# Appendix A – Preliminary Assessment Report for Intended Planning Proposal



# PRELIMINARY ASSESSMENT REPORT FOR INTENDED PLANNING PROPOSAL

456-474 Plumpton Road, Rowan

October 2020

**Project Number: 20-008** 





# **DOCUMENT VERIFICATION**

Project Title: 456-474 Plumpton Road, Rowan

Project Number: 20-008

Project File Name: 20-008 Preliminary Assessment Report Final

Revision	Date	Prepared by	Reviewed by	Approved by
Final	8/10/2020	S. Anderson	L. Olesen - Jensen	L. Olesen - Jensen

NGH prints all documents on environmentally sustainable paper including paper made from bagasse (a by-product of sugar production) or recycled paper.



W. www.nghconsulting.com.au

#### **BEGA - ACT & SOUTH EAST NSW**

Suite 11, 89-91 Auckland Street (PO Box 470) Bega NSW 2550 **T.** (02) 6492 8333

#### BRISBANE

Suite 4, Level 5, 87 Wickham Terrace Spring Hill QLD 4000 **T.** (07) 3129 7633

#### **CANBERRA - NSW SE & ACT**

8/27 Yallourn Street (PO Box 62) Fyshwick ACT 2609 **T.** (02) 6280 5053

#### **GOLD COAST**

PO Box 466 Tugun QLD 4224 **T.** (07) 3129 7633 E. ngh@nghconsulting.com.au

#### **NEWCASTLE - HUNTER & NORTH COAST**

Unit 2, 54 Hudson Street Hamilton NSW 2303 **T.** (02) 4929 2301

#### **SYDNEY REGION**

Unit 18, Level 3, 21 Mary Street Surry Hills NSW 2010 **T.** (02) 8202 8333

#### **WAGGA WAGGA - RIVERINA & WESTERN NSW**

Suite 1, 39 Fitzmaurice Street (PO Box 5464) Wagga Wagga NSW 2650 **T.** (02) 6971 9696

BEGA • BRISBANE • CANBERRA • GOLD COAST • NEWCASTLE • SYDNEY • WAGGA WAGGA

## **CONTENTS**

1.	Introduction	1
1.1.	Background	1
1.2.	Purpose of this report	3
1.3.	Subject site	4
2.	Preliminary Assessment	6
2.1.	Biodiversity	6
2.2.	European Heritage	15
2.3.	Bushfire	19
2.4.	Flood Assessment	19
2.5.	Overland flow	20
2.6.	Aboriginal significance and connection to sacred sites	23
2.7.	Demonstrate the need for additional R5 land and lifestyle blocks	29
2.8.	Justification for the loss of RU1 land	36
2.9.	High quality structure plan and urban design strategy	38
2.10.	Infrastructure capacity analysis and strategy	38
2.11.	Funding arrangements and sequencing of infrastructure provision	44
2.12.	Traffic and transport considerations	44
2.13.	Land suitability and site health	46
2.14.	Social and cultural impacts	51
2.15.	Strategic justification of rezoning, consistency with relevant regional and local strategies	53
2.16.	Stakeholder management and community development	59
Appe	ndix A Urban Design Strategy	<b>A-1</b>
Appe	ndix B Aboriginal significance and connection to sacred sites	B-1
Appe	ndix C Biodiversity Assessment	C-1
Appe	ndix D Sewage Report	D-1
	ndix E Stormwater Report	
	ndix F Electrical Report	
	ndix G Traffic Report	
Appe	ndix H Urban Design Strategy	H-1

# **FIGURES**

Figure 1-1 Subject land (Source: NGH/ESRI, 2020)	1
Figure 1-2 Potential Urban Areas Map Extract (Source: Wagga Wagga Spatial Plan 2013-2043)	2
Figure 1-3 Wagga Wagga Spatial Plan Potential Urban Area 5 (Source: WWCC online mapping, 2020)	2
Figure 1-4 Current land zoning (Source: WWCC online mapping, 2020)	4
Figure 1-5 Overview Map of the subject land (Source: NGH, 2020)	5
Figure 2-1 Biodiversity Values Map (BC Regulation) of the proposal area (Source: NGH, 2020)	8
Figure 2-2 Potential areas generating offset obligations within the proposal area (Source: NGH, 2020)	9
Figure 2-3 Example of PCT 277 at the site (Source: NGH, 2020)	. 10
Figure 2-4 Plant Community Types within the study area. Areas not coloured are exotic grassland (Sou NGH, 2020)	
Figure 2-5 Example of exotic vegetation in the proposal area (Source: NGH, 2020)	. 12
Figure 2-6 Aquatic habitat in the form of a dam present in the proposal area (Source: NGH, 2020)	. 13
Figure 2-7 Fallen timber present in a PCT 277 patch in the proposal area (Source: NGH, 2020)	. 14
Figure 2-8 Stringybark Creek in the proposal area (Source: NGH, 2020)	. 14
Figure 2-9 Proximity to environmental heritage item I189 (Source: WWCC Online Mapping, 2020)	. 15
Figure 2-10 Former barn, currently used for storage (Source: NGH, 2020)	. 16
Figure 2-11 Derelict woolshed (Source: NGH, 2020)	. 16
Figure 2-12 Derelict workers cottage – eastern elevation (Source: NGH, 2020)	. 17
Figure 2-13 Derelict workers cottage – western elevation(Source: NGH, 2020)	. 17
Figure 2-14 Former stables, currently used for storage (Source: NGH, 2020)	. 18
Figure 2-15 Windmill adjacent to farm dam (Source: NGH, 2020)	. 18
Figure 2-16 Subject land and its proximity to bushfire prone lands (Source: WWCC online mapping, 2020	)19
Figure 2-17 Subject land and its proximity to flood prone lands	. 20
Figure 2-18 Overland flow flooding of subject land (Source: WMA, 2020)	. 21
Figure 2-19 Hydraulic hazard (1% AEP event) for subject land (WMA, 2020)	. 22
Figure 2-20 AHIMS sites within the 5km search area	. 24
Figure 2-21 AHIMS Sites within 1km of the proposal area	. 25
Figure 2-22 The proposal area, showing areas of potential archaeological sensitivity (Source: NGH, 2020)	28 (
Figure 2-23 Minimum lot sizes of land at San Isadore/Moorong (WWCC online mapping, 2020)	. 31
Figure 2-24 Minimum lot sizes of land at Springvale (WWCC online mapping, 2020)	. 32
Figure 2-25 Minimum lot sizes of land at Lake Albert (north) (WWCC online mapping, 2020)	. 33
Figure 2-26 Minimum lot sizes of land at Lake Albert (south) (WWCC online mapping, 2020)	. 33
Figure 2-27 Minimum lot sizes of land at Governors Hill (WWCC online mapping, 2020)	. 34
Figure 2-28 Land capability map (Source: eSpade, 2020)	. 36
Figure 2-29 BSAL at the development site and wider locality (Source: MinView, 2020)	. 37

## Preliminary Assessment Report for intended Planning Proposal

456-474 Plumpton Road, Rowan

Figure 2-30 WWCC sewerage network (Source: WWCC, 2020 as cited in John Randal Consulting, 2020	) 38
Figure 2-31 TransGrid network (Source: TransGrid, 2020, as cited in Delta Star Designs, 2020)	40
Figure 2-32 Essential Energy network (Source: Essential Energy, 2020, as cited in Delta Star Designs, 20	,
Figure 2-33 Water infrastructure near the site (Source: RWCC 2020)	42
Figure 2-34 Water infrastructure north of the site (Source: RWCC 2020)	42
Figure 2-35 Existing (blue) and proposed (red) gas mains (Source: APA2020)	43
Figure 2-36 Wagga Wagga Active Travel Plan commuter cycling network (WWCC, 2020)	45
Figure 2-37 Hydrology and Topography within the proposal area (Source: NGH, 2020)	47
Figure 2-38 Soil Landscapes within the proposal area (Source: NGH, 2020)	48
Figure 2-39 Location of chemical store (Source: NGH, 2020)	49
Figure 2-40 Subject land with respect to naturally occurring asbestos (Source: NSW Resources & Ene 2020)	
Figure 2-41 Agricultural Suitability Map indicating subject land and locality (WWCC Online Mapping, 20	
Figure 2-42 Biophysical Strategic Agricultural Land map (MinView, 2020)	53
Figure 2-43 Alternate Route Plan (C4W, 2015)	58
TABLE	
Table 2-1 Impact assessment against the BC Act Thresholds	7
Table 2-2 Breakdown of previously recorded Aboriginal sites within 5 km of the project area	23
Table 2-3 Aboriginal Site Prediction Statements	27
Table 2-4 Summary of soil landscapes in the proposal area (OEH 2019).	46
Table 2-5 Agricultural chemicals stored on site	50
Table 2-6 Considerations under the Riverina Murray Regional Plan 2036	53
Table 2-7 Considerations under the Wagga Wagga Spatial Plan 2013-2043	56

## **ACRONYMS AND ABBREVIATIONS**

AHIMS Aboriginal heritage information management system

BC Act Biodiversity Conservation Act 2016 (NSW)

BCD (NSW) Biodiversity Conservation Division (of DPIE)

Biosecurity Act Biosecurity Act 2015 (NSW)

Cwth Commonwealth

DAWE (Cwth) Department of Agriculture, Water and the Environment

DPIE (NSW) Department of Planning, Industry and Environment

EEC Endangered ecological community – as defined under relevant law applying to

the proposal

EPBC Act (Cwth) Environment Protection and Biodiversity Conservation Act 1999

EP&A Act (NSW) Environmental Planning and Assessment Act 1979

ESD Ecologically Sustainable Development

FM Act (NSW) Fisheries Management Act 1994

ha hectares

Heritage Act (NSW) Heritage Act 1977

ISEPP (NSW) State Environmental Planning Policy (Infrastructure) 2007

KFH Key Fish Habitat

LALC Local Aboriginal Land Council

LEP Local Environment Plan

MNES Matters of National environmental significance under the EPBC Act (c.f.)

NPW Act National Parks and Wildlife Act 1974 (NSW)

NSW New South Wales

OEH (NSW) Office of Environment and Heritage (now BCD)

SEPP (NSW) State Environmental Planning Policy

sp/spp Species/multiple species

## 1. INTRODUCTION

#### 1.1. BACKGROUND

NGH was approached by Sunnyside Ventures Pty Ltd (the proponent) to prepare a Planning Proposal for land located at Rowan. The site is identified as Lot 23 DP757246 and Lot 25 DP757246. It is known as 456-474 Plumpton Road, Rowan. The land is indicated in Figure 1-1 below.



Figure 1-1 Subject land (Source: NGH/ESRI, 2020)

The subject land is comprised within Potential Urban Area 5 identified in the Wagga Wagga Spatial Plan (Spatial Plan) 2013-2043, as shown in Figure 1-2 and 1-3. The Spatial Plan is the key strategic planning document for directing and managing urban growth and change in the Wagga Wagga Local Government Area (LGA). It explores the issues that currently face Wagga Wagga and recommends a planning approach to address these issues. The Spatial Plan provides the framework to guide planning and land use outcomes through to 2043.

The Spatial Plan directs that Potential Urban Areas would be subject to master planning to ensure that efficient and cost-effective provision of infrastructure can occur with future development and to ensure access to the classified road network is not required.

An Urban Containment Line was also identified in the Spatial Plan for the purposes of maintaining existing travel times, to ensure that the provision of infrastructure could occur in a cost-effective manner and to prevent the fragmentation of rural land. The subject land is located within the urban containment line.

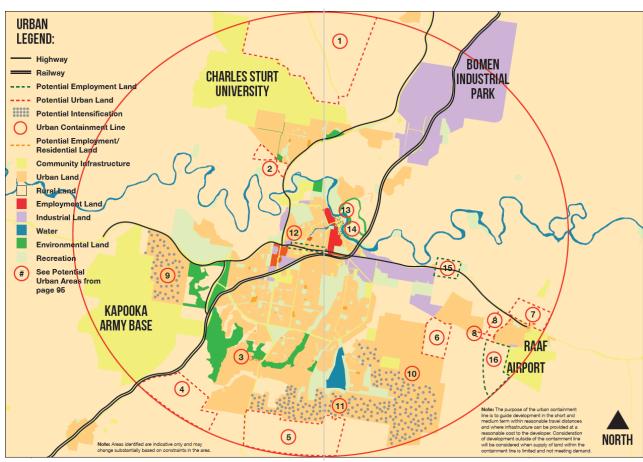


Figure 1-2 Potential Urban Areas Map Extract (Source: Wagga Wagga Spatial Plan 2013-2043)

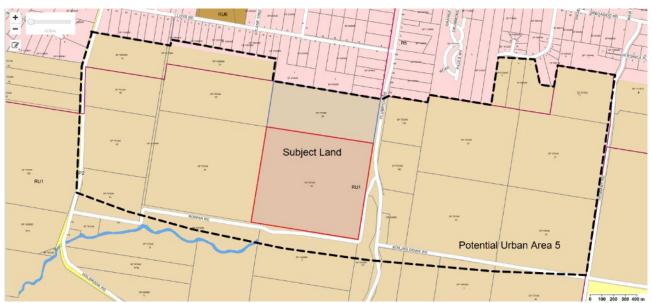


Figure 1-3 Wagga Wagga Spatial Plan Potential Urban Area 5 (Source: WWCC online mapping, 2020)

In respect of Area 5, the Spatial Plan identifies the following matters for consideration:

- The subject area is in the vicinity of a 'potential road connection' identified on the Transport Map. The rezoning of this land should be done in conjunction with the planning and investigation of the identified 'potential road connection'.
- The subject area is partially bush fire prone land and contains a significant ridgeline. The zone and minimum lot size will be considered after the outcomes of the residential study are known. The land will provide for Large Lot Residential / Rural Small Holding lifestyle blocks.
- Run off as a result of development in this area needs to be controlled to ensure it doesn't affect existing residences in the area.
- Overland flow flooding affects part of this area and any intensification in this area will not be supported on land affected by overland flow flooding.

This Preliminary Assessment will address the matters raised by the Spatial Plan.

It is intended the site would become the subject of a future Planning Proposal that seeks approval to amend the RU1 Primary Production zone, enabling residential development to occur. Rezoning the land for residential purposes would facilitate development on land that where urban services could be cost-effectively extended, travel times to the commercial core can be maintained and fragmentation of rural lands would be avoided.

A preliminary consultation meeting was held with Council's Strategic Planning section on 21 January 2020. Council confirmed the land is identified within Potential Urban Area 5 and a Planning Proposal could be considered for this area.

Council advised it would be necessary for the proponent to conduct a preliminary investigation to address matters identified for the land in the Spatial Plan and to inform the preparation of a future Planning Proposal. The scope for the initial investigation is outlined in Section 1.2 of this report and was directed in Council's correspondence dated 31 January 2020 (by email). A copy of this correspondence provided as Appendix A to this report, for Council's reference.

#### 1.2. PURPOSE OF THIS REPORT

This report has been prepared as a precursory report to the intended rezoning application for the subject land. The purpose of this report is to investigate potential environmental capacity concerns and evaluate the site's capability to support residential development.

The necessity of this report was established in consultation with Council's Strategic Planning section. As outlined above, the following scope for this report was directed in Council's correspondence.

#### Scope included:

- · Strategic justification of rezoning, consistency with relevant regional and local strategies
- Demonstrate the need for additional R5 land and lifestyle blocks
- Justification for the loss of RU1 land
- · Lot size methodology in consideration of service capacity, urban character analysis etc
- High quality structure plan and urban design strategy
- Infrastructure capacity analysis and strategy
- Funding arrangements and sequencing of infrastructure provision
- Traffic and transport considerations
- Environmental Studies; including flora and fauna, bushfire management, water table etc.
- Land suitability and site health
- Aboriginal significance and connection to sacred sites
- Social and cultural impacts

Stakeholder management and community development

The outcomes of this investigation will inform the scope of the Planning Proposal

#### 1.3. SUBJECT SITE

NGH was commissioned by Sunnyside Ventures Pty Ltd to prepare a Preliminary Assessment Report for land located at Rowan. The site is identified as Lot 23 DP757246 and Lot 25 DP757246. It is known as 456-474 Plumpton Road, Rowan. The land is located on the southern fringe of the urban area (Figure 1-5).

The land is currently zoned RU1 Primary Production under the provisions of the Wagga Wagga Local Environmental Plan (WWLEP) 2010, as shown in the figure below. The prescribed minimum lot size for the land is 200 hectares according to the Lot Size Map of the WWLEP 2010.

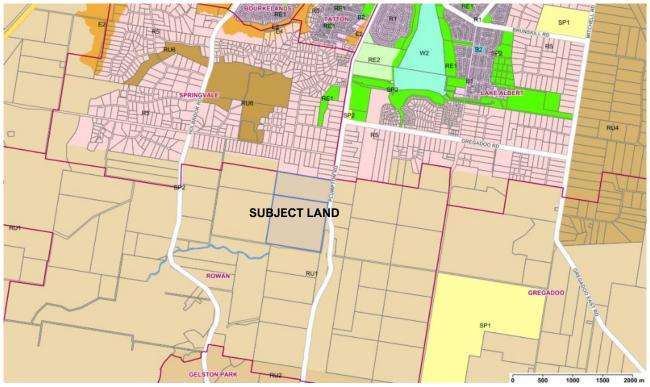


Figure 1-4 Current land zoning (Source: WWCC online mapping, 2020)

The subject land is host to an existing dwelling and ancillary buildings such as a detached studio and storage sheds. Rural buildings such as holding yards, barns, and stables, as well as a derelict workers' dwelling and woolshed are present on the land. Buildings and structures are generally clustered in the eastern central portion of the site.

The northern and central portions of the site are flat, elevated areas. The remaining areas are comprised by minor slopes and flats. Stringybark Creek traverses the south-eastern corner of the subject site. An unnamed ephemeral tributary is in the central portion of the site, feeding the large farm dam along the eastern boundary.

The entire property has been subject to cropping, likely since occupation. In recent drought conditions, cropping has been concentrated in the northern and western paddocks. The remainder of the property is used for cattle grazing.

456-474 Plumpton Road, Rowan

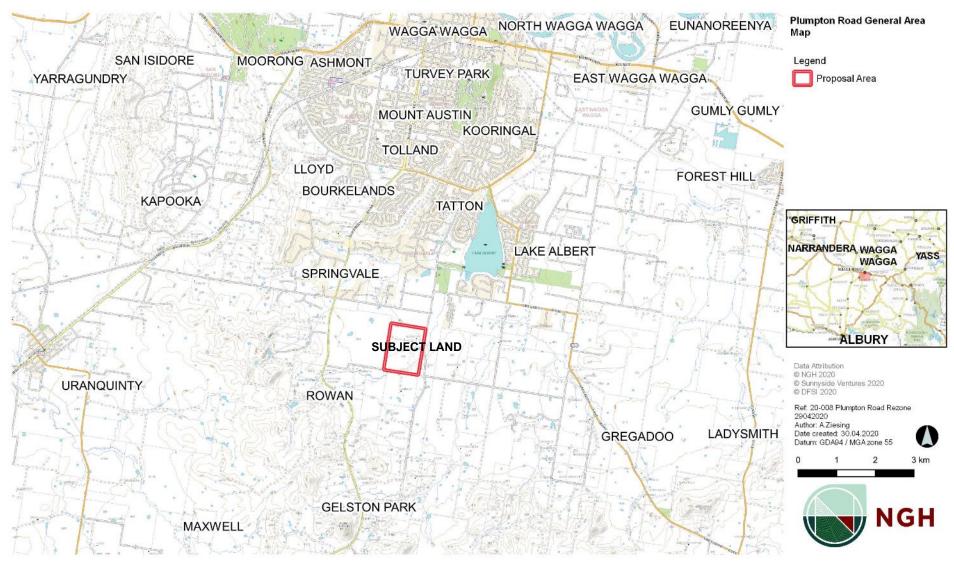


Figure 1-5 Overview Map of the subject land (Source: NGH, 2020)

NGH Pty Ltd | 20-008 - Final | 5

#### 2. PRELIMINARY ASSESSMENT

#### 2.1. BIODIVERSITY

#### 2.1.1. **Outline**

This assessment was carried out by a qualified NGH Environmental Consultant and a technical review by an NGH Certified Environmental Practitioner. A summary is provided below, and the full assessment provided in Appendix C for Council's reference.

This assessment has been prepared to consider:

- The relevant requirements of the *Biodiversity Conservation Act 2016* (BC Act), and the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act),
- The nature, extent and condition of the flora and fauna at the site,
- The likelihood of any threatened species, communities and populations being present,
- The Biodiversity Offset Scheme (BOS) thresholds assessment, and
- Any threatened biota to which a significant effect could occur and propose design or ongoing management measures that could mitigate this.

For the purpose of this assessment the following criteria has been established:

**Proposal area:** Comprises all land within Lot 23 and 25 DP757246. The proposal area was surveyed for the purposes of this assessment.

Development footprint: Comprises the area of land directly impacted by the proposal.

**Study area:** Comprises the proposal area as well as all areas.

Locality: The area within a 10 km radius of the development footprint.

#### 2.1.2. Results

#### **Biodiversity Conservation Act Thresholds**

The primary requirement under the BC Act, is to determine whether a development is likely to significantly affect threatened species. According to the provisions of the BC Act, a subdivision assessment must also account for any *future* clearing necessary to enable the future development of the lots. A summary of the potential impacts from the proposal against the BC Act thresholds is provided in Table 2-1 on the following page.

Table 2-1 Impact assessment against the BC Act Thresholds.

Threshold		Application to the Proposal	Threshold Exceeded ?
The development is likely to significantly affect threatened species, populations or ecological communities (clause 7.2(1)(a))		No significant effects on threatened species, populations or ecological communities is considered likely at this stage. However, post detailed design an impact assessment at the DA stage is required to confirm this.	Unlikely
		scheme threshold (clause 7.2(1)(b)) to clause 7.1(1) of the BC Regulation.	
Minimum lot size associated with the property	Threshold for clearing of native vegetation	The proponent intends to reduce the minimum lot size of the land to less than 1 hectare, through the planning proposal.	Likely
1 hectare or less	0.25 hectares or more	In that instance, the clearing threshold would be 0.25 hectares of native vegetation across the site.	
		Given the very low threshold value, compared to the site area, it is considered highly likely the BOS threshold would be exceeded based on the area of anticipated clearing.	
The clearing of native vegeta prescribed by clause 6.1, on Biodiversity Values map;		Part of the land is identified on the Biodiversity Values map (Figure 2-1). Should clearing, or any other actions under clause 6.1 be considered to occur on land identified on the map, this would trigger the BOS threshold.	Yes
The development is in an a	area of Outstanding	None occur in the proposal area.	No

According to clause 7.7(2) of the BC Act, if a proposed development is likely to significantly affect threatened species, the development application is to be accompanied by a Biodiversity Development Assessment Report (BDAR). Given the very low threshold value (0.25 hectares of native vegetation clearing), compared to the site area (approximately 100 hectares), it is considered likely the BOS threshold would be exceeded based on the area of anticipated clearing.

The BDAR must follow the Biodiversity Assessment Methodology (BAM). Based on the nature, extent, and condition of native vegetation communities on the site, the BAM calculator outputs a list of potentially occurring threatened species that may be affected by development in the area. Where species are unable to be discounted from occurring on the site through targeted surveys, the impact to the species (credit obligation) must be "offset". Figure 2-2 indicates the areas that would likely generate an offset obligation.

**Biodiversity Value (clause 7.2(1)(c))** 



Figure 2-1 Biodiversity Values Map (BC Regulation) of the proposal area (Source: NGH, 2020)

NGH Pty Ltd | 20-008 - Final



Figure 2-2 Potential areas generating offset obligations within the proposal area (Source: NGH, 2020)

NGH Pty Ltd | 20-008 - Final

#### Site survey

Background searches were undertaken to determine whether any threatened flora or fauna species, communities or populations were likely to occur in the proposal area. The results of the database searches are shown in Section C.8.

A site survey was completed on 4 May 2020 by two ecologists from NGH. Eight fauna species were recorded during the field survey. A complete fauna species list is provided in Section C.9. No threatened fauna species were recorded during the survey. A total of 31 flora species were recorded during the site survey, comprising 13 native and 18 exotic species. No threatened species were observed. A complete list of all species recorded is provided in Section C.9.

One Plant Community Type was identified in the study area, PCT 277 Blakely's Red Gum – Yellow box Grassy Tall Woodland of the NSW south western slopes bioregion. This community conforms with a Threatened Ecological Community (TEC) under the BC Act, White Box Yellow Box Blakely's Red Gum Woodland (Box Gum Woodland).

It is also aligned with the White Box Yellow Box Blakely's Red Gum Grassy Woodland and Derived Native Grassland (Box Gum Woodland) under the EPBC Act. However, the community does not conform to the EPBC listing due to the ground layer containing less than 50% of native perennial species.



Figure 2-3 Example of PCT 277 at the site (Source: NGH, 2020)

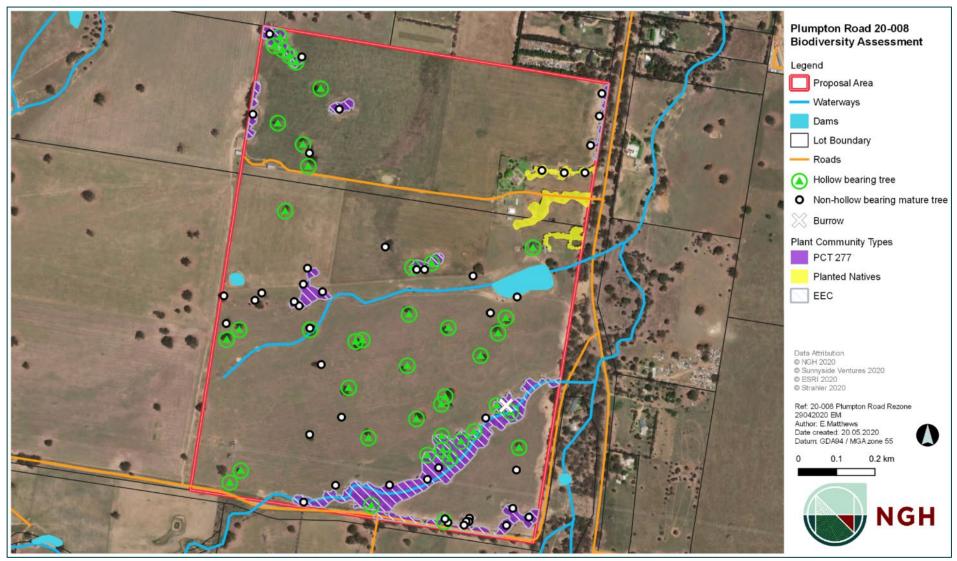


Figure 2-4 Plant Community Types within the study area. Areas not coloured are exotic grassland (Source: NGH, 2020)

NGH Pty Ltd | 20-008 - Final | 11

The study area has been highly disturbed (cropping) therefore a prevalence of exotic vegetation was found during the site surveys. Witchgrass (Panicum capillare), Stinkgrass (*Eragrostis cilianensis*), and Onion Grass (*Romulea rosea*) were noted as a component of all vegetation communities. The cleared paddocks and understorey of woodland vegetation were dominated by these exotic species (Figure 2-5). This vegetation type is indicated as having 'low' credit obligation offset value (Figure 2-2).



Figure 2-5 Example of exotic vegetation in the proposal area (Source: NGH, 2020)

Planted native vegetation occurs around the residence within the proposal area. This comprises of 1.3 hectares and includes a series of River Red Gum (*Eucalyptus camaldulensis*) along the driveway and Kurrajong (*Brachychiton populneus subsp. populneus*) surrounding the property.

#### **Threatened Species**

#### Listed threatened flora species

The Atlas of NSW Wildlife database search (BioNet) indicated there were three threatened flora species known from within a 10 km radius of the proposal area:

- Brachyscome muelleroides Claypan Daisy,
- Swainsona recta Small Purple-pea, and
- Senecio garlandii Woolly Ragwort.

A threatened species profile search was also undertaken indicating 23 threatened flora species could potentially occur within the locality (Appendix C8.3).

A habitat evaluation was undertaken for these species (Appendix C.10). Based on this assessment, 8 of these species listed under the BC Act were identified as having the potential to occur in the study area.

Based on the habitat assessment (Appendix C.10) seven flora species listed under the EPBC Act were identified as having the potential to occur on the site.

#### Endangered populations

No endangered populations are recorded within the proposal area. The nearest population, Squirrel Glider, is recorded about 4 km from the proposal area. Based on the habitat evaluation in Section C.10 Squirrel glider occurrence within the proposal area was considered 'Possible but Unlikely' to occur in the proposal area.

#### Listed threatened fauna species

The Atlas of NSW Wildlife database search (BioNet) found 37 threatened fauna species known from within a 10 kilometre radius of the proposal site (Section C8.2). A threatened species profile search was also undertaken indicating 54 threatened fauna species could potentially occur within the locality (Appendix C8.3).

A habitat evaluation was undertaken for these species (C.10). Based on this assessment, 43 of these species listed under the BC Act were identified as having the potential to occur or utilise habitat in the study area. Based on the habitat assessment (Appendix C.10) ten of the fauna species listed under the EPBC Act were identified as having the potential to occur on the site.

#### Fauna habitat

The proposal area supports foraging habitat for grassland and open woodland fauna species. In general, the fauna habitat quality within the study area is considered to be moderate. Habitat features include juvenile non-hollow bearing trees, mature hollow- and non-hollow bearing trees, shrubs and open exotic grassland for foraging. Waterbodies are present in the form of two dams with some fringing vegetation. Stringybark Creek and drainage lines currently contain minimal water but provide potential additional aquatic habitat with riparian vegetation. Fallen timber is present in many of the PCT 277 patches. There are some small areas of partially bedded rocks. The landscape has a history of disturbance from clearing vegetation for cropping.



Figure 2-6 Aquatic habitat in the form of a dam present in the proposal area (Source: NGH, 2020)



Figure 2-7 Fallen timber present in a PCT 277 patch in the proposal area (Source: NGH, 2020)



Figure 2-8 Stringybark Creek in the proposal area (Source: NGH, 2020)

#### 2.2. EUROPEAN HERITAGE

Several historic farm buildings exist on the subject land. These are generally clustered in the central eastern portion of the site. The buildings comprise former barns and stables, as well as a derelict workers cottage and woolshed. Images recorded during the preliminary site inspection are provided in Figure 2-10 to Figure 2-15.

These buildings are not listed Items of Environmental Heritage, according to Schedule 5 of the WWLEP 2010. The nearest Item of Environmental Heritage is located approximately 600 metres to the south-west of the subject site, as indicated in Figure 2-9. The listed item is described as Item I189 'Rowan, dwelling'. The subject site is approximately 1.5 kilometres from the heritage item and would not be visible due to existing topography and established vegetation.

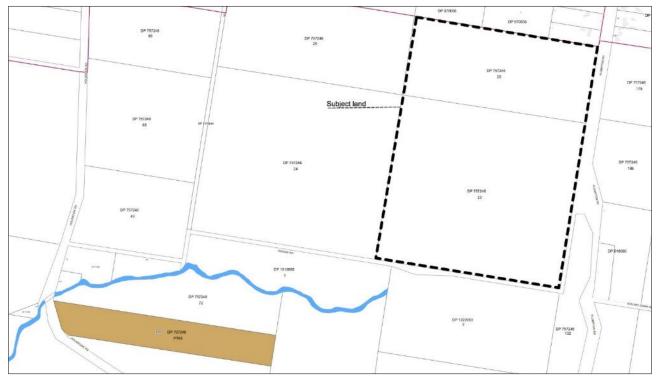


Figure 2-9 Proximity to environmental heritage item I189 (Source: WWCC Online Mapping, 2020)

The Wagga Wagga Rural Heritage Study 2000 is a comprehensive heritage study of the local government area. The study provides the historical context of the area, and identifies, assesses, and documents items of local cultural significance. The study does not identify buildings on the subject land as being locally important or significant. The study does identify and discuss the above referenced Rowan dwelling to the south-west of the subject site.



Figure 2-10 Former barn, currently used for storage (Source: NGH, 2020)



Figure 2-11 Derelict woolshed (Source: NGH, 2020)





Figure 2-12 Derelict workers cottage – eastern elevation (Source: NGH, 2020)

Figure 2-13 Derelict workers cottage – western elevation(Source: NGH, 2020)



Figure 2-14 Former stables, currently used for storage (Source: NGH, 2020)

Figure 2-15 Windmill adjacent to farm dam (Source: NGH, 2020)

#### 2.3. BUSHFIRE

The subject land is not mapped as bushfire prone, as shown on Council's online mapping in Figure 2-16. The nearest bushfire prone lands are located approximately 900 metres to the north, 1,500 metres to the west and 1,800 metres to the east.

There are no substantial stands of woody vegetation within the subject land. The land is utilised for cropping and unmanaged grassland is not present. It is considered the bushfire hazard risk would be low.

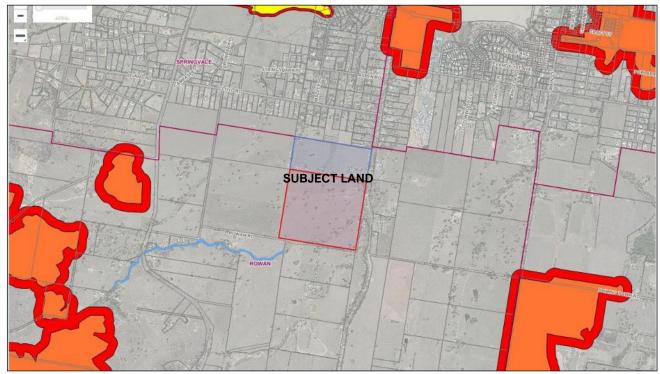


Figure 2-16 Subject land and its proximity to bushfire prone lands (Source: WWCC online mapping, 2020)

#### 2.4. FLOOD ASSESSMENT

The subject land is not within the Flood Planning Area (FPA) according to the Council flood mapping, as shown in Figure 2-17. The nearest flood prone lands are located in East Wagga Wagga, approximately 6.6 kilometres to the north and Uranquinty, approximately 8.1 kilometres to the west.

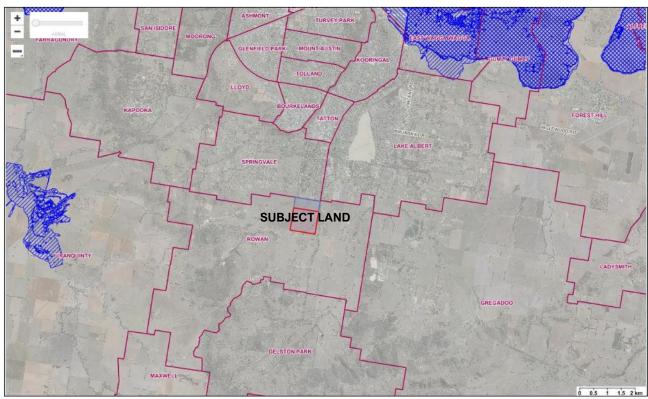


Figure 2-17 Subject land and its proximity to flood prone lands

#### 2.5. OVERLAND FLOW

Stringybark Creek and another unnamed watercourse traverse the land, running south-west to north-west. The south-eastern portion of the land is subject to overland flow flooding in a 100yr ARI event, as identified in the adopted Wagga Wagga Major Overland Flow Floodplain Risk Management Study and Plan 2011 (WMA Water).

An extract of the model is provided in Figure 2-18 on the following page. The model indicates that flow is generally confined to the channel of Stringybark Creek and unnamed creek line during the design event. Outside of the creek lines, the overland flow depth in the design event is up to 200mm. The hydraulic hazard classification prepared by WMA (2020) indicates that potentially developable land outside of the creeklines is classified as H1 no constraint (Figure 2-19).

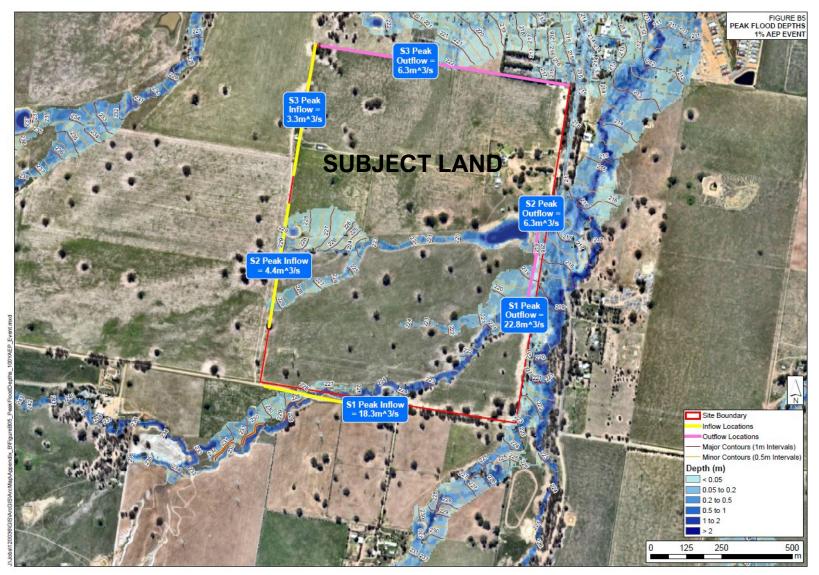


Figure 2-18 Overland flow flooding of subject land (Source: WMA, 2020)

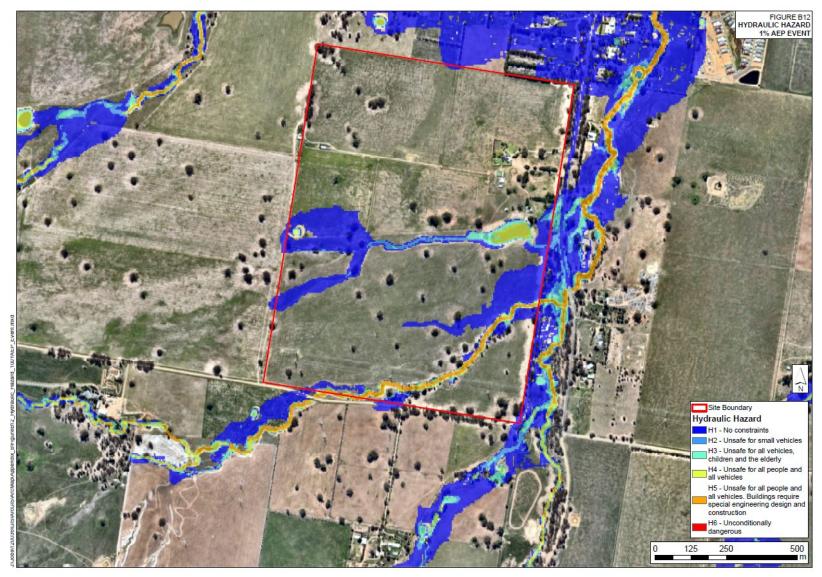


Figure 2-19 Hydraulic hazard (1% AEP event) for subject land (WMA, 2020)

# 2.6. ABORIGINAL SIGNIFICANCE AND CONNECTION TO SACRED SITES

This assessment was carried out by a qualified NGH archaeologist. This included background research and the completion of this report. A technical and quality assurance review was completed by a Senior Heritage Consultant. A summary is provided below, and the full assessment provided in Appendix B for Council's reference.

#### 2.6.1. Register Search

#### AHIMS Database and Heritage Register Searches

A search of relevant heritage registers for Aboriginal sites and places provides an indication of the presence of previously recorded sites. It is to be noted that a register search is not conclusive, as it reflects only those areas that have been surveyed and that sites recorded are added to the register.

On 30 April 2020, a search of the AHIMS database was undertaken over an area of approximately 5 x 5 kilometres centred over the project area. There were 61 Aboriginal sites recorded within this search area and no declared Aboriginal Places. Table 2-2 below shows the breakdown of the site types and Figure 2-20 shows the sites by type in the 5 kilometre search area. Figure 2-21 shows location of the AHIMS sites immediately adjacent to the project area.

Table 2-2 Breakdown of previously recorded Aboriginal sites within 5 km of the project area

Site Type	Number
Modified Tree (Carved or Scarred)	39
Artefact (1 or more)	22
Total	61

Four registered modified trees (AHIMS# 56-1-0559, 56-1-0080 and 56-1-0560 and 56-1-0561) are located within 30-130 metres of the eastern assessment boundary lining Plumpton Road. A further modified tree (AHIMS# 56-1-0002) is located within 600 metres of the south eastern corner of the assessment area. It should be noted that the majority of sites recorded within the 5 kilometres search area has been recorded independently by members of the local Aboriginal community and are not associated with previous archaeological investigations. None of these registered sites will be impacted by the proposed rezoning.

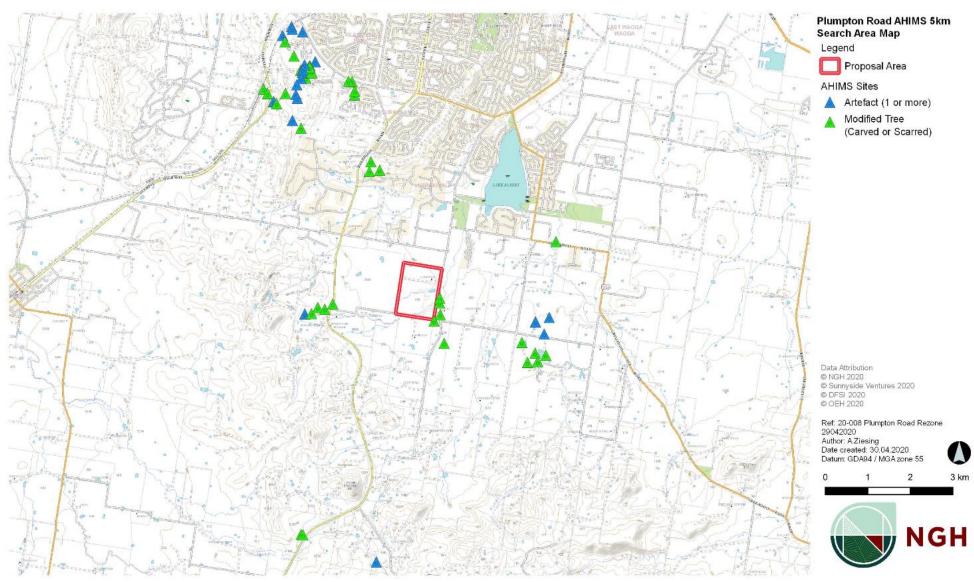


Figure 2-20 AHIMS sites within the 5km search area

#### Preliminary Assessment Report for intended Planning Proposal

456-474 Plumpton Road, Rowan



Figure 2-21 AHIMS Sites within 1km of the proposal area

#### Relevant archaeological studies

A summary of previous archaeological investigations in the study area is provided in Appendix B of this report.

Based on the previous archaeological investigations outlined, it is suggested that the most likely sites to be found in the current assessment area are small low-density artefact scatters and isolated artefacts. These sites will generally be found in archaeologically sensitive landforms, such as elevated terraces and flat land associated with natural watercourses, but may also be dispersed across the wider area, due to previous disturbance, erosion and colluvial processes. Scarred trees may also be present on native old growth isolated paddock trees. The dominant lithology is likely to be quartz and there is some potential for high density intact subsurface deposits of cultural material to be found (NGH 2020); however, any subsurface sites are more likely to consist of low density finds which are common across the remainder of the Wagga Wagga region.

#### 2.6.2. Landscape Assessment

The proximity to both water and registered AHIMS sites highlights the sensitivity of the landscape across the proposal area. Based upon the initial desktop assessment, using satellite imagery and topographic data, it appears that, where land is not previously disturbed, there is some potential for Aboriginal objects to be present including *in situ* artefact deposits. Within the disturbed portions of the project area, there is moderate potential for Aboriginal objects to occur, however, if present, these sites will generally not be *in situ* as a result of the prolonged exposure to pastoral activities. Significantly disturbed landforms across the proposal area will maintain nil to low likelihood for the identification of Aboriginal objects.

The environmental setting and context for the proposal area shows that there are unlikely to be rock outcrops present that could have been used as a source of stone for flaking. Resources for Aboriginal people in this location would likely have centred on animals and plant materials for food and materials, but the historic clearing of the area indicates that there is a low likelihood of such materials surviving. There is also limited chance of scarring on trees due to the previous land clearance; however, examples of cultural modification may be present on remnant isolated old growth paddock trees.

Topographically, the area contains key features that may have been the focus of Aboriginal occupation such as elevated flats associated with ephemeral drainage lines and Stringybark Creek and portions of these landforms may remain in undisturbed contexts. The open, broad, and gently sloping nature of the landscape would likely tend to disperse occupation across the area and thereby the archaeological manifestation of such occupation would be typically stone artefacts in low densities.

The soil profile present is likely to support some potential for subsurface deposits where the A horizon is intact and where extensive earth works has not occurred; creek flats are the most likely place.

The historical land use indicates past disturbances that may have affected the integrity of an archaeological site or potential subsurface deposit where they may occur. Despite this, there are areas where less disturbance is likely and such areas may have higher potential to contain Aboriginal objects, most likely stone artefacts, or modified trees where remnant old growth native trees are present.

#### 2.6.3. Aboriginal Site Prediction Statements

Based on the assessment of information for the environmental context and results from previous archaeological studies in the region there are several predictive modelling statements that can be made for the potential of finding Aboriginal sites within the project area (Figure 2-22). These are included in the table below.

#### Preliminary Assessment Report for intended Planning Proposal

456-474 Plumpton Road, Rowan

Table 2-3 Aboriginal Site Prediction Statements

Site Type	Site Description	Potential
Stone artefact scatters and isolated artefacts	Artefact scatter sites can range from high-density concentrations through to isolated finds.	High potential to occur in low to moderate densities.
Potential Archaeological Deposits (PADs)	Potential subsurface deposits of archaeological material.	Potential to occur within proposal area in areas of elevated flat land associated with ephemeral drainage line and Stringybark Creek.
Modified trees	Trees that have undergone cultural modification.	Potential to occur within the project area in areas where there are remnant mature native trees.

The desktop assessment concluded that the proposed rezoning may proceed; however, any future activities associated with the subdivision and development of the property would require further investigation and assessment.

#### Preliminary Assessment Report for intended Planning Proposal

456-474 Plumpton Road, Rowan



Figure 2-22 The proposal area, showing areas of potential archaeological sensitivity (Source: NGH, 2020)

# 2.7. DEMONSTRATE THE NEED FOR ADDITIONAL R5 LAND AND LIFESTYLE BLOCKS

Council has requested the proponent to consider the need for additional R5 land and lifestyle blocks. The following assessment considers general population growth and the supply and demand of R5 land across the LGA. These considerations have been based on trends adopted in the Wagga Wagga Spatial Plan 2013-2043, being the primary strategic planning study that guides land use across the LGA, the Riverina Murray Regional Plan 2036, and population forecast growth resulting from the Special Activation Precinct (SAP) at Bomen.

#### 2.7.1. Demand for residential land

The goals and actions of the Riverina Murray Regional Plan 2036 acknowledge that the city will grow to over 80,000 residents by 2040. However, more recently Council's planning has evolved towards the potential for over 100,000 residents by 2040. This is underpinned by the NSW Government's publication 'A 20-Year Economic Vision for Regional NSW', in which Wagga Wagga was identified as a major growth centre. State and Federal economic vision and investment in industrial and community infrastructure at Bomen (SAP), identifies Wagga Wagga as an area of significant growth providing sophisticated health, education, and cultural inland services to surrounding inland areas. Residents will be attracted by employment industries and lifestyle choices.

Whilst the majority of new housing will likely be provided within Wagga Wagga's urban release areas, Council has identified and supported the rezoning of other smaller precincts within the urban containment line, recognising these will play an important role in catering for population growth as well.

The Spatial Plan identified that dwelling approvals between 2003 and 2012 in the LGA were more than double long-term median figures. Approvals ranged from approximately 160 and 700 dwellings per annum, with an average of 345 dwellings per annum. Of these approvals, 24 percent were considered rural residential dwellings, which equates to approximately 83 per annum.

The Spatial Plan identified that the number of lots approved through rural residential subdivision between 2003 and 2012 in the LGA ranged from 3 to 225 per annum. An average of 70 rural residential lots were approved per annum.

Based on the analysis outlined in the Spatial Plan, Council concluded that approximately 360 residential lots are likely to be required on average each year from 2013 to 2043 to provide for population growth. Large residential lots, between 1,200sqm and 10,000sqm, are predicted to comprise approximately 9 percent of total supply (approximately 32 lots per annum).

The Spatial Plan, as of 2013, indicated that there was 7 years supply of rural residential land already zoned at the forecast growth rate of less than 2 percent. Should the population growth rate rise to 2 percent, supply would be exhausted within 4 years. A few small infill areas in the Lloyd Road precinct have been rezoned to support the creation of additional R5 lots, whilst another proposal is currently being assessed in the Gregadoo Road precinct. Wagga Wagga is already well positioned to accommodate population growth because of historic land use strategies that stem from State and Federal governments initiatives in the 1970s, which first prompted Council to allow for future growth and included residential lots and higher density development on greenfield semi residential farmland. Therefore, rural residential zoned land otherwise remains as outlined in the Spatial Plan, of which the subject land provides consideration to accommodate growth.

#### 2.7.2. Strategic justification for R5 lifestyle lots

The Riverina Murray Regional Plan 2036 is relevant to the Wagga Wagga LGA. The Regional Plan indicates the region's 3 cities, which Wagga Wagga, Albury, and Griffith, will accommodate the highest rates of growth over the next 20 years. By 2036, the population is projected to increase by 11,150, with the cities expected to

456-474 Plumpton Road, Rowan

accommodate most of this growth. Additionally, SAP funding received from the Federal and State governments will stimulate further growth and expansion as a strong regional city. This proposal increases and supports land and housing availability and choice, to contribute to these objects.

The Regional Plan states that "Over the next 20 years, the majority of housing is likely to be delivered in regional cities and this will need to be supported by infrastructure delivery. Significant release areas are located at Thurgoona and Wirlinga in Albury; Estella, Lloyd and Boorooma in Wagga Wagga; and Hanwood and Lake Wyangan in Griffith. These areas will provide sufficient housing to accommodate the projected demand for 12,600 new dwellings". It is noted that the areas of Estella, Lloyd and Boorooma provide only for standard residential lots and do not provide variety in housing opportunities, such as lifestyle lots. The subject land can support an alternative housing opportunity, specifically, large lot living with rural landscape character, whilst also remaining within the urban containment line. Such development can attract new residents who desire a rural lifestyle but do not have the ability to manage a farm. This is consistent with the 'Evocities' philosophy and marketing of lifestyle and affordability opportunities to residents of the metropolitan areas.

Goal 4 of the RMRP includes Direction 25 'Build housing capacity to meet demand'. Housing in the region has historically been characterised by single detached dwellings, with some larger residential lots and rural lifestyle options. As the population grows and changes, there will be increased demand for new housing and a greater variety of housing. The Spatial Plan directs that future rezoning for residential land would be comprised within infill precincts and the mapped Potential Urban Areas. Rezoning the subject land for residential purposes would facilitate development on land that where urban services could be cost-effectively extended, travel times to the commercial core can be maintained and fragmentation of rural lands would be avoided. This is consistent with the Spatial Plan directions regarding the Urban Containment Line.

The Regional Plan states that agriculture is integral to the success of the economy and a major force in the State and directs that the region's diverse and productive agricultural land should be protected. As indicated in Section 2.8, the subject land is not mapped as productive, high value or strategic agricultural land.

The subject land is not mapped as high environmental value (HEV) land and therefore the land is not subject to the associated protections and provisions. Biodiversity constraints have also been considered and assessed, as outlined in Section 2.1 of this report. Opportunities exist to meet other goals and aims of the RMRP.

#### 2.7.3. R5 land availability

Large lot residential land is predominantly located within Springvale, Lake Albert, San Isidore and Gumly Gumly. Smaller pockets include land at Cartwrights Hill and on the fringes of Gobbagombalin and Boorooma. A range of lot sizes are provided, ranging from around 0.1 hectares to 8 hectares.

#### San Isidore and Moorong

Large lot residential land at San Isidore is largely exhausted. Several vacant lots and approximately 2 larger lots with subdivision potential remain. The village of San Isidore disposes effluent and wastewater through on-site disposal. Growth in San Isidore is constrained by the lack of servicing. Council's Development Servicing Plan – Sewerage indicates that for San Isidore to grow, a major gravity carrier main would be required to the Sturt Highway and Cummins Drive. Additionally, larger lots appear to be heavily constrained by existing remnant vegetation, which could limit subdivision potential. Not more than 10 existing and future lots are considered to remain.

Large lot residential land at Riverview Drive (Moorong) is largely exhausted. Several vacant lots and 1-2 larger lots with subdivision potential remain. Significant flood risks pose an issue for existing and future development at Moorong. The larger lots appear to be heavily constrained by existing remnant vegetation, which could limit subdivision potential. Not more than 10 existing and future lots are considered to remain.

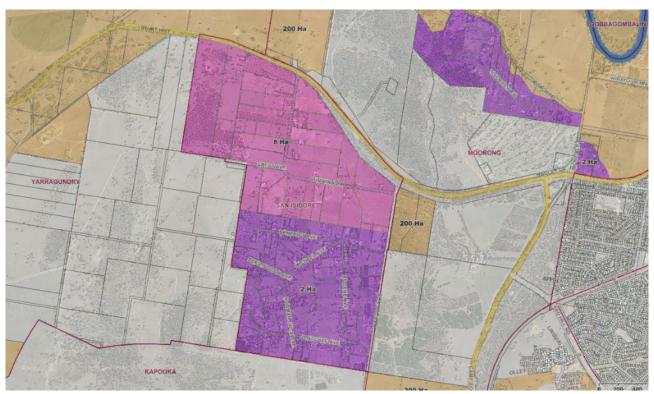


Figure 2-23 Minimum lot sizes of land at San Isadore/Moorong (WWCC online mapping, 2020)

#### Springvale

Large lot residential land at Springvale is largely exhausted. Approximately 7 vacant lots remain in the 'Glenoak' precinct, west of Holbrook Road. A residual parcel is located on the northern side of Senna Place; however, would provide for not more than 3 rural residential lots. No vacant lots remain in the Dunns Road precinct (south of Dunns Road), excepting residual land on the western fringe. Approximately two 8-hectare lots could be developed.

In the Lloyd Road precinct (between Holbrook Road and Mallee Road) there is one vacant lot off Plane Tree Drive, whilst some infill potential is present for three lots off Plane Tree Drive/Lloyd Road, due to the 0.45 hectare minimum lot size. Given the configuration of existing development, not more than 6 additional lots would be envisaged.

Within the remainder of the Springvale precinct, (the area generally fronting and surrounding Springvale Drive and Featherwood Road), there are no vacant lots remaining. Residual land at Genista Place has been approved for 9 rural residential lots of approximately 2-hectares.

Within the infill precinct fronting Plumpton Road, there is one lot remaining fronting Cedar Place. A subdivision is underway at 66 Plumpton Road for 10 additional rural residential lots. No development application has been submitted for subdivision of 64 Plumpton Road; however, similar subdivision potential is envisaged.

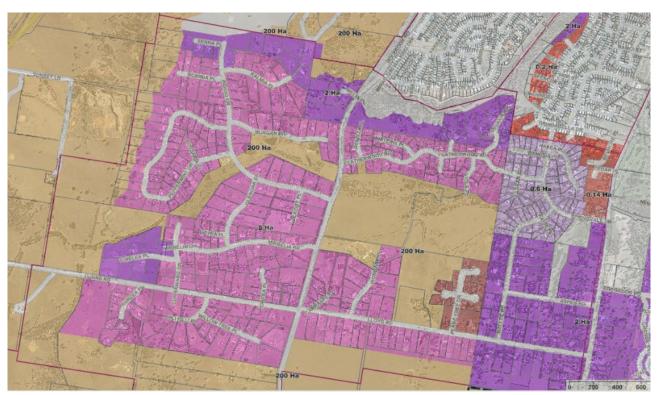


Figure 2-24 Minimum lot sizes of land at Springvale (WWCC online mapping, 2020)

#### Lake Albert

Large lot residential land at Lake Albert is largely exhausted. There are no vacant rural residential lots within the precinct south of Gregadoo Road. There are approximately 47 vacant rural residential lots in the precinct north of Gregadoo Road and potential for approximately six future lots. In the Kooringal Road precinct, there is one vacant lot remaining. Within the remainder of the Lake Albert precinct, there are no vacant lots remaining. There are three larger lots that have potential for approximately 16 additional lots.

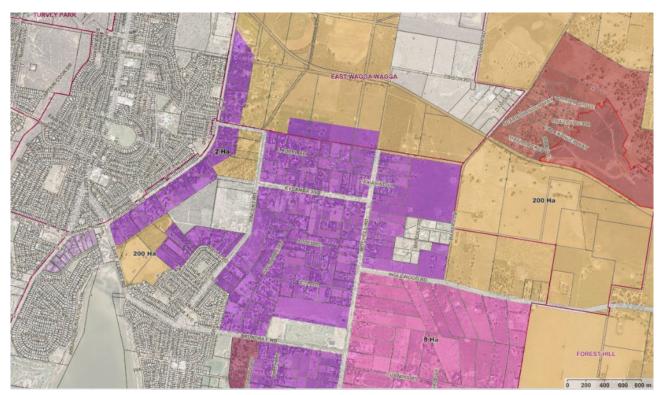


Figure 2-25 Minimum lot sizes of land at Lake Albert (north) (WWCC online mapping, 2020)

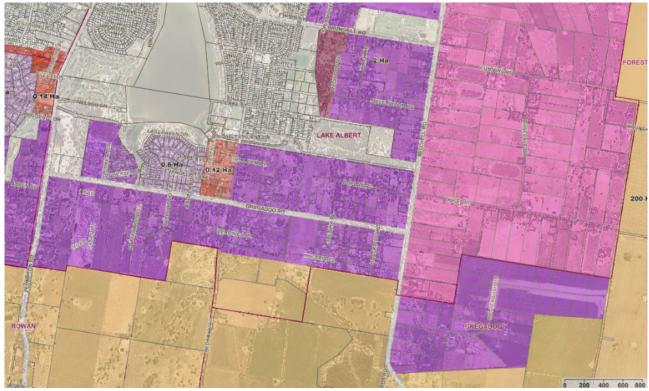


Figure 2-26 Minimum lot sizes of land at Lake Albert (south) (WWCC online mapping, 2020)

#### **Gumly Gumly**

Current and future supply remains at Gumly Gumly (Governors Hill). The total approved development involves 175 rural residential lots, with approximately 55 developed at this stage. Potential for a further 120 lots remains, whilst six existing lots are currently vacant.

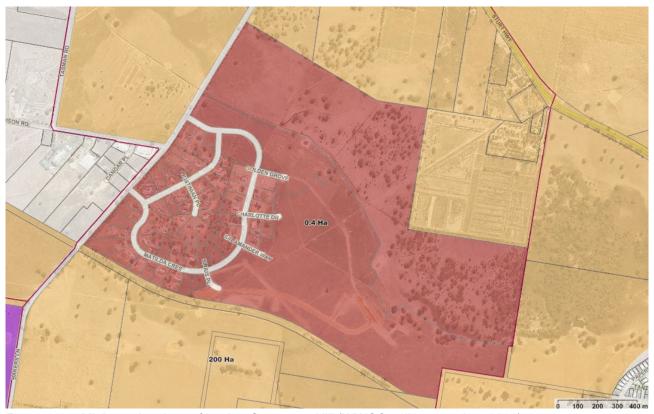


Figure 2-27 Minimum lot sizes of land at Governors Hill (WWCC online mapping, 2020)

#### Other

Other smaller precincts of R5 Large Lot Residential include land at Cartwrights Hill and on the fringes of Gobbagombalin and Boorooma. There are three vacant lots at Cartwrights Hill and two larger lots with potential for subdivision. It is estimated not more than 25 additional lots can be developed, in consideration of other known constraints. Land at Cartwrights Hill is likely to be prevented from further development due to the SAP at Bomen. At Boorooma, there is one vacant larger lot with potential for one additional lot. At Estella, there is one residual lot with potential for approximately 50 lots according to the masterplan. At Gobbagombalin, approximately 20 larger lots would be provided adjoining rural land, according to the masterplan.

#### **Summary**

Precinct	Existing vacant lots	Estimated potential	Estimated existing and potential supply	Currently available on the market <sup>1</sup>
Springvale	9	40	49	9
San Isidore and Moorong	4	16	20	1
Lake Albert	48	22	70	7
Gumly Gumly	6	120	126	0
Other	4	96	100	0
Total	71	294	365	17

#### 2.7.4. Summary of findings for supply and demand

In line with the goals and actions of the Riverina Murray Regional Plan 2036 and the 20-Year Vision for Regional NSW, Council's focus is to plan for over 100,000 residents in Wagga Wagga. Council has identified and supported the rezoning of other smaller precincts within the urban containment line, recognising these will play an important role in catering for population growth as well.

Though dwelling and subdivision approvals between 2003 and 2012 indicated a high level of demand, Council determined through the Spatial Plan that approximately 32 rural residential lots, between 1,200sqm and 10,000sqm, would be required per annum through to 2043.

An analysis of current and future R5 land supply indicates there is 71 vacant R5 lots currently. Of these, only 17 are published as on the market and available for purchase. This equates to around 6 months of the predicted R5 land requirement and would therefore be likely exhausted by the end of 2020.

There is estimated potential for approximately 294 R5 lots in future; however, supply is significantly affected, given that only a very small proportion of lots are currently available on the market. Supply may be affected by a range of factors including environmental factors, access to financing, economic feasibility, multiple land holdings within precincts and the like. Many of these lots are also concentrated within the Governors Hill precinct.

The Spatial Plan indicated that there was 7 years' supply of rural residential land already zoned as at 2013 at the forecast growth rate of less than 2 percent. A few small infill areas in the Lloyd Road precinct have been rezoned to support the creation of additional R5 lots; however, rural residential zoned land otherwise remains as outlined in the Spatial Plan.

Given supply constraints and current R5 lot availability, it is considered that the rezoning of additional land for rural residential development is justified. Based on the lack of site constraints, the subject land presents a suitable opportunity in consideration of the directions of the Spatial Plan for Potential Urban Area 5.

\_\_\_

<sup>&</sup>lt;sup>1</sup> As at 4 June 2020

#### 2.8. JUSTIFICATION FOR THE LOSS OF RU1 LAND

#### 2.8.1. Land and soil capability

Land capability is the inherent physical capacity of the land to sustain a range of land uses and management practices in the long term without degradation to soil, land, air, and water resources (OEH 2012). The NSW land and soil capability assessment scheme (OEH 2012) describes and maps eight land and soil capability classes. The classification is based on various biophysical features of the land and soil, as well as its susceptibility to a range of hazards.

The subject land is predominantly land mapped as Capability Class 4 (moderate capability), with portions of the south-eastern corner mapped as Capability Class 6 (low capability), as indicated in Figure 2-28 below. The Class 6 area is generally comprised by the Stringybark Creek and associated riparian corridor.

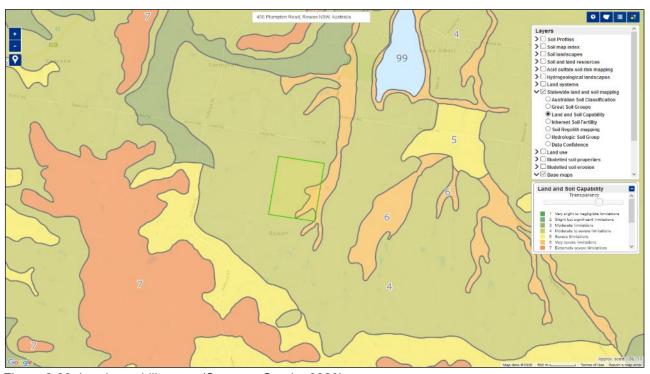


Figure 2-28 Land capability map (Source: eSpade, 2020)

Class 4 land is described as having moderate to high limitations for high-impact land uses. It would restrict land management options for regular high-impact land uses such as cropping, high-intensity grazing and horticulture. These limitations can only be managed by specialised management practices with a high level of knowledge, expertise, inputs, investment, and technology (OEH 2012).

Class 6 has very high limitations for high-impact land uses.

#### 2.8.2. Biophysical Strategic Agricultural Land

The NSW Government has mapped Biophysical Strategic Agricultural Land (BSAL) across the state. This is land which features the best quality soil and water resources and is capable of sustaining high levels of productivity. BSAL has a rare combination of natural resources highly suitable for agriculture, with the best quality landforms, soil, and water resources, inherently fertile and generally lacking significant biophysical constraints (NSW Government 2013a).

There is no classified BSAL within the vicinity of the subject land, as indicated in Figure 2-29.

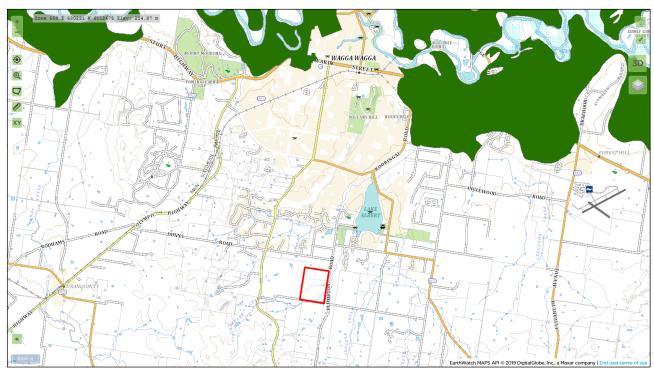


Figure 2-29 BSAL at the development site and wider locality (Source: MinView, 2020)

#### **Important Agricultural Land**

A Guideline for Identifying Important Agricultural Lands in NSW (DPI 2017) defines IAL as 'existing or future location of local or regionally important agricultural industries or resources as mapped that is consistent with the NSW DPI Guideline to Identifying Important Agricultural Lands in NSW'. The IAL mapping methodology involves overlays of current land use, biophysical resources, socioeconomic information, and agricultural industries. The methodology is intended to be used at the LGA, sub-region and region scales, rather than property scale.

IAL mapping for the Riverina-Murray region is not as yet on exhibition (DPI 2020). Due to the current land capability classification of the subject land (moderate to low capability), it is considered unlikely that the site would qualify as IAL.

#### Land use

The subject land has historically been used for agriculture, specifically cereal crops. In more recent drought conditions, the southern and eastern paddocks have been dedicated to cattle production. The subject land has been extensively cleared for agriculture. Large mature and hollow bearing trees remain throughout the southern and central portions of the site.

Agricultural land uses comprise 39,756 square kilometres within the three Riverina LGAs (Griffith, Snowy Valleys and Wagga Wagga). Agriculture and Forestry employ around 9,700 people in the region (ABS 2018). The most valuable commodities in the region during 2017-18 were wheat (\$375 million), cotton (\$347 million) and cattle and calves (\$247 million) (Department of Agriculture, Water and the Environment, 2020).

#### **Summary**

The proposal would occupy an area of up to 111 hectares. It is considered that the loss of up to 111 hectares represents a small fraction of the agricultural output of the region and would result in a negligible reduction in its overall productivity. Furthermore, it is also considered that the proposal would not significantly impact the agricultural operations of the locality, given the land use capability of Class 4 and 6.

# 2.9. HIGH QUALITY STRUCTURE PLAN AND URBAN DESIGN STRATEGY

An Urban Design Strategy including Structure Plan is provided as an attachment to this report.

#### 2.10. INFRASTRUCTURE CAPACITY ANALYSIS AND STRATEGY

#### 2.10.1. Sewerage infrastructure

A Preliminary Sewage Report was prepared by John Randall Consulting, to consider how to enable sewerage services in support of the proposed development. A summary is provided below, and the full report included at Appendix D of this report.

Wagga Wagga City Council operates the reticulated sewer network in the city, which consists of conventional sewerage, pressurised sewage systems and three sewage treatment plants. It is understood that on-site sewage management systems (OSMS) are also utilised on larger properties.

The subject land contains a single farm residence with associated outbuildings. The residence has an on-site sewage management system.

The closest connection for reticulated sewer to the subject land is a 100mm diameter (dia.) main to the north west of the site, located on Lloyd Road. There are also larger diameter mains (225 to 300mm dia.) located at the intersection of Plumpton Road and Nelson Drive some 1,735 metres from the north east corner of the site as indicated in the figure below.

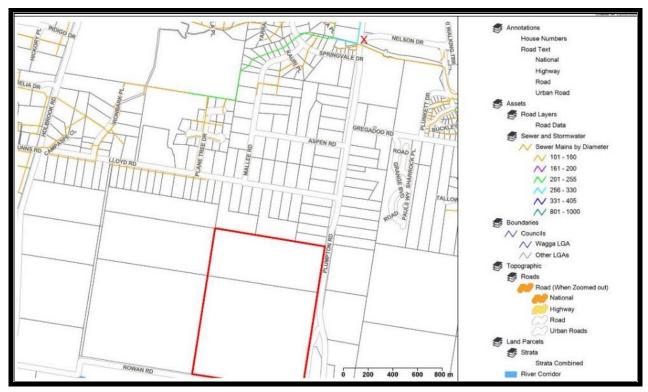


Figure 2-30 WWCC sewerage network (Source: WWCC, 2020 as cited in John Randal Consulting, 2020)

It is proposed that the development would be provided with a conventional sewerage system based on gravity flows within the sewerage pipe network. The proposed development is anticipated to generate a design flow of approximately 32.75 litres per second (L/s) (refer Appendix A of the accompanying Preliminary Sewage Report).

456-474 Plumpton Road, Rowan

Provision could be made to cater for an existing unsewered catchment to the east and west of Plumpton Road, south of Springvale Drive, to the subject land. This could potentially cater for a further 58 existing dwellings.

Based on the above flow, a 225mm dia. sewer main would be suitable to convey the discharge from the north east corner of the estate to the point of connection to the city sewerage network at the intersection of Plumpton Road and Nelson Drive<sup>2</sup>, as nominated by Council's Manager Technical & Strategy.

Based on the distance (1,735 metres) and levels (estate ground surface approx. RL215m, connection point ground surface approx. RL202m), the sewer main along Plumpton Road from the subject land to the nominated connection point, could be constructed at up to 6-7 percent grade, subject to other services constraints within the verge. Given the minimum grade is 0.75 percent, the existing conditions provide for flexibility in the design.

#### 2.10.2. Stormwater infrastructure

A Preliminary Site Stormwater Management Plan was prepared by WMA Water, to consider the management of stormwater flows through the subject land and the generation of drainage flows by the proposed development. A summary is provided below, and the full report included at Appendix E of this report.

Wagga Wagga City Council operates the stormwater drainage network in the city, which consists of reticulated drainage and informal swale drainage.

The subject land contains a single farm residence with associated outbuildings. The residence is not connected to the stormwater drainage network. Stormwater drainage currently is discharged to the land and directed to ensure other neighbouring properties are not affected.

The subject land was delineated into three sub-catchments based on the existing topography, being S1 (northern sub-site), S2 (middle sub-site), and S3 (southern sub-site). Based on the existing overland flow flood characteristics, it was recommended by WMA to design "offline" stormwater management facilities to mitigate/treat stormwater locally generated by the proposed development, whilst conveying the external flow from upstream through the subject land by appropriate civil conveyance design.

Specifically, the sheet flow across the northwest corner of the subject land can be captured by a perimeter swale along the western boundary and conveyed around the proposed development site to the northern point of discharge. Stormwater runoff can also be conveyed within the proposed road reserves via kerb and channel, and proposed drainage system. The existing waterways delineating the middle and southern sub-sites are suggested to be retained with minor modification to allow the conveyances of the external flows.

The Site Stormwater Management Plan indicates that an end-of-line combined wetland (for water quality) and detention basin (for water quantity) was conceptually designed for each of the three sub-catchments, and can cater for both external (upstream) flows through the site and locally generated flows by the proposed development.

A local water quality model (MUSIC) was set up for the three wetlands intended with the proposed development, to ensure the site discharge would meet the stormwater quality objectives. The wetland parameters and stormwater quality treatment efficiencies would be met, according to the modelling. A local hydrological model for the developable site has been set up with XPRAFTS. Three detention basins have been designed on top of the wetlands to ensure "no-worsening" stormwater peak discharges due to proposed development. It is considered the proposed stormwater management arrangements can adequately support the proposed development and would meet Council requirements.

<sup>&</sup>lt;sup>2</sup> Email correspondence 18 May 2020 (Council Manager Technical & Strategy)

#### 2.10.3. Electrical infrastructure

An assessment was prepared by Delta Star Designs, to consider the electrical infrastructure intersecting the site and in the surrounding area, and the capacity of infrastructure in the area. A summary is provided below, and the full report included at Appendix F of this report.

Two 330kV TransGrid powerline corridors traverse the subject land as indicated below. These corridors would require a minimum 60m wide clearance corridor as per TransGrid guidelines.

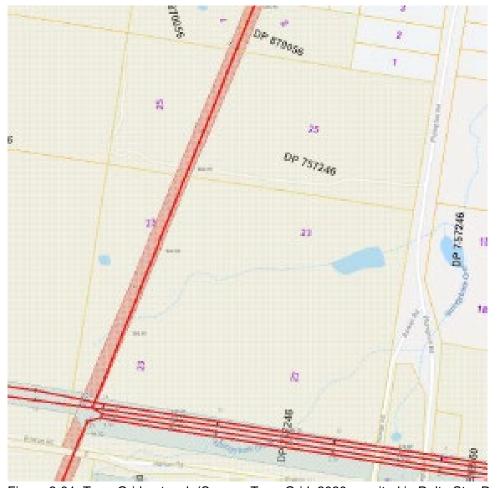


Figure 2-31 TransGrid network (Source: TransGrid, 2020, as cited in Delta Star Designs, 2020)



Figure 2-32 Essential Energy network (Source: Essential Energy, 2020, as cited in Delta Star Designs, 2020)

A maximum of 1000kVA load can be connected as part of the proposed development, with minimal augmentation required in the external network.

Essential Energy states the After Diversity Maximum Demand (ADMD) as:

- For proposed lots with reticulated gas 4kva per lot.
- For proposed lots without reticulated gas 6kva per lot.

The connection relies on substations to be established within the development, each being 315kVA.

- For proposed lots with reticulated gas 4kva per lot, a maximum of 78 connections per substation are available so therefore a maximum of 234 lots can be supplied from 3 x 315kVA substations.
- For proposed lots without reticulated gas 6kva per lot, a maximum of 52 connections per substation are available so therefore a maximum of 156 lots can be supplied from 3 x 315kVA substations.

Loads above 1000kVA would require the reconductoring of 1 km of existing overhead lines with 19/3.75 AAAC, to maintain voltage levels for urban. High voltage reconductoring would be between poles 117190 128716.

Other TransGrid and Essential Energy requirements apply to the setback of development from electrical assets. These corridors have been incorporated into the concept designs for the proposed development.

#### 2.10.4. Water infrastructure

Riverina Water County Council (RWCC) is the water supply authority for the area. RWCC provided advice regarding existing and possible infrastructure requirements as detailed in the following sections of this report.

The land is situated at an elevation of approximately 220-230 metres AHD, which is potentially serviceable from RWCC's existing high-level supply system. This system has a maximum serviceable elevation of 240m AHD.

The land is in the vicinity of existing water supply infrastructure located in Plumpton Rd. This being a combination of 80mm AC, 100mm DICL & 100mm wPVC pipe.



Figure 2-33 Water infrastructure near the site (Source: RWCC 2020)



Figure 2-34 Water infrastructure north of the site (Source: RWCC 2020)

Based on preliminary hydraulic modelling (by RWCC), the existing infrastructure in Plumpton Rd that fronts the properties does not have sufficient capacity to supply the additional demand associated with up to 420 residential lots.

New infrastructure would be required to increase the supply capacity south of the Plumpton Rd and Gregadoo Rd intersection. Further detailed analysis would be required to determine the exact scope (and associated cost) of works required, including any potential impacts on supply to surrounding areas.

#### 2.10.5. Gas infrastructure

APA is the gas supply authority for the area.

A decision to provide the proposed residential estate with gas has not been made as a sustainability initiative for the estate may include mandating rooftop solar to all dwellings. Despite the above, APA was approached regarding infrastructure in the vicinity of the subject land.

APA Transmission's Wagga Wagga to Culcairn (High Pressure Gas Transmission) Pipeline is located approximately 11km west of the subject site at the closest point. Therefore, APA Transmission has no concerns regarding direct impact on the pipeline. Additionally, the site is not located within the associated pipeline Measurement Length (area of consequence) nor does it involve a AS2885 sensitive use (e.g. school, aged care facility).

There are small diameter gas mains located along Plumpton Road and Lloyd Road as well as a 110mm diameter main along Lloyd Road. A gas connection is available to the subject land.

To supply the proposed development, approximately 1,600 metres of 125mm gas main from the existing main in Lloyd Rd would be required to be installed. An economic evaluation would need to be completed at the time of development to determine if there would be a capital evaluation required from the developer towards to cost of installing the main.

A 125mm diameter main would be provided for the main road within the development, with all other roads provided with 63mm mains.

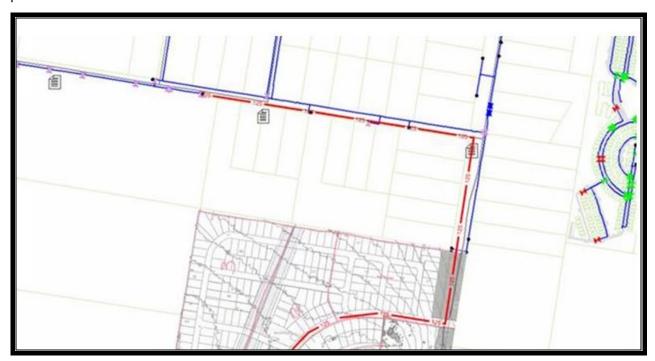


Figure 2-35 Existing (blue) and proposed (red) gas mains (Source: APA2020)

#### 2.10.6. Telecommunications infrastructure

NBN is the telecommunications/broadband authority for the area. NBN did not respond to requests for details of existing and potentially required infrastructure for the proposed development.

# 2.11. FUNDING ARRANGEMENTS AND SEQUENCING OF INFRASTRUCTURE PROVISION

The accompanying Urban Design Report indicates the development would be privately funded by an experienced land development company. Some infrastructural elements may be considered eligible for inclusion in Council's respective Contributions Plans.

The intended sequencing of the development is indicated in Section 4 of the Urban Design Report.

The progressive delivery and release of lots is intended is response to market conditions and demand. The earliest stages of the development would be in the north-eastern portion of the land, providing a logical connection point to Plumpton Road. Most of the facilities would be established in the first three stages of the development, including place making through the creation of recreation areas and the core community precinct incorporating a neighbourhood shop.

#### 2.12. TRAFFIC AND TRANSPORT CONSIDERATIONS

A Preliminary Traffic Assessment Report (TAR) has been prepared to consider the proposed rezoning and future development it would potentially give rise to. The TAR is included as Attachment G to this report.

#### 2.12.1. Existing environment

Plumpton Road forms the eastern boundary of the site for approximately 480 metres. It runs south from its intersection with Lake Albert Road and provides access for local traffic from nearby residential areas as well as rural areas further south of the subject site. Plumpton Road terminates approximately 3.5km south of the subject site.

Plumpton Road is classified as a sub-arterial road and is under management of the Wagga Wagga City Council. Sub-arterial roads carry traffic volumes generally between 6,000 and 20,000 vehicles per day, between industrial, commercial, and residential areas. These roads generally form a grid with roads spaced around 1.5 kilometres apart and link specific land use areas or "cells" and carry a range of vehicle types including heavy goods vehicles.

Adjacent to the subject site Plumpton Road has a road reserve of approximately 62 metres and a two-way sealed carriageway width of approx. 8metres. The section of Plumpton Road adjacent the site is rural in nature, has table drains in the verge and does not have kerb and gutter.

Existing public transport (Busabout Route 969) services the Tatton neighbourhood, along Brindabella Drive and Plumpton Road, approximately 1.5km north of the site.

The Wagga Wagga Active Travel Plan provides a network of commuter cycleways across the urban area, as indicated in the figure on the following page. An existing cycleway along Plumpton Road connects with the cycleway network. The closest connection point to the subject land is on Plumpton Road at Nelson Drive, approximately 1.7km north of the site. It is proposed to provide a network of footpaths and cycleways as part of potential future development.

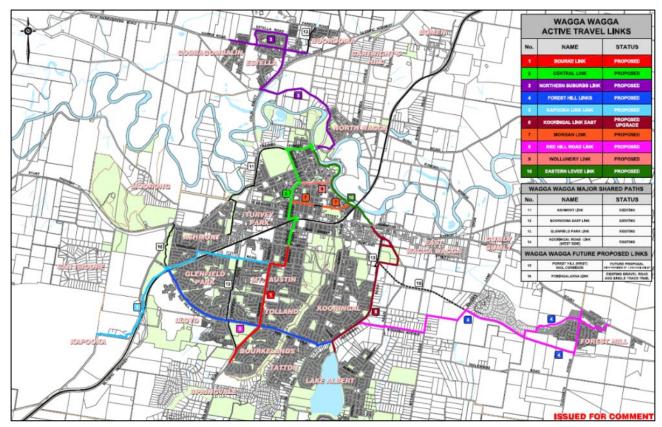


Figure 2-36 Wagga Wagga Active Travel Plan commuter cycling network (WWCC, 2020)

#### 2.12.2. Potential impacts

Traffic generation levels for the proposed residential estate are established using the rates provided in the RMS Guide to Traffic Generating Developments Technical Direction and TDT 2013/04a Updated Traffic Surveys. Traffic generation rates for Dwelling Houses (regional areas) are used for the residential estate. Assumed generation rates are as follows:

Residential Dwellings Houses

- Daily vehicle trips (vpd) = 7.4 per dwelling
- Weekday average peak hour vehicle trips (vph) = 0.78 per dwelling

The total traffic generated for a fully developed estate of up to 420 lots is shown below:

- Daily vehicle trips = 3,108vpd
- Weekday average peak hour vehicle trips = 328vph

The proposed development would be developed over several years with potentially 100 blocks in the first stage then subsequent stages of approximately 50 blocks per year, dependent upon demand. In a worst-case scenario, all traffic resulting from the proposed development would travel along Plumpton Road to the roundabout at the intersection of Plumpton Road/Red Hill Road/Kooringal Road/Lake Albert Road. From the roundabout the traffic is likely to disperse, depending on the destination.

It was modelled that Plumpton Road, between Red Hill Road and Lansdowne Avenue (both directions), caters for 8,486vpd and 902vph and 834vph in the AM and PM peaks, respectively. Between Springvale Drive and Gregadoo Road, Plumpton Road (both directions) caters for 4,800vpd and 756vph and 619vph in the AM and PM peaks, respectively.

For the full development scenario, Plumpton Road, between Red Hill Road and Lansdowne Avenue (both directions), would cater for 11,593vpd and 1,205vph and 1,139vph in the AM and PM peaks respectively. Between Springvale Drive and Gregadoo Road, Plumpton Road (both directions) would cater for 7,908vpd and 1,084vph and 947vph in the AM and PM peaks, respectively.

Plumpton Road is classified as a sub-arterial road according to Council and can therefore cater for up to 20,000vpd. The proposed development would not exceed the capacity of Plumpton Road in terms of traffic volumes.

#### 2.13. LAND SUITABILITY AND SITE HEALTH

#### 2.13.1. **Geology**

The geology of the proposal area is comprised of thick (>2-3 m) Cainozoic through to present day alluvial and slope-washed sediments derived from granite, Mount Flakney Adamellite and lesser amounts from Ordovician metasedimentary rocks. Also, thick slope-washed alluvial-colluvial sands, clays and gravels derived from Ordovician metasedimentary rocks are present.

#### 2.13.2. Topography

The proposal area consists of a landscape containing ephemeral drainage lines as tributaries of Stringybark Creek (Figure 2-37). The terrain is of low relief, with no clear ridges but some changes in elevation either side of the drainage lines. Some of the drainage lines are eroded within their channel and some have been modified in association with construction of farm dams. The main landscape features are a wide shallow drainage depression that drains gently from west to east and Stringybark Creek in the south of the proposal area also draining from east to west. The main character of the proposal area is the lack of distinct topographic features except for slightly elevated ground associated with the centre of the proposal area and elevated banks around the natural water sources.

#### 2.13.3. Soils

The two soil landscapes present in the proposal area are outlined in the table below and shown in Figure 2-38 below. The presence of deep soil deposits in the area may contain in situ archaeological deposits containing cultural material.

Table 2-4 Summary of soil landscapes in the proposal area (OEH 2019).

Soil Landscape	Location	Topsoil		Subsoil	Depths
Redbank (rb)	Majority of the proposal area	Brown to dark brown clay loam	orange fine, sandy	Bright reddish brown to yellowish brown heavy clays with grey mottling	
O'Briens Creek variant b (obb)	North eastern portion of the proposal area, directly south of the Becks Lane landscape			Bright reddish brown to yellowish brown heavy clays with grey mottling	, ,

456-474 Plumpton Road, Rowan

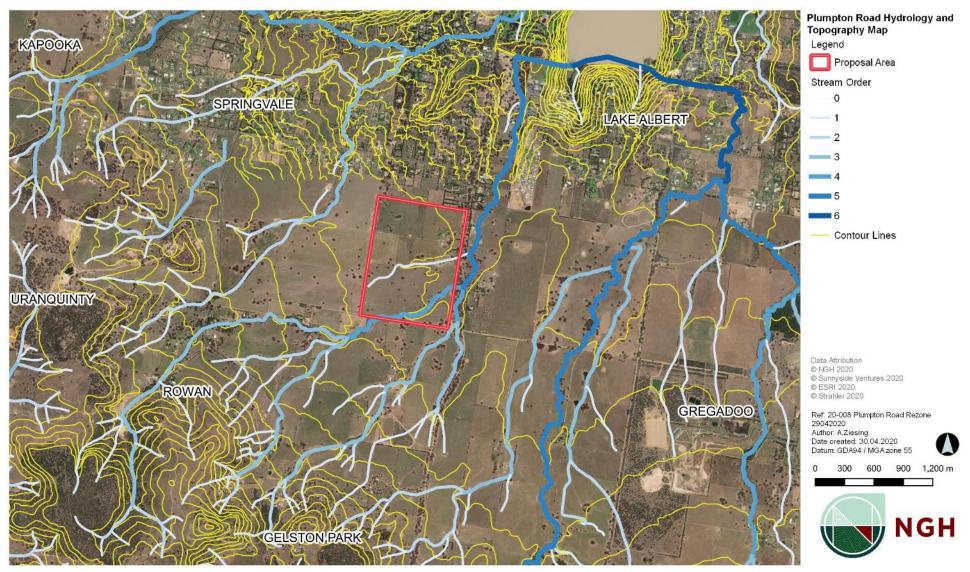


Figure 2-37 Hydrology and Topography within the proposal area (Source: NGH, 2020)



Figure 2-38 Soil Landscapes within the proposal area (Source: NGH, 2020)

#### 2.13.4. Site Health

In respect of potential land contamination matters, a search of the NSW EPA's Contaminated Land Record and List of Contaminated Sites Notified to the EPA was carried out on 28 April 2020. Results of the search indicated there were no identified contaminated lands within or adjacent to the subject land. Additionally, a search of records for lands classed as 'potentially contaminated' indicated there is no recorded data held by Wagga Wagga City Council for the site. However, in determining the likelihood of potential land contamination, it is acknowledged that the subject land, being rural, has historically been utilised for the purposes of agriculture and agricultural use is specified in Appendix 2 of Council's Contaminated Land Policy which takes reference from the SEPP 55 Planning Guidelines.

Therefore, to best determine the nature of agricultural activities, a site inspection was conducted on 4 May 2020. The site inspection included a comprehensive walk over of the site, inspection of farm buildings and discussions with the landowner to confirm past and present land use activities. Information obtained during discussions was based on the landowner's long-term management of the land, for which the information is provided to the best of his knowledge and expertise.

The landowner has occupied the property since its purchase in September 2000. The land has been used for livestock grazing, predominantly for cattle, however some fat lamb grazing occurred in the past. Cropping activities, past and present, comprises cereal and lucerne production, predominantly for hay.

The subject land contains general farm buildings associated with its agricultural use. Site inspection indicated a farm shed, referred to as Building C in the figure below, contained a small storage area for chemicals.



Figure 2-39 Location of chemical store (Source: NGH, 2020)

456-474 Plumpton Road, Rowan

Chemicals observed were contained in sealed plastic containers and the contents were clearly marked on labels. The chemicals observed are provided in the table below.

Table 2-5 Agricultural chemicals stored on site

Site name	SDS Title
Jaguar	Jaguar® Selective Herbicide
Igran	Flowable IGRAN 500 SC Liquid Herbicide
Glysophate	FMC Glyder 450 Herbicide
Dual Gold	DUAL GOLD
Diuron/Sprayseed	Apparent Diuron 900 WG Herbicide
MAP Super	Campbells MAP(Solu-MAP)
Urea	UREA AR

Material data sheets for the chemicals in the table above indicate they are not listed as Dangerous Goods. An assessment provided by a consulting agronomist confirmed that some of the chemicals listed above have not been used for up to 6 years. The site inspection did not indicate the presence of cattle / sheep dipping activities, which was also confirmed by the landowner.

Additionally, the status of the subject land was checked against data contained in mapping for Naturally Occurring Asbestos in NSW. The site in not mapped as being impacted as indicated in the figure below.

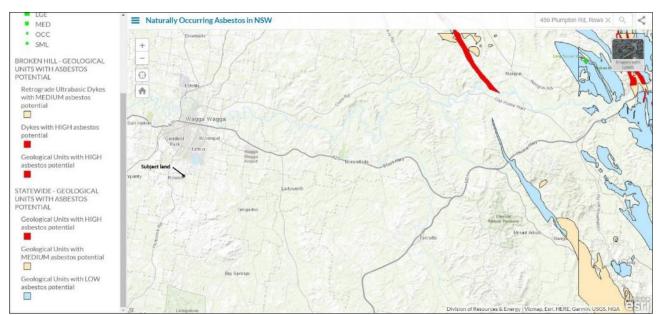


Figure 2-40 Subject land with respect to naturally occurring asbestos (Source: NSW Resources & Energy, 2020)

With regard to the above findings, it is considered that the potential for impact from contamination is minimal, given low residual levels of agricultural chemicals may be present on the land however, these would not be expected to pose a risk to human health.

#### 2.14. SOCIAL AND CULTURAL IMPACTS

The rezoning of the land would facilitate additional housing opportunities in an area that forms a natural expansion of the existing established urban area. The potential for additional lifestyle housing opportunities and enhanced location choice is considered of social benefit to the community.

The need for housing provision to support project growth is outlined in the Spatial Plan and consolidated by the NSW Government's publication 'A 20-Year Economic Vision for Regional NSW', in which Wagga Wagga was identified as a major growth centre. The growth projections outlined in the Spatial Plan have been fortified through major drivers such as the Wagga Wagga Special Activation Precinct and the Health and Knowledge Precinct, with population expected to reach 100,000 by 2040.

The proposed precinct represents a cohesive landholding, under a single ownership. The land would support a natural extension of the established urban area towards the south. The proposed precinct is considered suitable for further strategic analysis, with a view to rezoning. The subject precinct would present a viable opportunity for sustainable urban expansion with few environmental concerns present and retention of the desired landscape character.

Essential infrastructure can be cost-effectively extended to the site, as outlined earlier in this report, and accompanying infrastructure feasibility assessments. The land is located adjacent to Plumpton Road, a major road connection, providing a direct route to the CBD. The land would also be connected to and served by public transport routes and shared pathways for cycling and walking.

The precinct is supported by social infrastructure such as nearby medical centres, childcare centres, and schools. Proximity to these facilities is outlined in Section 1 of the Urban Design Report.

The Planning Proposal would cater for projected population growth and thereby support social and economic objectives, sustaining and enhancing demand for commercial functions in the CBD and other supporting lower-order centres such as Kooringal Mall, as well as other community facilities Critical mass in the southern residential precinct could also attract the establishment of other services and facilities within the zoned business precinct at Tatton.

Regional and local-scale open space areas are within close proximity to the land and a network of open space areas would be provided within the development to take advantage of the site's features. The Wagga Wagga City Council Recreation, Open Space and Community (ROSC) Strategy and Implementation Plan 2040 does not identify the subject land within the existing precincts, given the land is not currently zoned for urban development.

The closest urban precinct identified is Springvale, which adjoins the subject land to the north. The ROSC recommends an area of Open Space per 1000 people of 4 hectares. The combined Bourkelands/Lloyd/Springvale precinct is estimated to have 8.44 hectares per 1000 people by 2040, in excess of the recommended rates for open space provision; however, a major part of this excess is comprised by the regional-level Jubilee Park sportsground, which covers an area of 33 hectares.

Previous community consultation identified the local community is seeking additional outdoor activities and facilities, as well as improved and additional open spaces and places for community connection. It is intended that sensitive areas of the subject land would be conserved through application of a RE1 Public Recreation zone, to form a network of passive and active open space areas for the enjoyment of the community and promote healthy and active lifestyles.

The proposed development would fulfill the community's desire for additional urban canopy through the retention of existing trees and the planting of native species as outlined in the Urban Design Strategy. It is proposed to provide recreation facilities such as picnic shelters, play areas, wetlands, and a dog park.

The proposed development would result in the loss of land that is currently zoned for primary production, being only a small proportion of available agricultural land in the Wagga Wagga LGA. The loss of agricultural land can have economic and social effects on communities, through loss of direct expenditure, loss of indirect expenditure on supporting and related enterprises, progressive changes to the character or identify of the

456-474 Plumpton Road, Rowan

locality, loss of relationships within the community. Other impacts include potential isolation of agricultural land and reduction in the productive capacity of agricultural land. Agriculture is an important local sector, with 4.8 percent of residents employed in the agriculture, forestry, and fishing sector as at 2016 census.

The subject land is predominantly mapped as Agricultural Suitability Class 2 and 3, as indicated in the figure below. A significant area of Class 2 land remains within the wider locality.

It is considered the proposed development would not have widespread or significant impacts as a result of the loss of 110 hectares of agricultural land. The direct loss of agricultural land to the community would be outweighed by substantial economic and social benefits. Other important benefits would arise through sustained demand for commercial activities, community services and efficient use of serviceable urban land.

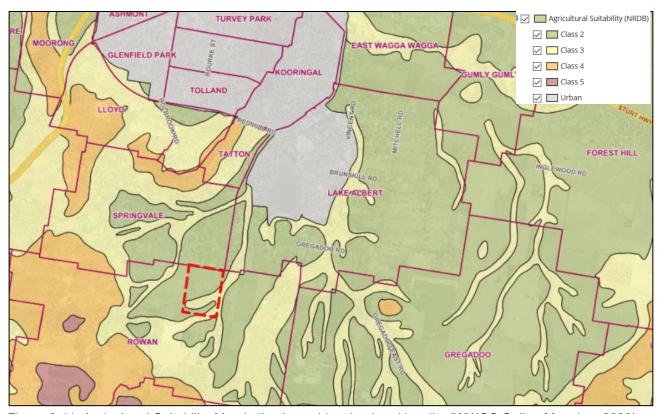


Figure 2-41 Agricultural Suitability Map indicating subject land and locality (WWCC Online Mapping, 2020)

The subject land is not identified as Biophysical Strategic Agricultural Land (BSAL), under the provisions of the *State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007*, as indicated in the figure on the following page.

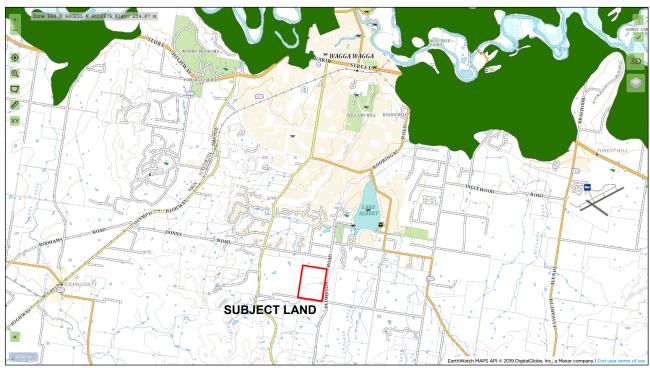


Figure 2-42 Biophysical Strategic Agricultural Land map (MinView, 2020)

# 2.15. STRATEGIC JUSTIFICATION OF REZONING, CONSISTENCY WITH RELEVANT REGIONAL AND LOCAL STRATEGIES

#### 2.15.1. Riverina Murray Regional Plan 2036

The Riverina Murray Regional Plan 2036 is applicable to the subject land. The following Directions from the Plan are relevant to the Planning Proposal:

Table 2-6 Considerations under the Riverina Murray Regional Plan 2036

#### **Objectives** Comment Direction 1 Protect the region's diverse Generally consistent. The Regional Plan identifies that the and productive agricultural land. co-location of incompatible land uses can inhibit agricultural processes. Further, the fragmentation of Action 1.2 Protect important agricultural land agricultural land can also impact its productivity by limiting identified in the regional agricultural its ability to operate at a sufficient economic scale. development strategy from land use conflict and fragmentation, and manage the interface Important Agricultural Land (IAL) mapping for the Riverinabetween important agricultural lands and Murray region is not yet on exhibition (DPI 2020). Due to other land uses. the current land capability classification of the subject land (Class 4 and 6; moderate to low capability), it is considered unlikely that the site would qualify as IAL. Biophysical Strategic Agricultural Land (BSAL) is not mapped within the subject land or surrounds. It is considered that the subject precinct is already fragmented as it comprises two existing lots with a collective area of 110 hectares, under the prescribed minimum lot size of 200 hectares. Plumpton Road, Rowan Road and existing easements would provide for a buffer between future development and surrounding agricultural lands. Design controls and

Objectives	Comment
	objectives under the Wagga Wagga Development Control Plan (DCP) 2010 would guide compatible development outcomes and manage the interface to prevent land use conflicts.
Direction 15 Protect and manage the region's many environmental assets.  Action 15.2 Minimise potential impacts arising from development in areas of high environmental value, and consider offsets or other mitigation mechanisms for unavoidable impacts.	Generally consistent. The subject land is mapped as containing riparian land and biodiversity values. A preliminary biodiversity assessment was prepared to consider the values present. No threatened fauna or flora species were detected during a field survey; however, background research indicated that several threatened species could potentially occur. One Threatened Ecological Community (TEC) listed under the <i>Biodiversity Conservation Act 2016</i> (BC Act) was detected on-site. Refer to Section 3.3.1 of this Planning Proposal for further details.  The Planning Proposal intends that sensitive areas of the site would be conserved through the RE1 Public Recreation zone and would not form part of the developable residential area. Detailed design would be used to avoid, minimise, and mitigate biodiversity impacts.
	Given the low thresholds for further assessment and offsetting under the BC Act provisions, it is considered likely that future development would require a Biodiversity Development Assessment Report (BDAR) to be prepared. Impacts are required to be avoided, minimised, and offset according to the Biodiversity Assessment Method (BAM), which is consistent with this direction of the Regional Plan.
Direction 16 Increase resilience to natural hazards and climate change.	Generally consistent. The subject land is not affected by bushfire hazards, groundwater, or land vulnerabilities.
Action 16.1 Locate developments, including new urban release areas, away from areas of known high biodiversity value, high bushfire and flooding hazards, contaminated land, and designated waterways, to reduce the community's exposure to natural hazards.	Part of the land is subject to overland flow flooding arising from Stringybark Creek, which is also mapped as an area of high biodiversity value; however, the riparian areas would largely be preserved within open space areas and not form part of the proposed developable residential land. Detailed design would avoid, minimise, and mitigate impacts on riparian land and biodiversity values.
Direction 22 Promote the growth of regional cities and local centres.  Action 22.1 Coordinate infrastructure delivery across residential and industrial land in the regional cities.	Consistent. The Riverina Murray Regional Plan 2036 states a need for Wagga Wagga (together with Albury and Griffith as the other major centres in the region) to shoulder a significant portion of the anticipated population growth and housing provision over the next 20 years.
regional ciues.	The Spatial Plan identifies that approximately 360 new dwellings are required in the LGA per annum. The subject land represents a cohesive landholding, under a single ownership. The land would present a viable opportunity for sustainable urban expansion, a natural extension towards the south, with few environmental concerns present and retention of the desired landscape character. The proposed precinct is considered suitable for further strategic analysis, with a view to rezoning.

#### **Objectives**

#### Comment

### Direction 26 Provide greater housing choice.

Action 26.7 Promote incentives to encourage greater housing affordability, including a greater mix of housing in new release areas.

Consistent. The Regional Plan indicates the necessity to provide a wide range of housing options and locations to encourage housing mobility — both upsizing and downsizing as required - and to ensure that this can occur as needed by the community.

The subject land is mapped within Potential Urban Area 5 as identified in the Spatial Plan, which indicated land that is potentially suitable for future urban development in a short to medium term timeframe.

The Planning Proposal has the potential to contribute to the required level of housing provision across the LGA, as well as to service specific market segments such as affordable housing and larger sized housing lots.

## Direction 27 Manage rural residential development.

Action 27.1 Enable new rural residential development only where it has been identified in a local housing strategy prepared by council and approved by the Department of Planning and Environment.

Action 27.2 Locate new rural residential areas:

- in close proximity to existing urban settlements to maximise the efficient use of existing infrastructure and services, including roads, water, sewerage and waste services and social and community infrastructure;
- to avoid or minimise the potential for land use conflicts with productive, zoned agricultural land and natural resources; and
- to avoid areas of high environmental, cultural and heritage significance, important agricultural land or areas affected by natural hazards.

Consistent. As outlined above, the subject land is identified as a potential urban area in the Spatial Plan, a local planning strategy endorsed by the Department of Planning.

The subject land forms a natural extension to the existing established urban area and would provide for the optimal use of urban infrastructure. The land is not within or adjacent to an area that comprises prime agricultural land, BSAL, SSAL and is considered unlikely to meet the factors for IAL (not yet published by DPI). The land does not comprise areas of high environmental value and is largely free of environmental constrains and natural hazards.

## Direction 28 Deliver healthy built environments and improved urban design.

Consistent. The accompanying Urban Design Report indicates the site features would be used to their advantage to create good quality liveability outcomes for future residents and the community. The Urban Design Report takes reference from the Urban Design Guide for Regional NSW prepared by the Government Architect NSW.

The Planning Proposal intends that sensitive areas of the site would be conserved through the RE1 Public Recreation zone and would not form part of the developable residential area. These would form a network of passive and active open space areas for the enjoyment of the community and preservation of landscape character.

456-474 Plumpton Road, Rowan

The 'Riverina Murray Regional Plan 2036' does not include Sustainability Criteria, as referenced in the DPE's 'A guide to preparing planning proposals'. As such, the Assessment Criteria in the guide are instead referenced to establish the merit of the Planning Proposal. The Assessment Criteria form the basis of the strategic merit and site-specific merit assessment for the rezoning review process.

As outlined earlier in this Planning Proposal, the Planning Proposal is justified on its strategic merit. The Planning Proposal would give effect to a relevant local strategic planning strategy, the Wagga Wagga Spatial Plan, which has been endorsed by the Department. This is further addressed in Section 3.2.2 below.

Additionally, several site-specific merit factors exist in relation to the Planning Proposal. Development of the land would form a natural extension to the existing urban area. An analysis identified the land to be largely free of environmental or hazard constraints such as biodiversity values, flooding, bushfire, and the like. The land is gently undulating which is conducive to residential development. It also has access to physical and social infrastructure, given proximity to the existing established urban area and Central Business District, and location within the Urban Containment Line identified within the Spatial Plan. These factors are discussed further in Section C of this Planning Proposal.

#### 2.15.2. Wagga Wagga Spatial Plan 2013-2043

The Wagga Wagga Spatial Plan 2013-2043 is applicable to the subject land. The following Objectives from the Spatial Plan are relevant to the Planning Proposal. Considerations of the Wagga Wagga Spatial Plan are discussed in the table below.

Table 2-7 Considerations under the Wagga Wagga Spatial Plan 2013-2043

Objectives	Comment
Facilitate an environment that provides shared access to public spaces and promotes healthy activities.	As outlined above, the Planning Proposal intends that sensitive areas of the site would be conserved through the RE1 Public Recreation zone, to form a network of passive and active open space areas for the enjoyment of the community and promote healthy and active lifestyles.
Retain and strengthen the open space network, including the hills, ridges, natural watercourses and gullies	As outlined above, the riparian areas within the site would be preserved through the application of the RE1 Public Recreation zone. These would form part of the network of passive and active open space areas through the development and preserve the landscape character.
Protect the biodiversity of Wagga Wagga Local Government Area.	Generally consistent. As outlined above, the subject land is mapped as containing riparian land and biodiversity values. No threatened fauna or flora species were detected during a field survey; however, background research indicated that several threatened species could potentially occur on the site. One TEC listed under the BC Act was detected on-site.
	As outlined above, sensitive areas of the site would be conserved through the RE1 Public Recreation zone and would not form part of the developable residential area. Detailed design ensure biodiversity impacts are avoided, minimised, and mitigated. The rezoning and potential future development of the land is not anticipated to have an adverse impact on biodiversity values within the locality.
Manage impacts of natural systems and hazards, particularly salinity, flooding and bushfires	Generally consistent. As outlined above, the subject land is not adversely affected by natural hazards.  A portion of the land is subject to overland flow flooding arising from Stringybark Creek; however, these areas would largely be preserved within open space areas and would not form part of the proposed developable residential land.

Objectives	Comment
Accommodating population growth through adequate supplies of well planned residential land, providing a variety of housing options to achieve housing choice and affordability.	Consistent. The subject land comprises part of Potential Urban Area 5 identified in the Spatial Plan. The planned outcome as indicated in the Spatial Plan is the ensure dwelling demand for the full range of household types is met, to provide adequate choice of housing type and locations, to ensure adequate and affordable housing is available in accessible locations throughout the area and a decrease in land use complaints. The proposed rezoning and potential future residential development would fulfil these objectives. The Planning Proposal has the potential to contribute to the required level of housing provision across the LGA, as well as to service specific market segments.
	Development of the land would form a natural extension to the existing urban area. The land is gently sloped which is conducive to residential development and is largely free of environmental or hazard constraints. It also has access to physical and social infrastructure, given proximity to the existing established urban area and CBD, and location within the Urban Containment Line identified within the Spatial Plan.
Well serviced areas displaying design excellence, which in turn enhance the security and wellbeing of individuals and families, and provide a base for strong, resilient communities.	Consistent. As outlined below, the subject land is serviceable land identified within the Urban Containment Line. According to the Spatial Plan, the purpose of the Urban Containment Line is to guide development in the short and medium term within reasonable travel distances and where infrastructure can be provided at a reasonable cost to the developer.
	The accompanying Urban Design Report indicates the site features would be used to their advantage to create good quality liveability outcomes for future residents and the community.
Facilitate the provision of physical infrastructure in a coordinated and cost-effective manner	Consistent. The accompanying infrastructure assessments indicate that essential infrastructure can be cost-effectively extended to the land. It is also noted that some infrastructure head works could additionally support infill/intensification of adjacent lands, as is indicated in the Spatial Plan for potential urban development.
Facilitate improved efficiency of urban infrastructure such as water supply, wastewater management, stormwater management, electricity and telecommunications	Consistent. The land is a natural expansion of the existing established urban area of Wagga Wagga. Servicing of the land would not place an undue burden on the community. A lower average lot size is proposed in comparison to surrounding development, to ensure that serviceable urban land is utilised in an optimal manner, thereby improving the efficiency of urban infrastructure going forward.

## 2.15.3. Wagga Wagga Recreation, Open Space and Community Strategy and Implementation Plan 2040

The Wagga Wagga City Council Recreation, Open Space and Community (ROSC) Strategy and Implementation Plan 2040 does not identify the subject land within the existing precincts, given the land is not currently zoned for urban development. The closest urban precinct identified is Springvale, which adjoins the subject land to the north. The ROSC indicates Springvale to be one of the most recent suburbs in Wagga Wagga, with development commencing in the early 2000s.

The ROSC recommends an area of Open Space per 1000 people of 4 hectares. The Bourkelands/Lloyd/Springvale precinct is estimated to have 8.44 hectares per 1000 people by 2040, in excess of the recommended Open Space. A major part of this excess Open Space is Jubilee Park sportsground, located between Bourkelands and Lloyd, which covers an area of 33 hectares.

Previous community consultation identified the local community requested improvements to existing the open spaces including the provision of additional trees and BBQs at local parks, and improvements to the Wiradjuri Walking Track. The community had also requested additional outdoor activities and facilities, and improved and additional open spaces and places for community connection.

#### 2.15.4. Wagga Wagga Integrated Transport Strategy

The Wagga Wagga Integrated Transport Strategy (WITS) is Council's current traffic and transport strategy for Wagga Wagga. The strategy further considers the potential southern bypass/connection identified in the Spatial Plan. The WITS acknowledges the city's existing road and transport network has developed over time to cater for increasingly expanding outer settlements, however, a new and integrated approach is required to support a growing population, economy and strategic position as a regional centre. The WITS aims to establish a strategic direction for transport needs to respond to population growth.

One objective of the WITS is to 'Preserve a heavy vehicle bypass south of the Sturt Highway'. According to the WITS, Key Item FT1.2 is to 'Work with RMS to preserve a heavy vehicle bypass corridor south of the Sturt Highway within Council strategies'. The Sturt Highway is a major freight route between Sydney and Adelaide and traverses the Wagga Wagga Central Business District (CBD) and the Health and Knowledge Precinct (HKP) surrounding the Wagga Wagga Base and Calvary hospitals. It is intended that a suitable corridor, be identified, south of the Sturt Highway, to provide efficient, safe and low impact movement for freight movement between Sydney and Adelaide.

A potential route for the southern bypass/connection was identified in the Master Transport Plan and Alternate Route Plan for Wagga Wagga prepared by GHD and commissioned by Committee 4 Wagga. This alternate route plan was included in the WITs and is indicated in the figure below.

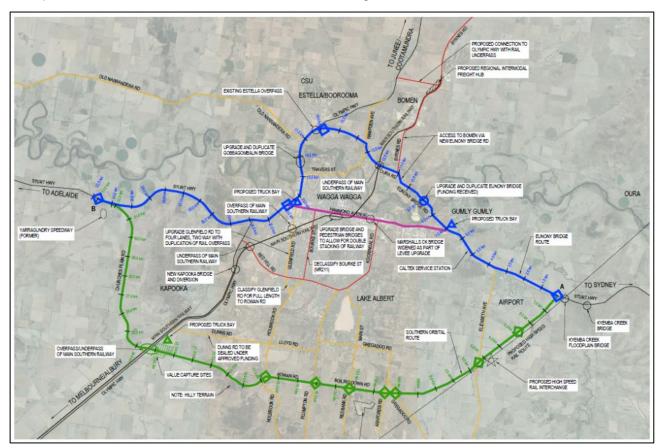


Figure 2-43 Alternate Route Plan (C4W, 2015)

456-474 Plumpton Road, Rowan

The route is indicated as following existing road corridors where possible, to avoid land acquisitions. The proposed route, being in close proximity to the subject land, would traverse Boiling Down Road, intersect with Plumpton Road, and continue along Rowan Road to its intersection with Holbrook Road.

The subject land is encumbered by a significant electrical easement along the southern property boundary that would prevent dwellings from being constructed within a buffer of approximately 130 metres of Rowan Road. This would restrict future residential development impacting the proposed southern bypass route, should rezoning proceed, thus complying with the objectives of the southern bypass route.

# 2.16. STAKEHOLDER MANAGEMENT AND COMMUNITY DEVELOPMENT

The Planning Proposal would be submitted to NSW Department of Planning, Industry and Environment for Gateway Determination where community consultation will be conditioned.

It is considered the target audience for community consultation would be adjoining and nearby affected landholders, as well as the wider community.

It is considered Council's key messages for the exhibition would be the following:

- Council has received this planning proposal to rezone parcels of land at 456-474 Plumpton Road
- Council are seeking feedback on the proposed changes
- Describe the planning process
- Describe how to make a submission
- Where the information is available and how to get involved
- What will happen after exhibition?

Based on previous similar proposals, it is anticipated Council would utilise the following engagement methods:

- Consultation page on Connect.Wagga including proposal details, FAQs, and contact details for further information.
- · Direct mail notification to adjoining and affected landholders
- Advertisements in Council's News insert
- Opportunities for stakeholder meetings and consultation with Council staff
- Typical hard copies may not be available for inspection at Council Chambers due to the COVID-19 pandemic. In lieu of this, the planning proposal may be notified of DPIE's website.

It is considered, the following stakeholder management risks may be associated with the planning proposal:

- The community may not understand the strategic planning process; however, Council's consultation material including FAQs should minimise this issue.
- Controversial issues may be highlighted in the local media; however, the above stakeholder engagement tools provide several forums for the discussion of issues.
- Lack of community or key stakeholder awareness, buy-in or engagement; however, the above stakeholder engagement tools will ensure the community is notified in several different manners and provided with a variety of opportunities to make comment.