosaurus rugosus</i>

APPENDIX 3

Land Capability, Effluent and Water Management for Rural-residential Subdivision

**Lot 1, DP 815478
Gunning
Lachlan Valley Council**

November, 2010

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Soil survey and assessment for forestry, agriculture, urban development; land degradation assessment;
catchment planning; soil conservation advice and planning; farm planning; land capability mapping

ABN 54 084 739 800

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Summary

The report details land capability for dwellings and effluent application, and evaluates non-potable water supply options for a proposed subdivision on 226.6ha of rural land on the northern edge of Gunning. The subdivision could yield up to 22 lots based on the current planning scheme.

The report is based on interpretation of topographic maps, high resolution imagery and extensive field traverse. It also utilises the consultant's extensive knowledge of the soil and land resources of the local area. The report assesses a range of physical characteristics that influence land capability, including slope class, drainage conditions, rockiness and soil properties.

The survey has found that approximately 170ha (75%) of the land area is upland, free draining terrain with moderately deep to deep soil cover. It is thus free of significant constraints to on-site disposal of effluent, and has the capability to support dwellings. The remaining 56.6ha (25%) of the site has significant limitations for effluent disposal and dwelling construction, due either to steep slope grades, very rocky land or poor drainage. This land would be suitable for inclusion within lots, but not suited for development comprising dwellings, roads or effluent disposal.

The site has soils which are stable and not highly erodible. Soil erosion and sediment control can be readily achieved with careful planning and effective implementation of a range of standard procedures.

In terms of non potable water supply, the area has a total harvestable right of 15.8ML, with an estimated 2ML already stored in farm dams. There is a drainage line with a 78ha catchment running east to west through the northern part of the site which would be suitable for a single large storage. The catchment would yield an estimated 15ML in a 1 in 10 dry year (assuming 5% runoff coefficient).

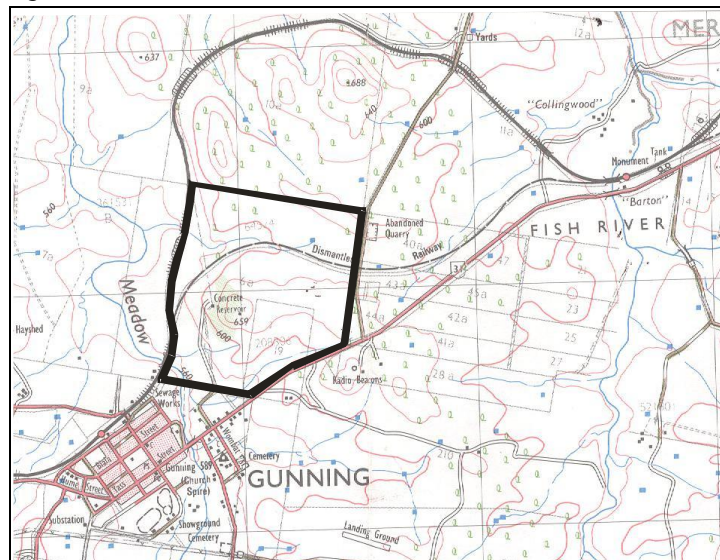
In terms of groundwater, NSW Office of Water would not permit multiple bores but would consider a community water supply with lot owners receiving the water as joint licensees with an allocation from NSW OW of between .5 and 1ML per licensee. There are no existing groundwater bores on the site although bores in the vicinity yield at rates between .2 and 1.1l/sec.

The whole site is mapped as water sensitive land under Upper Lachlan LEP 2010. The report indicates that evaluation against the respective water sensitive criteria shows that the development would have minimal impact.

Introduction

This report details the physical characteristics and evaluates the capability for rural residential development of a 226.6ha of presently rural land just to the north of Gunning. Fig 1 shows the location of the site. The report is based on interpretation of available maps and imagery, and field traverse. The consultant also has extensive knowledge of the area based on soil assessment for on-site effluent management in the vicinity.

Fig 1: Site location



Physical characteristics

Terrain

The site comprises gently to moderately undulating land developed on granite of the Wyangla Batholith. Granite forms extensive boulder outcrops on the two prominent hills and as localised outcroppings elsewhere on the more gently sloping land. Most of the site is gently undulating, with slope grades commonly in the range of 5-10%. These hillslopes are free draining, with occasional saturation following extended rainfall events. The hillslopes drain to a number of first order drainage lines which drain from the site, and to Meadow Creek which itself has a short section running through the site on the north west side. Meadow Creek drains to the Lachlan River a short distance to the north. The drainage lines running through the site have incised to form gullies 1-2m deep, but are in a generally stable condition with localised areas of active bank collapse. The drainage lines would carry flows only after extended rainfall and storm events, with flood flows largely contained within the channels. There is a very small area of floodplain adjacent to the small section Meadows Creek.

Soils

The area is located within the area mapped by the soil landscape survey of the Goulburn 1:250,000 sheet (Hird, 1989). The area is covered by the Garland soil landscape which comprises gently undulating elevated lands and intervening drainage lines, with Wyangla soil landscape representing the rocky hills and steep sideslopes. Field traverse of the site indicates that the soil landscape map gives a good representation of the site conditions. Analytical data for the areas covered by the Sydney catchment Authority are available and can reasonably

be extrapolated to this site¹ for the particular soil landscape which has been mapped across both areas, see table 1.

Red chromosols

These soils have developed on granite in situ on the gently sloping upland terrain and as such are the most extensive soil type on the site. The soils comprise a sandy loam topsoil to a depth of around 10cm, grading to a lighter coloured, weakly structured sub-surface layer of sandy loam to sandy clay loam. This sharply overlies a subsoil of sandy clay which is moderately to strongly structured and reddish brown to red in colour. The reddish, whole coloured subsoils are indicative of soils with free drainage, and in which elevated or perched watertables are not a major factor. The subsoil grades to highly weathered rock at depths of between 80 to 120cm.

The analytical data from DLWC (2002) shows slightly acid pH throughout the profile, a low level of salt and moderate phosphorous sorption capacity. The cation exchange capacity is at a moderate level through the profile reflecting the moderate levels of clay in the soil texture. The exchange complex is dominated by calcium and magnesium, with sodium, potassium and aluminium as minor components. This relative composition of cations is favourable for soil structural stability and the soils are not dispersive.

Yellow chromosols

These soils occur on the narrow tracts of alluvial terrain along the drainage lines and on the gently graded lower hillslopes. They have a 1 to 2m deep profile comprising a silty clay loam topsoil overlying a yellow brown to yellow coloured clay subsoil. Layers of gravel are common features reflecting the depositional nature of these soils. These soils tend to contain higher levels of sodium on the cation exchange complex, and would be slightly to moderately dispersive in the subsoil. This is reflected at a small number of sites along the banks of the incised drainage lines, see next section.

Stony tenosols

These soils occupy the areas where rock outcrop and stone predominate, on hillcrests and on the limited area of steeper land. They comprise a dark grey brown sandy loam topsoil grading to a sandy clay loam subsoil. Gravel and stone content is between 10 and 30%. The soil grades into weathered bedrock at around 20 to 40cm.

Table 1: representative soil analytical data from DLWC (2002)

Soil landscape ¹	profile	Depth cm	texture	CEC Mequiv/100g	Na %	Mg %	Ca %	K %	Al%	P sorp mg/kg	EC dS/m	pH water
Garland	Red chromosol	12-33	Clay loam	29	1	26	75	5	2	266	.05	6.3
		33-100	Light clay	19	1	20	63	1	2	283	.04	6.8

Hydrology

The site is mostly elevated terrain comprising hillcrests and sideslopes is typically free draining and not prone to saturation except for short periods after extended rainfall events. The soils are relatively porous and permeable, and excess water after rainfall moves laterally to convergent zones in the landscape, such as drainage depressions and water courses. These sites are prone to saturation for more extended periods due to the larger contributing catchment area, and greater volume of water which is concentrated here. It is these areas that generate most of the runoff into the drainage system as a results of saturation excess flows.

The site forms headwater catchments for a number of minor drainage lines. The largest single catchment is approximately 80ha feeding the drainage line which runs through the north west

portion of the site, and leaves the site under a railway culvert on the west side. There are two other drainage lines with catchments mostly on the site, of the order of 20-40ha.

The receiving waters for the site are Meadows Creek to which all of the drainage lines eventually run. Meadows Creek runs through the south west corner of the site for approximately 200m and represents the only perennial drainage feature.

Soil erosion and sediment control

Current status of erosion

The hillslopes across the site are in a stable, well grassed condition, and display no signs of sheet erosion or salinity.

The drainage lines have been subject to historical gully erosion when catchment conditions were altered by European settlement. They have been extensively incised to form gullies which are commonly two to three metres deep. There are now only small localised sites where gully erosion is active. The most significant is the head of the channel which has incised the main catchment, located in the central north of the site. It displays an actively extending gully head which has the potential to slowly extend further up the drainage line by slumping and undercutting. The site could readily be repaired with standard structural soil conservation measures, principally an engineered drop structure and associated shaping and drainage control.

Erosion hazard

The erosion hazard has been assessed using the procedure from section 4 of "Soils and Construction: Volume 1 Managing Urban Stormwater" (Landcom, 2004). The parameters for the evaluation are given in table 1. The table shows index values rather than absolute values, as a number of parameters are held constant to allow for easier comparisons.

Table 2 shows that the gently graded hillslopes forming most of the site has a very low erosion hazard, up to slope grades of 10% and between 10 and 15% are in the low hazard class. Slope grades in excess of 15% typically fall into the moderate erosion hazard class, and as such are not suited to building or road construction.

Table 2: erosion hazard for the site based on the Revised Universal Soil Loss Equation (RUSLE), following procedure defined in Landcom, 2004

RUSLE parameter	Value	Estimated Soil loss (t/ha/yr)	Soil loss class (from table 4.2, Landcom 2004)
R (Canberra)	1180		
K (Garland soil landscape)	.03		
C	1		
P	1.3		
LS slope grade 5%	1.19	40	Very low
Slope grade 10%	2.81	95	Very low
Slope grade 15%	5.0	196	Low

Erosion and sediment control

The information provided in this report shows that the site has soils with low erosion hazard and that no special measures would be required for erosion and sediment control so the main risk to soil stability are generated by road construction, dwelling construction and service provision, including power, telecoms and possibly water. Whilst the soils do present a high erosion hazard,

all development sites are at risk of soil erosion during the period when soils are exposed. The risk of soil erosion and sediment export can be minimized by an erosion and sediment control plan being prepared in association with engineering design for the development and being implemented effectively. The plan should be based on the "Blue Book" (Landcom, 2004) and incorporate the following principles:

- Establishing a good understanding of the physical site conditions, and particularly the runoff pathways and design runoff volumes;
- Keeping soil disturbance to the minimum required for site development, and as far as practical limiting disturbance to defined corridors;
- Managing topsoil to ensure effective pre disturbance stockpiling and subsequent re-spreading. Of particular relevance is ensuring a depth no greater than 10cm is utilized as topsoil as soil beyond this depth dilutes topsoil quality;
- Sediment basins would not be required for a broadacre development such as this as large areas remain undisturbed and generally capable of absorbing and filtering sediment laden water, assuming erosion control measures are in place at disturbance sites;
- Road drainage to be stabilized to minimize the risk of erosion. Typically, table drains should be jute meshed on grades exceeding 5%. Culvert inlets and outlets require stabilization measures to minimise the risk of erosion;
- Drainage line crossings will be stabilized to ensure no scouring of the bed and banks, and inflowing road runoff does not scour;
- All ground disturbed by road and servicing to be re vegetated to establish a minimum ground cover of 70%, and maintained to ensure groundcover remains intact and effective;
- A maintenance program is in place to repair any erosion problems and ensure long term site stability.

Land capability

Building capability

Capability for rural residential development can be evaluated using criteria adopted in planning instruments in the area. A slope grade of 15% is commonly used as an upper limit for building envelopes (eg former Yarrowlumla LEP) and is considered appropriate for the land covered by this proposal as it incorporates slope limits which define land in the low to very low erosion hazard category (see previous section). Additionally, the land capability assessment also excludes land which is prone to waterlogging or flooding. This includes the drainage lines which run through the site and small areas of low lying land prone to waterlogging. The remaining gently sloping, free draining land can be considered suitable for dwelling and road construction without resulting in significant soil erosion.

Fig 2 shows the land suitable for locating buildings. The map shows there is an extensive area of land suitable for dwelling construction (approximately 170ha), on the gently undulating land which makes up most of the site, while the remaining 56ha is constrained by steep slope grades or poor drainage.

Effluent management

On-site disposal of effluent must accord with the relevant state and national standards:

- ANZ Standard 1547:2000 On-site domestic wastewater management, and
- Environment and Health Protection Guidelines: On-site Sewage Management for Single Households (NSW Government, 1998).

Assessment of the site in accordance with the limitation assessment procedure in the NSW guidelines (see appendix 1) shows that the more gently sloping upland land (<15%) and free of drainage constraints is generally capable of supporting surface or sub-surface applied effluent treated to a secondary standard, in accordance with NSW Health standards (eg, accredited Aerated Wastewater Treatment Systems and Biological Filters). Other more innovative options which treat effluent to a standard suitable for surface or subsurface irrigation may also be well suited. Some sites may be suited to a subsoil absorption of primary treated effluent, but this requires more detailed assessment at particular sites.

The Environment and Health Protection Guidelines also prescribe a range of buffer distances between effluent application areas and drainage features, dwellings and boundaries. For this site, a 100m buffer would be required along Meadows Ck, a 40m buffer would be required with the minor drainage lines and any dams. While no particular buffer distance is specified in the Silver book for a non potable groundwater bore, a minimum 70m buffer with effluent irrigation areas has been adopted elsewhere in the region based on groundwater studies for the Royalla Estate just south of Canberra.

Water and nutrient balances indicate that on-site effluent management can be achieved in a sustainable manner (see appendix 2). An area of around 600sq m would be required for a five bedroom dwelling.

Lot specific geotechnical reports would be required by council at the time of submitting the DA for each lot in order to ensure the principles outlined here are applied in practice.

Water Management

NSW Office of Water Controls

NSW OW controls on surface water are established in the Water Act (1912), and associated orders issued under the act.

Surface Water

Under the Water Act, the total site area of 226ha has a harvestable right of 15.8ML with an estimated 2ML already stored in three small dams. The NSW OW has typically permitted the reallocation of the harvestable right into smaller subdivision lots as long as the total pre subdivision HR volume is not exceeded. As such the HR could be utilised in a single or a number of large dams as part of a community water supply or it could be utilised on individual lots. Single lots with an area of 10ha would have an HR of .7ML. While this volume may be adequate for non potable requirements, it would not be possible to find a suitable dam site on every lot as there are not enough drainage lines with an adequate catchment area. Additionally, small farm dams are an inefficient means of storing water due to the relative evaporative losses. A smaller number of larger dams, with a relatively smaller surface area results in a proportionately smaller evaporative loss.

Groundwater

Whilst there is an embargo on expanding groundwater availability for irrigation, basic stock and domestic rights are exempt from the embargo. Communication with NSW OW licensing officers indicates the department allows between .5 and 1ML for such purposes. They would only consider licensing a single bore for a community water supply scheme, rather than numerous bores on single lots.

There are no existing groundwater bores on the site although there are five bores within 2km of the site, on the same geology, yielding at rates between .2 and 1.1l/sec.

Riparian Access

Additional to the controls on surface water, NSW OW has a policy of opposing subdivisions which increase riparian access. At this site, the only riparian land is the 200m stretch adjacent to Meadows Creek. It is practical to ensure that this land is not actually subdivided, and remains within a single lot.

Options for providing non-potable water

From a regulatory view, NSW OW will allow between .5 to 1ML of groundwater per lot, for a community scheme. This could be complemented with a 15.8ML storage for surface water. It would therefore be possible to provide capacity for a supply of 1ML per annum to each lot, if the supply is reticulated from a source.

There is a possible dam site, subject to further investigation, at the lower end of the main drainage line running west to east through the northern half of the site. A provisional catchment yield estimate is shown in the box below. While the estimate does not substitute for more detailed hydrological modelling, it gives a reasonable indication that the catchment has the potential to yield sufficient runoff to sustain a surface water supply which accords with the available harvestable right.

Catchment area at a dam site located at exit on western side of site: approximately 75ha
Rainfall in 1:10 dry year: 390mm
Runoff coefficient: .05
Total estimated runoff: 14.95ML

Water sensitive land

The whole site is classified as water sensitive land under Upper Lachlan Council LEP 2010. The clause requires that the impact of a development is considered in the following terms:

Impact on water quality of receiving waters

A broadacre development as proposed for the site retains a large area of land in an undisturbed condition, with the main potential impact from road and track construction, particularly during the construction phase. The site does not present any major hazards as soil and terrain conditions and it falls into the low to very low soil loss class. A range of soil and water management controls can be readily implemented to ensure minimal impact on water quality.

Impact on natural flow regime

In an average year, the site yields approximately 68ML of runoff, assuming 5% runoff from 600mm of rainfall. Assuming an annual usage of .3ML of potable water and .7ML of non potable water, for 22 lots, the subdivision would draw 22ML from the catchment. However, most of the non potable requirement is likely to be provided by groundwater. As such the impact on natural flows can be regarded as minimal.

The natural flow paths of waterways

The dispersed nature of the proposed development means that there will be minimal impact on surface runoff pathways. It is proposed to harvest surface water in a single large dam on the largest catchment. The Water Act requires that outflows would be directed back to the channel and exit the site within the same channel in which they initially concentrate. As such there will be minimal impact on natural flow paths.

Stability of the bed and banks of waterways

The only major waterway is Meadows Creek which runs through the site for a length of only 200m. It will be retained within a single lot, and construction activity would be at least 100m from the creek as required for effluent disposal. Additionally, roads and tracks will be located well away from the creek and no crossings are required.

Where roads cross any waterways on the site, erosion and sediment controls will ensure that the stability of existing channels is retained and that scouring is prevented.

Flows, capacity and quality of groundwater systems.

It is proposed to utilize groundwater as the primary source of non potable water. The sustainable yield for groundwater in the Murrumbidgee Region is calculated on the basis of 10% of recharge, which distills to a multiplier of .065 times the site area to give the yield in ML. For this site, the sustainable groundwater yield would be 14.7ML. This would provide an average of .66ML to each property for a centralized scheme. NSW OW has indicated that a community bore would receive an allocation of between .5 and 1ML for domestic use.

In terms of quality, the groundwater bores in the area extract from depths of 20 to 50m. The only potential threat to groundwater quality is from on site effluent application. However this must comply with the requirements of the Silver Book (NSW Government, 1998) which ensures an adequate buffer between effluent application areas and any bore. Given that there would only be a single bore, the opportunity for connectivity between effluent irrigation sites and groundwater is minimal.

References

DLWC (2002) Soil landscapes of the SCA hydrological catchments. CD

Hird C (1989) Soil Landscapes of the Goulburn 1:250,000 Sheet. CaLM

Landcom (2004) Soils and Construction: Managing Urban Stormwater. 4th Ed. NSW Government

NSW Government (1998) On-site Sewage Management for Single Households. (Silver Book)

Standards Australia (2000) Australian/New Zealand Standard 1547:2000 On site domestic wastewater management. Standards Australia



Site Photos

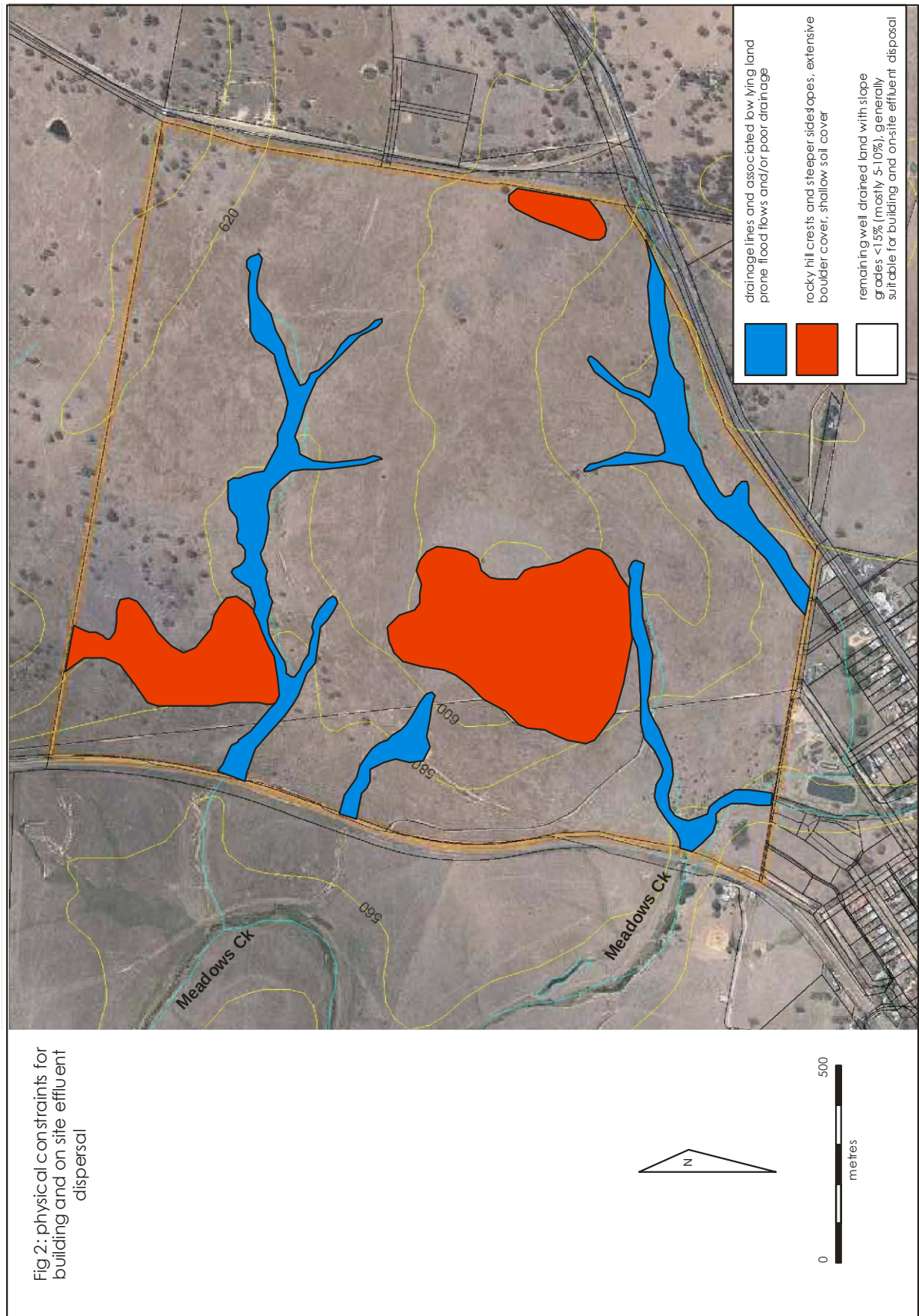
Photo 1: looking across gently undulating, freely drained land which makes up most of the site and which has the capability to support dwellings and on site effluent disposal.



Photo 2: gently sloping land in the foreground running up to steeply sloping rocky land to the rear. The latter is not suited to use for dwellings or for on site disposal of effluent.



Photo 3: the gully head on the main drainage line that runs through the northern portion of the site. This is the main focus of erosion on the site, and could be remedied with structural soil conservation measures.



Appendix 1: Site and soil limitation assessment for effluent disposal

The following two limitation tables are a standardised guide to the site and soil characteristics which may limit the suitability of the site for effluent disposal and which would require attention through specific management practices. The tables have been reproduced from On-site Sewage Management for Single Households (tables 4 and 6, Silver Book).

The italicised categories represent site and soil conditions of the land covered in this report. The assessment applies to free draining land with slope grades <15%, and free of drainage constraints and shows that land with these qualities is suited to surface or subsurface irrigation of secondary treated effluent.

Site limitation assessment

Site feature	Relevant system	Minor limitation	Moderate limitation	Major limitation	Restrictive feature
Flood potential	All land application systems	> 1 in 20 yrs		Frequent, below 1 in 20 yrs	Transport wastewater off site
	All treatment systems	components above 1 in 100 yrs		Components below 1 in 100 yrs	Transport in wastewater off site, system failure
Exposure	All land application systems	High sun and wind exposure		Low sun and wind exposure	Poor evapo-transpiration
Slope %	Surface irrigation	0-6	6-12	>12	Runoff, erosion potential
	Sub-surface irrigation	0-10	10-20	>20	Runoff, erosion potential
	Absorption	0-10	10-20	>20	Runoff, erosion potential
Landform	All systems	Hillcrests, convex sideslopes and plains	Concave sideslopes and footslopes	Drainage plains and incised channels	Groundwater pollution hazard, resurfacing hazard
Run-on and seepage	All land application systems	None-low	Moderate	High, diversion not practical	Transport of wastewater off site
Erosion potential	All land application systems	No sign of erosion potential		Indications of erosion eg rills, mass failure	Soil degradation and off-site impact
Site drainage	All land application systems	No visible signs of surface dampness		Visible signs of surface dampness	Groundwater pollution hazard, resurfacing hazard
Fill	All systems	No fill	Fill present		Subsidence
Land area	All systems	Area available		Area not available	Health and pollution risk
Rock and rock outcrop	All land application systems	<10%	10-20%	>20%	Limits system performance
Geology	All land application systems	None		Major geological discontinuities, fractured or highly porous regolith	Groundwater pollution hazard

Soil limitation assessment

Soil feature	Relevant system	Minor limitation	Moderate limitation	Major limitation	Restrictive feature
Depth to bedrock or hardpan (m)	Surface and sub surface irrigation	> 1.0	.5-1.0	< 0.5	Restricts plant growth
	Absorption	> 1.5	1.0-1.5	< 1.0 ¹	Groundwater pollution hazard
Depth to seasonal water table (m)	Surface and sub surface irrigation	> 1.0	0.5-1.0	< 0.5	Groundwater pollution hazard
	Absorption	> 1.5	1.0-1.5	< 1.0	Groundwater pollution hazard
Permeability	Surface and sub surface irrigation	2b, 3 and 4	2a, 5	1 and 6	Excessive runoff and waterlogging Percolation
Class	Absorption	3, 4		1, 2, 5, 6	
Coarse fragments %	All systems	0-20	20-45	>40	Restricts plant growth, affects trench installation
Bulk density (g/cc) SL L, CL C	All land application systems	 < 1.8 < 1.6 < 1.4		 > 1.8 > 1.6 >1.4	restricts plant growth, indicator of permeability
pH	All land application systems	> 6.0	4.5-6.0	-	Reduces plant growth
Electrical conductivity (dS/m)	All land application systems	<4	4-8	>8	Restricts plant growth
Sodicity (ESP)	Irrigation 0-40cm; absorption 0-1.2mtr	0-5	5-10	> 10	Potential for structural degradation
CEC mequiv/100g	Irrigation systems	> 15	5-15	< 5	Nutrient leaching
P sorption kg/ha	All land application systems	> 6000	2000-6000	< 2000	Capacity to immobilise P
Aggregate stability	All land application systems	Classes 3-8	class 2	class 1	Erosion hazard

Appendix 2: Water and nutrient balances

The irrigation area size has been evaluated from the water balance, nitrogen balance and phosphorous balance. The largest area so determined represents the sustainable area for effluent irrigation. The balances below assume a generous effluent generation rate of 200l/bedroom, and conservative nutrient concentrations in order to show the maximum area required for effluent application.

Water Balance: $A = Q \text{ (l/day)} / \text{DIR (mm/day)}$;
where $Q = 800\text{l/day}$; $\text{DIR} = 4\text{mm/day}$ (from ANZ Standard 1547:2000)
 $A = 800/4 = 200\text{m}^2$

Nitrogen balance: $A = Q \text{ (l/day)} \times \text{TN (mg/l)} / L_n \text{ (critical loading of TN, mg/m}^2\text{/day)}$
 $Q = 800\text{l/day}$; $\text{TN} = 38\text{mg/l}$ (from Silver Book);

Assume 20% loss by denitrification; $38\text{mg/l} - (38 \times .2) = 32\text{mg/l}$
 $L_n = 15,000\text{mg/m}^2\text{/yr}$ (ie 150kg/ha/yr for a mix of introduced and native species)
 $A = 800 \times 32 \times 365 / 15,000 = 622\text{m}^2$

Phosphorous balance: P sorption capacity in upper 50cm
 $P_{\text{sorb}} = 2000\text{kg/ha} = .2\text{kg/m}^2$

P uptake for design period of 50 years
 $P_{\text{uptake}} = 4\text{mg/m}^2\text{/day} \times 365 \times 50 = .073\text{kg/m}^2$

P generated over 50yr design period
 $P_{\text{gen}} = 12\text{mg/l} \times 800 \times 365 \times 50 = 175\text{kg}$

 $A = P_{\text{gen}} / (P_{\text{uptake}} + P_{\text{sorb}}) = 175 / (.2 + .073) = 640\text{m}^2$

Thus, irrigation area size of 640m² is based on P balance. For 3 bedroom dwelling, application area is 480sq m, for 5 bedroom dwelling, application area is 800sq m. Thus, an area of 1000sq m suitable for effluent disposal would be adequate for most dwelling scenarios, on each lot. This can readily be found on a lot area of 10ha, on terrain and soil types of the site.

APPENDIX 4

A guide to preparing planning proposals



Planning &
Infrastructure



DISCLAIMER

These guidelines are provided for general guidance and information only. The guidelines are made available on the understanding that the NSW Department of Planning and Infrastructure ('department') is not providing legal advice. The Department has compiled the guidelines in good faith, exercising all due care and attention.

The guidelines do not affect or replace relevant statutory requirements. Where an inconsistency arises between the provisions of the guidelines and relevant statutory provisions, the statutory requirements prevail.

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It should be noted that the guidelines may be affected by changes to legislation at any time and/or be subject to revision without notice.

It is recommended that independent advice be sought in respect of the operation of the guidelines and the statutory requirements applying to plan making under the *Environmental Planning and Assessment Act 1979*.

A guide to preparing planning proposals

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1

Introduction

This guideline is issued under s55 (3) of the *Environmental Planning and Assessment Act 1979* (the Act) and provides guidance and information on the process for preparing planning proposals.

1.1 What is a planning proposal?

A planning proposal is a document that explains the intended effect of a proposed local environmental plan (LEP) and sets out the justification for making that plan. It will be used and read by a wide audience including those who are responsible for deciding whether the proposal should proceed, as well as the general community. It must be concise and written in language that is clear and easy to understand. It must also be technically competent and include an accurate assessment of the likely impacts of the proposal. It should be supported by technical information and investigations where necessary.

The preparation of a planning proposal is the first step in preparing an LEP. Throughout the course of preparing the proposed LEP, the planning proposal itself may evolve. This is particularly the case for complex proposals.

A Gateway determination is issued by the Minister (or delegate). It specifies whether a planning proposal is to proceed and if so, in what circumstances. The purpose of the Gateway determination is to ensure there is sufficient justification early in the process to proceed with a planning proposal. It enables planning proposals that lack strategic planning merit to be stopped early in the process before time and resources are committed.

The Gateway determination will confirm the information (which may include studies) and consultation required before the LEP can be finalised. The Gateway determination will also establish the timeframe in which the required steps are to be carried out. As the necessary information is gathered and consultation undertaken, the planning proposal may need to be updated by including additional documentation.

This document provides guidance on the matters that should be included in a planning proposal to satisfy the requirements of the Act. This guideline should be read in conjunction with other relevant guidelines/guidance documents issued by the department which are available on the department's website. Together, these guideline documents explain the plan making process and the role of planning proposals in the process.

1.2 Who can prepare a planning proposal?

The Act does not say who must prepare the information needed for a planning proposal. In practice, the planning proposal document can be prepared by a council, a landowner or developer seeking to change the planning controls relating to a particular site, or by a third party on behalf of a landowner or council.

Whoever prepares the background information must ensure the level of detail provided is sufficient to respond to the statutory requirements of the Act and the supplementary information requirements set out in this guideline (refer to Section 2 of these guidelines).

Once the document is prepared, it must be forwarded to the Minister for Planning and Infrastructure (the Minister) by the relevant planning authority (RPA) for consideration. In most instances, the RPA will be the council for the local government area to which the planning proposal relates. In exceptional circumstances the RPA may be the Director-General of the Department of Planning and Infrastructure (the department) or another public body, such as a joint regional planning panel (regional panel).

The RPA is responsible for the content of the planning proposal and the quality of the information provided in support of the proposal. The RPA must ensure the information is accurate, current and sufficient for issuing a Gateway determination and detailed enough for the purposes of consulting with agencies and the general community.

A guide to preparing local environmental plans provides an overview of the plan-making process.

1.3 How much information should be in a planning proposal?

A planning proposal must demonstrate the strategic merit of the proposed amendment to the LEP proceeding.

A planning proposal must provide enough information to determine whether there is merit in the proposed amendment proceeding to the next stage of the plan-making process. The level of detail required in a planning proposal should be proportionate to the complexity of the proposed amendment. The planning proposal should contain enough information to demonstrate that relevant environmental, social, economic, and other site specific matters have been identified and if necessary that any issues can be addressed with additional information and/or through consultation with agencies and the community.

Each planning proposal is unique. It is difficult therefore to prescribe standard 'appropriate information' to support a planning proposal in each and every case.

An 'Information checklist' has been developed to assist both proponents and councils to identify and agree on the range of information that may be appropriate to support a planning proposal. A copy of the checklist is provided as Attachment 1.

Not all information listed on the checklist will be relevant or required in all circumstances. To prevent unnecessary work prior to the Gateway stage, specific information nominated as being necessary would not be expected to be completed prior to the submission of the planning proposal. In such circumstances, it would be sufficient to identify what information may be required to demonstrate the

proposal's strategic merit or compliance with a relevant statutory consideration such as a section 117 Direction. The scope of any information should be outlined and evidence of any preliminary consultation with relevant agencies should be included to support the request for a planning proposal to proceed.

It is recommended that proponents and RPAs work together to agree on the range and scope of information necessary. This is best done via a pre-lodgement meeting.

Evidence of any pre-lodgement discussions, negotiations and agreement between the parties on the scope of work to be completed should be provided to support a request for a pre-Gateway review of a decision by a council not to proceed with a planning proposal, or where the council fails to make a decision on a planning proposal in the required time. This may include a completed 'Information checklist'. Further advice in relation to the pre-Gateway review process can be found in the department publication *A guide to preparing local environmental plans*.

1.4 When is a pre-lodgement meeting appropriate?

It is recommended that a proponent seek a pre-lodgement meeting with an RPA prior to preparing and submitting a planning proposal. This will be critical where the matter is complex with many factors to be considered. A pre-lodgement meeting will assist the RPA and the proponent to reach agreement on the information necessary to justify further consideration of the proposed change to land-use or controls. It will also ensure that a proponent does not commit time and resources undertaking unnecessary studies or preparing information that does not address the main areas of concern with appropriate detail.

The 'Information checklist' provided at Attachment 1 forms a suggested framework for discussion at a pre-lodgement meeting. The checklist may also be a useful starting point where a council does not have a similar guide or where a proponent is preparing a planning proposal for the first time. It is worth noting that in some cases the nature of a planning proposal will be such that its merits may be able to be demonstrated without the need to prepare any supporting strategic studies.

2

The parts of a planning proposal

Section 55 (2) of the Act outlines that a planning proposal must include the following components:

Part 1 – A statement of the objectives and intended outcomes of the proposed instrument

Part 2 – An explanation of the provisions that are to be included in the proposed instrument

Part 3 – The justification for those objectives, outcomes and the process for their implementation

Part 4 – Maps, where relevant, to identify the intent of the planning proposal and the area to which it applies

Part 5 – Details of the community consultation that is to be undertaken on the planning proposal.

Section 55(3) of the Act allows the Director-General to issue requirements with respect to the preparation of a planning proposal. The Director-General's requirements include:

- Specific matters that must be addressed in the justification (Part 3) of the planning proposal
- A project timeline to detail the anticipated timeframe for the plan making process for each planning proposal.

The project timeline forms **Part 6** of a planning proposal.

2.1 Part 1 – objectives or intended outcomes

Part 1 of the planning proposal should be a short, concise statement setting out the objectives or intended outcomes of the planning proposal. It is a statement of what is planned to be achieved, not how it is to be achieved. It should be written in such a way that it can be easily understood by the general community.

For example, the objectives or intended outcomes of a planning proposal might be:

Example 1

To enable the redevelopment of the former Acme Factory site at 3 Smith Road, Smithville, for high-density housing, except for a corridor of public open space along the river frontage.

A planning proposal relates only to an LEP amendment. It is not a development application nor does it consider specific detailed matters that should form part of a development application. It is essential therefore that a proposal addresses all relevant matters that relate to the planning controls to be amended or introduced.

An amendment to an LEP is a stand-alone component of the development process. The RPA and the community must be confident that the proposed planning controls suggested by the planning proposal are acceptable as an outcome appropriate in that location, regardless of the subsequent approval or refusal of any future development application. Sufficient information must be provided to enable an assessment of the proposal to be undertaken.

It is not necessary to identify the mechanism by which the outcomes will be achieved. For instance, in Example 1 the zone(s) the site will eventually be zoned are not stated. The final zone(s) may change as a result of consultation with agencies and public exhibition and a number of alternative zones may be suitable for achieving the desired outcome.

The objectives or intended outcomes (in conjunction with Part 2 – the Explanation of Provisions), constitute the actual ‘proposal’ and will be the basis for drafting the legal instrument (the LEP). The objectives and intended outcomes need to be specific enough to accurately reflect the desired outcome of the proposal yet flexible enough to allow for alternative ways of achieving the desired result to be considered.

Principal LEPs apply to a whole local government area (LGA) and seek to achieve a number of changes.

The objectives and intended outcomes will need to accurately reflect the full extent of those changes. For example:

Example 2

To implement a Standard Instrument LEP across the Smithville local government area that replaces but maintains the general effect of the existing LEPs applying to the land, except where:

1. *It is intended to introduce a new provision to minimise the impacts of urban stormwater on properties, native bushland and receiving waters.*
2. *It is intended to give effect to the Smithville Housing Strategy by:*
 - a. *Enabling the future redevelopment of land within a reasonable walking distance of Smithville Railway Station (as shown on the attached map) for residential flat buildings;*
 - b. *Reserving land for future acquisition by the Smithville Metro Authority for the construction of additional commuter parking at Black Street, Smithville.*
 - c. *Etc.*

As in Example 1, the details of the planning proposal are specific enough to clearly identify the intent of the proposal, yet flexible enough to enable the RPA to determine the most appropriate zones to achieve the desired outcome at a later stage of the process.

2.2 Part 2 – explanation of provisions

The explanation of provisions is a more detailed statement of how the objectives or intended outcomes are to be achieved by means of amending an existing LEP.

In the context of Example 1 and 2, the explanation of provisions might be:

Example 3

The proposed outcome will be achieved by:

- *Amending the Smithville LEP 2009 Land Zoning Map on the former Acme Factory site at 3 Smith Road, Smithville in accordance with the proposed zoning map shown at attachment 1; and*
- *Amending the Smithville LEP 2009 Height of Building Map in accordance with the proposed height map, shown at attachment 2, which indicates a maximum permissible height of 22 metres onsite; and*
- *Amending the Smithville LEP 2009 Floor Space Ratio Map in accordance with the proposed floor space ratio map, shown at attachment 3, which indicates a maximum permissible floor space ratio of 2.5:1 on the site*

In the case of a new principal LEP, the Explanation of Provisions will be more detailed even if it relates to the Standard Instrument. The Explanation of Provisions therefore should take a form similar to the one as follows:

Example 4

The proposed outcome will be achieved by:

Preparing a Standard Instrument LEP in the form shown at attachment 1 (to which the standard instrument is attached) and with accompanying maps as shown at attachment 2 (to which the proposed maps are attached).

The Standard Instrument will include the following additional local provision:

2.6B Stormwater management

- 1. The objective of this clause is to minimise the impacts of urban stormwater on land to which this clause applies and on adjoining properties, native bushland and receiving waters.*
- 2. This clause applies to all land in residential, business and industrial zones.*
- 3. Development consent must not be granted to development on land to which this clause applies unless the consent authority is satisfied that the development:*
 - a. is designed to maximise the use of water permeable surfaces on the land having regard to the soil characteristics affecting on-site infiltration of water, and*
 - b. includes, if practicable, on-site stormwater retention for use as an alternative supply to mains water, groundwater or river water, and*
 - c. avoids any significant adverse impacts of stormwater runoff on adjoining properties, native bushland and receiving waters, or if that impact cannot be reasonably avoided, minimises and mitigates the impact.*

2.3 Part 3 – justification

The justification sets out the case for making the proposed LEP. Changes to an existing LEP can include changes to the current zones and/or development standards and controls. They can affect a single allotment of land, a whole zone, or the entire LGA.

The overarching principles that guide the preparation of planning proposals are:

- the level of justification should be proportionate to the impact the planning proposal will have
- it is not necessary to address a question (see Section 2.3(a)) if it is not considered relevant to the planning proposal. In such cases the reason why it is not relevant should be briefly explained, and
- the level of justification should be sufficient to allow a Gateway determination to be made with the confidence that the LEP can be finalised within the time-frame proposed.

As a minimum, a planning proposal must identify any environmental, social and economic impacts associated with the proposal. It is not expected that a proponent will provide comprehensive information to support a request for a planning proposal. The Gateway may include a requirement for additional information or determine that additional work on a particular aspect of the proposal is required. Detailed information completed prior to the Gateway may be unnecessary if it does not address the main concerns the Gateway identifies in its review of the proposal.

In some cases it will be necessary to undertake technical studies or carry out consultation with government agencies

to justify or clarify different aspects of a planning proposal. Generally, however these investigations will not need to be carried out before the Gateway, provided the issues giving rise to the need for the investigations and an approach for addressing the issues are identified in the planning proposal. The Gateway determination will then confirm the studies and consultation required and the timeframe for these to be completed.

The potential level of information that may be reasonable to justify a planning proposal at the Gateway determination stage is outlined in the following examples:

Example 5

Where vegetation management is an issue for a large site to be rezoned, it would be sufficient for the planning proposal to be submitted to the Gateway to identify the issue, demonstrate that preliminary analysis of the impacts has been undertaken and indicate what environmental studies would be suggested to assess and analyse the value and location of the vegetation and how the matter(s) could be addressed. Where appropriate the need to potentially enter into a voluntary planning agreement (VPA) to protect any significant species or habitat may be highlighted. It is not expected that a proponent would have undertaken the studies or prepared a draft VPA or offset agreement for the purposes of obtaining the initial Gateway determination. This is because the amount of offset or the matters to be addressed in a VPA or other agreement may vary as a consequence of further agency consultation and public exhibition.

Example 6

Overshadowing and amenity impacts may be potential issues associated with increasing the height and floor space ratio controls on a site to a planning proposal to be submitted to the Gateway. It would not be reasonable to require a proponent to provide detailed architectural design drawings of a proposed development as part of the planning proposal. The planning proposal should provide sufficient justification explaining why it is appropriate to increase the development potential of the site by amending these development standards in that location. Block/massing diagrams would be a suitable level of detail to provide with the planning proposal.

The Gateway will need to be confident that the level of information provided with the planning proposal will enable the plan making process to be completed within a reasonable time. Depending on the complexity or scale of the proposal this may require some initial investigations to be carried out prior to submitting the proposal to the Gateway.

2.3(a) Questions to consider when demonstrating the justification

Section A – Need for the planning proposal

Q1. *Is the planning proposal a result of any strategic study or report?*

The answer to this question helps explain the context of the planning proposal. If the planning proposal implements the outcomes of a strategic study or report of some kind, the nature of the study and its key findings should be briefly explained to justify the proposal. A copy of the study or report (or relevant parts) should be submitted with the planning proposal and ultimately form part of the public exhibition material.

Q2. *Is the planning proposal the best means of achieving the objectives or intended outcomes, or is there a better way?*

Imposing or changing the controls on development is one means of giving effect to policy. But others may be equally effective, implemented quicker, and impose less of a regulatory burden.

Even when changing development controls is an appropriate means of giving effect to policy, there is still a range of options regarding how and when the new controls should be introduced. For example, it may be more efficient to implement the controls through the council's LGA wide principal Standard Instrument Local Environmental Plan (SI LEP) if this is close to finalisation rather than proceeding with a stand-alone planning proposal.

The planning proposal should demonstrate that alternative approaches to achieving the intended outcomes of the proposal have been considered. It should be evident from this assessment that the proposed approach is the best, most efficient and most time effective approach to delivering the desired outcome.



Section B – Relationship to strategic planning framework.

Q3. *Is the planning proposal consistent with the objectives and actions of the applicable regional or sub-regional strategy (including the Sydney Metropolitan Strategy and exhibited draft strategies)?*

Regional and sub-regional strategies have been prepared for many parts of NSW. The strategies include outcomes and specific actions for a range of different matters relevant to that region or sub-region. In all cases the strategies include specific housing and employment targets and identify regionally important natural resources, transport networks and social infrastructure.

When preparing a planning proposal for an area covered by a regional or sub-regional strategy, the relationship between the planning proposal and the applicable strategy must be considered in the context of those outcomes and actions including housing and employment targets. Where an outcome or action is directly relevant to the planning proposal it should be briefly described and the planning proposal should set out the reasons why the proposal is either consistent or inconsistent with the outcome or action.

Regional strategies include Sustainability Criteria that provide a framework to consider planning proposals that are not consistent with the strategy but may nonetheless have merit. This may include a proposal for rezoning a site immediately adjoining – but not included in – a future urban investigation area under the relevant strategy. In such cases, the Sustainability Criteria should be addressed in the planning proposal.

In cases where there is no regional or sub-regional strategy in place, Assessment Criteria have been identified to assist proponents in preparing information to justify a planning proposal. These criteria form the basis of the initial eligibility assessment for the pre-Gateway review process. The justification component of a planning proposal should address the following Assessment Criteria as a minimum where a regional or sub-regional strategy is not in place:

Assessment Criteria

- a. Does the proposal have strategic merit and:
 - is consistent with a relevant local strategy endorsed by the Director-General or
 - is consistent with the relevant regional strategy or Metropolitan Plan or
 - can it otherwise demonstrate strategic merit, giving consideration to the relevant section 117 Directions applying to the site and other strategic considerations (e.g. proximity to existing urban areas, public transport and infrastructure accessibility, providing jobs closer to home etc)

b. Does the proposal have site-specific merit and is it compatible with the surrounding land uses, having regard to the following:

- the natural environment (including known significant environmental values, resources or hazards) and
- the existing uses, approved uses, and likely future uses of land in the vicinity of the proposal and
- the services and infrastructure that are or will be available to meet the demands arising from the proposal and any proposed financial arrangements for infrastructure provision.

Q4. *Is the planning proposal consistent with a council's local strategy or other local strategic plan?*

Where a local strategic plan has been prepared for the LGA and endorsed by the Director-General, relevant matters must be identified and the relationship of the planning proposal to those matters should be discussed.

As is the case with strategic studies and reports, the status of council's plan is important. Is it still in draft form? Has it been adopted by the council? Has it been endorsed by the Director-General? A planning proposal that is explicitly consistent with an endorsed local strategy has a good chance of being supported. Local strategies or local strategic plans also provide the opportunity to justify or detail how environmental issues (such as those set out in section 117 Directions) can be addressed.

Q5. *Is the planning proposal consistent with applicable State Environmental Planning Policies?*

State Environmental Planning Policies (SEPPs) relevant to the planning proposal must be identified and the relationship of the planning proposal with those SEPPs must be discussed. In some instances it may be necessary to provide some preliminary advice in relation to how the proposal satisfies the requirements of the SEPP. For example, a Stage 1 contamination report may be necessary under the provisions of SEPP 55 – Remediation of Land. A proponent and/or RPA should consider whether it is appropriate to undertake this study prior to Gateway to demonstrate that the intent of the planning proposal can be achieved.

Q6. *Is the planning proposal consistent with applicable Ministerial Directions (s.117 directions)?*

Section 117 of the Act enables the Minister to issue directions regarding the content of LEPs to the extent that the content must achieve or give effect to particular principles, aims, objectives or policies set out in those directions.

There is a range of section 117 Directions (Local Planning Directions) requiring certain matters to be addressed if they are affected by a proposed LEP. The directions can be found on the department's website at <http://www.planning.nsw.gov.au/planningsystem/local.asp>.

Each planning proposal must identify which, if any, section 117 Directions are relevant to the proposal, and whether the proposal is consistent with the direction. Where the planning proposal is inconsistent with any of the relevant

directions, those inconsistencies must be specifically explained and justified in the planning proposal.

Certain directions require consultation to take place with particular government agencies to demonstrate consistency with the direction's desired outcome. If such a direction is relevant to the planning proposal, this should be identified in the planning proposal in the first instance. Formal consultation with that government agency should not take place until the initial Gateway determination is issued, confirming the public authorities to be consulted. If additional information is required, sufficient detail should be provided to enable the Director-General to determine whether the inconsistency is of minor significance or whether the planning proposal can be justifiably inconsistent with the conditions of the relevant direction.

Section C – Environmental, social and economic impact

Q7. *Is there any likelihood that critical habitat or threatened species, populations or ecological communities, or their habitats, will be adversely affected as a result of the proposal?*

If the land affected by the planning proposal contains habitat of any sort, it will be necessary to carry out an assessment of significance in accordance with section 5A of the Act and the 'Threatened Species Assessment Guidelines', which can be found at <http://www.environment.nsw.gov.au/resources/threatenedspecies/tsaguide07393.pdf>.

The assessment of significance will determine whether there is any likelihood that critical habitat or threatened species, populations or ecological communities or their habitats will be adversely affected as a result of the proposal.

Notwithstanding the significance of the impact, any adverse impact will trigger the requirement under section 34A of the Act for the RPA to consult on the planning proposal with the relevant government agency. If required, this consultation does not need to take place until after the issuing of the initial Gateway determination.

Q8. *Are there any other likely environmental effects as a result of the planning proposal and how are they proposed to be managed?*

The aim of the strategic planning framework is to provide comprehensive guidance regarding the matters that will shape the growth of NSW. It is possible other likely environmental effects unique to a particular planning proposal may not be already addressed in the strategic planning framework. These matters may be identified in informal guidelines, codes or policies produced by different public authorities including local councils. These may include natural hazards such as flooding, land slip, bushfire hazard and the like.

It is important these are identified and addressed in the planning proposal. Again, if it is necessary to prepare information or undertake investigations to address an identified matter, the scope of these should be identified in the planning proposal while the actual information/investigation may be undertaken following the initial Gateway determination where appropriate.

Q9. *Has the planning proposal adequately addressed any social and economic effects?*

The response to this question will include effects on items or places of European or Aboriginal cultural heritage not already addressed elsewhere. It may also include impacts on existing social infrastructure such as schools and hospitals and impacts on existing retail centres which may result if the planning proposal proceeds.

In the instance where a planning proposal is to proceed, the Gateway needs to be satisfied that the level of information available leads to the conclusion that the LEP can be completed within a reasonable timeframe and that identified impacts can be addressed.

As with other potential impacts, proponents are required to undertake preliminary assessments and identify the scope of issues to be addressed in any information. The Gateway will confirm the need for the information and the scope of matters to be addressed.

 Section D – State and Commonwealth interests

Q10. *Is there adequate public infrastructure for the planning proposal?*

Typically, this question applies to planning proposals that:

- result in residential subdivisions in excess of 150 lots
- substantial urban renewal
- infill development

- development that will result in additional demand on infrastructure (such as public transport, roads, utilities, waste management and recycling services, essential services such as health, education and emergency services).

Where applicable, the justification for the planning proposal should address whether existing infrastructure is adequate to serve or meet the needs of the proposal. Any justification should address how any shortfall in infrastructure provision is to be met. It is not expected that a proponent will identify exactly what infrastructure may be needed at the initial stage. The planning proposal should identify that there may be an expected shortfall in service provision, that studies may be required to identify the extent of that shortfall – and potential mechanisms to address any shortfall – and which agencies will be consulted as part of that process.

For planning proposals likely to place additional demands on public infrastructure, this section will be developed following consultation with the public authorities responsible for the provision of that infrastructure. Proponents may wish to have informal/ preliminary discussions with relevant agencies to inform this process prior to the initial Gateway determination. The initial Gateway determination would confirm the public authorities to be consulted.

Q11. *What are the views of state and Commonwealth public authorities consulted in accordance with the Gateway determination?*

One of the aims of the plan making process is to reduce the number of unnecessary referrals to government agencies. The planning proposal should nominate the state and Commonwealth agencies to be consulted and outline the particular land use issues or site conditions which have triggered the need for the referral. The proposed agency consultation will be confirmed with the Gateway determination.

The preliminary views of any state or Commonwealth agency obtained by a proponent in relation to a proposal prior to its submission to an RPA should be included in this section. This should include agreement about the scope of any additional information/ investigations that may be required by that agency subsequent to the issuing of a Gateway determination. Evidence of this pre-lodgement consultation and any agreement in relation to the progression of the planning proposal should be provided with the planning proposal. This information will also be a relevant consideration in the assessment of whether a proposed instrument qualifies for a pre-Gateway review.

2.4 Part 4 – mapping

Planning proposals should be supported by relevant and accurate mapping where appropriate. The mapping should be clear and accurately identify, at an appropriate scale, relevant aspects of the proposal including:

- the land subject to the planning proposal

- current land use zone/s applying to the land
- current development standards relating to the land (i.e. FSR, building height, minimum lot size)
- the proposed alternative zone, if a change in zone is proposed
- a map illustrating the extent of the proposed revised development standard, if a change to a development standard is proposed
- relevant maps or figures illustrating the intent of the planning proposal including:
 - » extent of a proposed heritage conservation area
 - » location of a specific heritage item
 - » proposed extent of an environmental conservation area
 - » area to which a local provision will apply.

Additional material such as aerial photographs clearly identifying the site should also be included where appropriate.

Where a council is preparing the planning proposal and already has a SI LEP in force, mapping should be carried out consistently with the requirements of *Standard technical requirements for LEP maps*. That is, the maps should be prepared using the same format template, colours, zone names etc as required under the department's guidelines. Mapping should be prepared at an appropriate scale showing the subject site and immediate area surrounding the site. Where the planning proposal is prepared by a proponent, this may not initially be possible. However, for exhibition purposes, the Gateway may determine that SI LEP compliant mapping should be prepared to ensure consistency with council's current SI LEP maps.

The Gateway may also determine that additional mapping be prepared to support the exhibition of a planning proposal. Where this is the case, this requirement will be included in the initial Gateway determination.

As the planning proposal progresses through the plan making process, it may be necessary to prepare additional mapping and supporting figures. Any additional maps should also be of a sufficient standard and quality to meet the department's mapping guideline requirements.

2.5 Part 5 – community consultation

This part of the planning proposal should outline the community consultation to be undertaken in respect of the proposal, having regard to the requirements set out in *A guide to preparing local environmental plans*. For the purpose of public notification the guide distinguishes between 'low impact' and other types of planning proposals.

If an RPA considers a greater period of public notification is required or that a public hearing should be held, it should be explained in this part of the planning proposal.

The Gateway determination will then confirm the public consultation that must be undertaken in respect of the planning proposal having regard to the details set out in the planning proposal. This part of the proposal must be revised to reflect any change to the consultation requirements specified in the determination.

The Act sets out the community consultation requirement for planning proposals and these are determined or confirmed at the Gateway. It may be premature to undertake extensive consultation with the broader community on a particular planning proposal before the Gateway. The Gateway will confirm the scope of additional information that may be required and the range of agencies to be consulted. As a result, the planning proposal may vary from the time it is initially conceived to the point where a definite proposal evolves for the site.

The community consultation should provide the full range of completed technical and background information relating to a site so interested parties/ persons can make an informed opinion if the planning proposal is approved at Gateway.

An indication of any proposed community consultation strategy is required with the planning proposal.

2.6 Part 6 – project timeline

A primary goal of the plan making process is to reduce the overall time taken to produce LEPs. The Gateway will need to be confident, should the planning proposal proceed, that the level of information provided with the planning proposal will enable the plan making process to be completed within a reasonable time. In order to meet these goals the Minister may consider taking action to finalise the LEP if the timeframes approved for the completion of the planning proposal are significantly or unreasonably delayed.

The inclusion of a project timeline with the planning proposal will provide a mechanism to monitor the progress of the planning proposal through the plan making process. It will also allow the RPA, the department and Parliamentary Counsel's Office (PCO) to more accurately manage resources to ensure there are no unexpected delays in the process.

The timeframe for the completion of the planning proposal will depend on the complexity of the matter, the nature of any additional information that may be required and the need for agency and community consultation. The following details should be provided as a minimum in the project timeline:

- anticipated commencement date (date of Gateway determination)
- anticipated timeframe for the completion of required technical information
- timeframe for government agency consultation (pre and post exhibition as required by Gateway determination)
- commencement and completion dates for public exhibition period
- dates for public hearing (if required)
- timeframe for consideration of submissions
- timeframe for the consideration of a proposal post exhibition
- date of submission to the department to finalise the LEP
- anticipated date RPA will make the plan (if delegated)
- anticipated date RPA will forward to the department for notification.

The project timeline will be assessed by the department, and may be amended by the Gateway to provide the necessary level of confidence that the LEP will be finalised within a reasonable time.



What happens next?

The RPA will undertake an assessment of the planning proposal information provided and decide whether the proposal contains sufficient information to meet the requirements of the Act and this guideline. The RPA will then to decide whether or not to send the proposal to Gateway. The RPA will generally consider the matter at a council meeting and resolve to send the planning proposal to the department for consideration.

Once the planning proposal is submitted to the department the proposal is assessed before being considered by the LEP Review Panel. The Panel will make a recommendation to the Minister (or delegate) as to whether there is merit in the proposal proceeding and if so, whether any conditions should be attached to the proposal to ensure it progresses. If it is determined that a proposal should proceed, the Minister (or delegate) will issue a Gateway determination and the matter will be returned to the RPA to finalise in accordance with any conditions imposed by the Gateway.

4

Need more information?

The preparation of a planning proposal is the critical first step in the plan making process. The plan making process includes opportunities for the review of decisions to be undertaken to ensure that proposals with strategic merit can be considered in a timely manner. In certain circumstances the plan making process has been delegated to council to ensure that local planning decisions are made at the local level.

To assist understanding of the plan making system the department has prepared a Planning Circular (PS 12-006 *Delegations and independent reviews of plan making decisions*) which explains in more detail the various components of the plan making process. *A guide to preparing local environmental plans* has also been updated.

These documents may be found on department's website at www.planning.nsw.gov.au/gateway-process

If you require additional information about preparing a planning proposal or the plan making process, you should initially contact one of the department's regional teams. Contact details for these teams can be found on the department's website (www.planning.nsw.gov.au/contact-us) or by phoning the department's Information Centre on (02) 9228 6333.

ATTACHMENT 1 – INFORMATION CHECKLIST

▶ STEP 1: REQUIRED FOR ALL PROPOSALS

(under s55(a) – (e) of the EP&A Act)

- | | |
|--|--|
| <ul style="list-style-type: none"> Objectives and intended outcome Mapping (including current and proposed zones) Community consultation (agencies to be consulted) | <ul style="list-style-type: none"> Explanation of provisions Justification and process for implementation (including compliance assessment against relevant section 117 direction/s) |
|--|--|

▶ STEP 2: MATTERS – CONSIDERED ON A CASE BY CASE BASIS

(Depending on complexity of planning proposal and nature of issues)

PLANNING MATTERS OR ISSUES	To be considered	N/A	PLANNING MATTERS OR ISSUES	To be considered	N/A
Strategic Planning Context			- Resources (including drinking water, minerals, oysters, agricultural lands, fisheries, mining) - Sea level rise	☐	☐
- Demonstrated consistency with relevant Regional Strategy - Demonstrated consistency with relevant Sub-Regional strategy - Demonstrated consistency with or support for the outcomes and actions of relevant DG endorsed local strategy - Demonstrated consistency with Threshold Sustainability Criteria	☐	☐			
	☐	☐	Urban Design Considerations		
	☐	☐	- Existing site plan (buildings vegetation, roads, etc) - Building mass/block diagram study (changes in building height and FSR) - Lighting impact - Development yield analysis (potential yield of lots, houses, employment generation)	☐	☐
	☐	☐	Economic Considerations		
Site Description/Context			- Economic impact assessment - Retail centres hierarchy - Employment land	☐	☐
- Aerial photographs - Site photos/photomontage	☐	☐	Social and Cultural Considerations		
Traffic and Transport Considerations			- Heritage impact - Aboriginal archaeology - Open space management - European archaeology - Social & cultural impacts - Stakeholder engagement	☐	☐
- Local traffic and transport - TMAP - Public transport - Cycle and pedestrian movement	☐	☐	Infrastructure Considerations		
Environmental Considerations			Infrastructure servicing and potential funding arrangements	☐	☐
- Bushfire hazard - Acid Sulphate Soil - Noise impact - Flora and/or fauna - Soil stability, erosion, sediment, landslip assessment, and subsidence - Water quality - Stormwater management - Flooding - Land/site contamination (SEPP55)	☐	☐	Miscellaneous/Additional Considerations		
	☐	☐	<i>List any additional studies</i>		



A guide to preparing planning proposals



Notes

