



Business Papers 2021

MID-WESTERN REGIONAL COUNCIL

ORDINARY MEETING
WEDNESDAY 17 FEBRUARY 2021

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Burrendong Wind Farm Scoping Report

Epuron Projects Pty Ltd

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Template 2.8.1

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Abbreviations

| Abbreviation | Description |
|--------------|--|
| ACHA | Aboriginal Cultural Heritage Assessment |
| AHIMS | Aboriginal Heritage Information Management System |
| APZ | Asset Protection Zone |
| BAM | Biodiversity Assessment Methodology |
| BBAMP | Bird and Bat Adaptive Management Plan |
| BC Act | <i>Biodiversity Conservation Act 2016</i> |
| BCD | Biodiversity Conservation Division |
| BDAR | Biodiversity Development Assessment Report |
| BVT | Biometric Vegetation Types |
| CASA | Civil Aviation Safety Authority |
| CCC | Community Consultation Committee |
| CEEC | Critically Endangered Ecological Community |
| DAWE | Commonwealth Department of Agriculture, Water and Environment |
| DCP | Development Control Plan |
| DEM | Digital Elevation Model |
| DoEE | Department of the Energy and Environment |
| DPIE | Department of Planning, Industry and Environment |
| DRE | DPIE- Division of Resources and Energy |
| EEC | Endangered Ecological Community |
| EIS | Environmental Impact Statement |
| ELA | Eco Logical Australia |
| EPA | Environment Protection Authority |
| EPBC Act | <i>Environment Protection and Biodiversity Conservation Act 1999</i> |
| EP&A Act | <i>Environmental Planning & Assessment Act 1979</i> |
| Epuron | Epuron Projects Pty Ltd |
| GIS | Geographic Information System |
| Guideline 3 | <i>Guideline 3 – Scoping an Environmental Impact Statement (DPE, 2017)</i> |
| ISEPP | <i>State Environmental Planning Policy (Infrastructure) 2007</i> |
| LEP | Local Environmental Plan |
| LGAs | Local Government Areas |
| LLS | Local Land Services |
| LSPS | Local Strategic Planning Statement |
| MNES | Matters of National Environmental Significance |

| Abbreviation | Description |
|-----------------|--|
| MW | megawatts |
| NEM | National Electricity Market |
| NIA | Noise Impact Assessment |
| Noise Bulletin | Wind Energy: Noise Assessment Bulletin (DPE, 2016c) |
| NSW | New South Wales |
| PCT | Plant Community Types |
| PEA | Preliminary Environmental Assessment |
| PLVIA | Preliminary Landscape and Visual Impact Assessment |
| Project | Burrendong Wind Farm |
| RE Act | <i>Renewable Energy Act 2000</i> |
| RET | Renewable Energy Target |
| REZ | Renewable Energy Zones |
| RFS | NSW Rural Fire Service |
| SEARs | Secretary's Environmental Assessment Requirements |
| SEPP | State Environmental Planning Policy |
| SEPP(SRD) | <i>State Environmental Planning Policy (State and Regional Development) 2011</i> |
| SoHI | Statement of Heritage Impact |
| SSD | State Significant Development |
| TEC | Threatened Ecological Communities |
| VIS | Vegetation Information System |
| Visual Bulletin | Wind Energy: Visual Assessment Bulletin (DPE, 2016b) |
| Wind Guideline | Wind Energy Guideline (DPE, 2016a) |
| WTG | Wind Turbine Generators |
| ZTVI | Zone of Theoretical Visual Influence |

1. Introduction

1.1 Background

The Burrendong Wind Farm (herein referred to as the 'Project'), will involve the construction, operation and decommissioning of around 69 Wind Turbine Generators (WTG) and associated ancillary infrastructure, with a total capacity around 400 MW. The Project site is located approximately 30 km south-east of Wellington and to the east of Lake Burrendong (Figure 1-1) and is situated within two Local Government Areas (LGA), being:

- Dubbo Regional Council
- Mid-Western Regional Council.

The Project site is currently primarily used for agriculture, including farming and grazing operations, and also lies within the Lake Burrendong catchment.

A preliminary Project site layout comprising of 69 WTGs is provided in **Figure 1-2** however, this will be further refined in response to identified environmental constraints and ongoing stakeholder consultation.

1.2 Proponent

The Proponent for the project is Epuron Projects Pty Ltd (Epuron), an Australian renewable energy company established in North Sydney in 2003. Epuron is one of the most experienced wind energy development companies in New South Wales (NSW), as well as a significant developer of solar projects across Australia.

Epuron is a leader in its field, with 573 MW of wind turbines in operation or construction resulting from its development work, significantly more in NSW than any other developer. Epuron owns and operates more off-grid utility-scale solar power stations than any other Australian company. Further details can be found at our website at www.epuron.com.au.

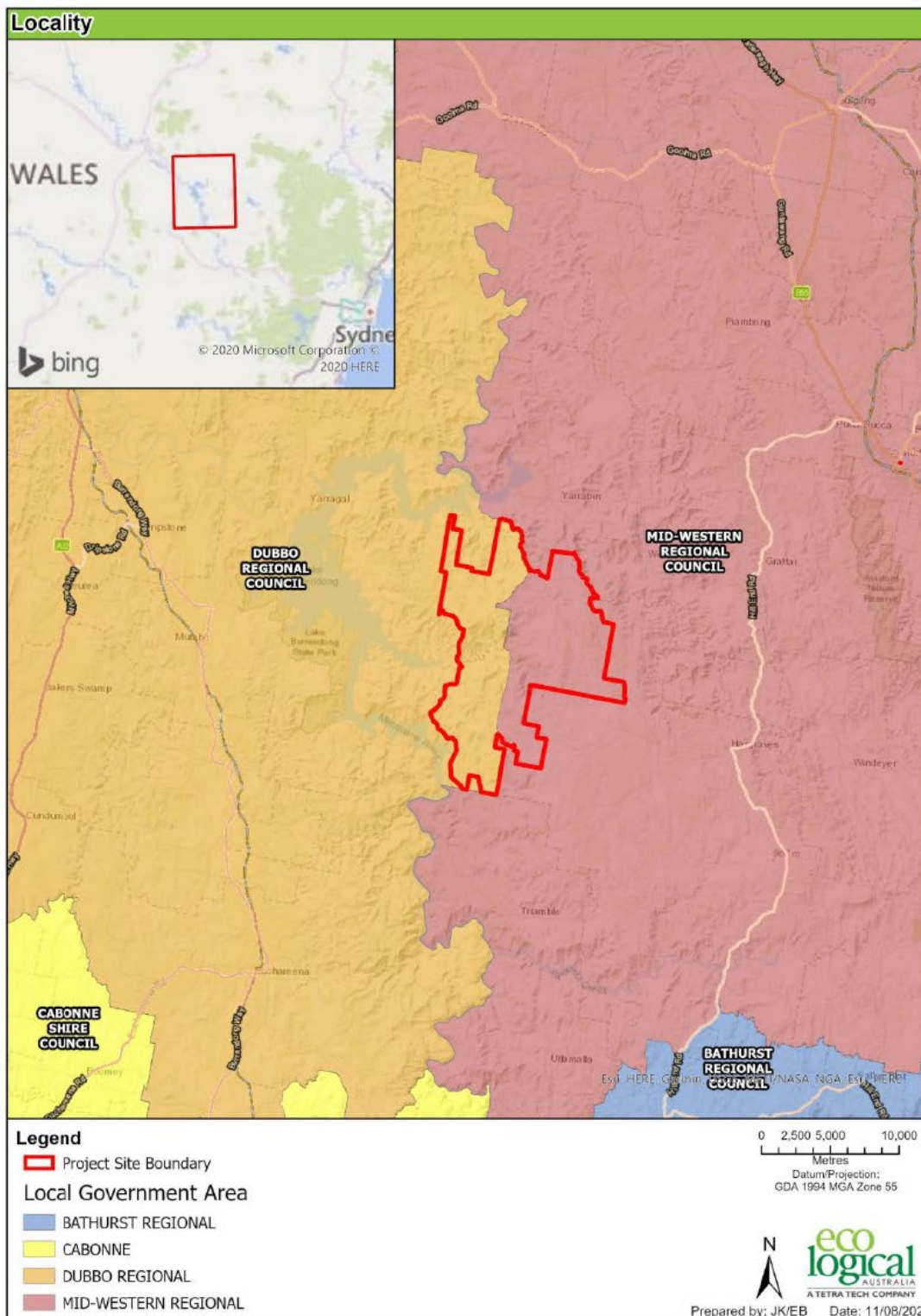


Figure 1-1: Project site locality and LGAs

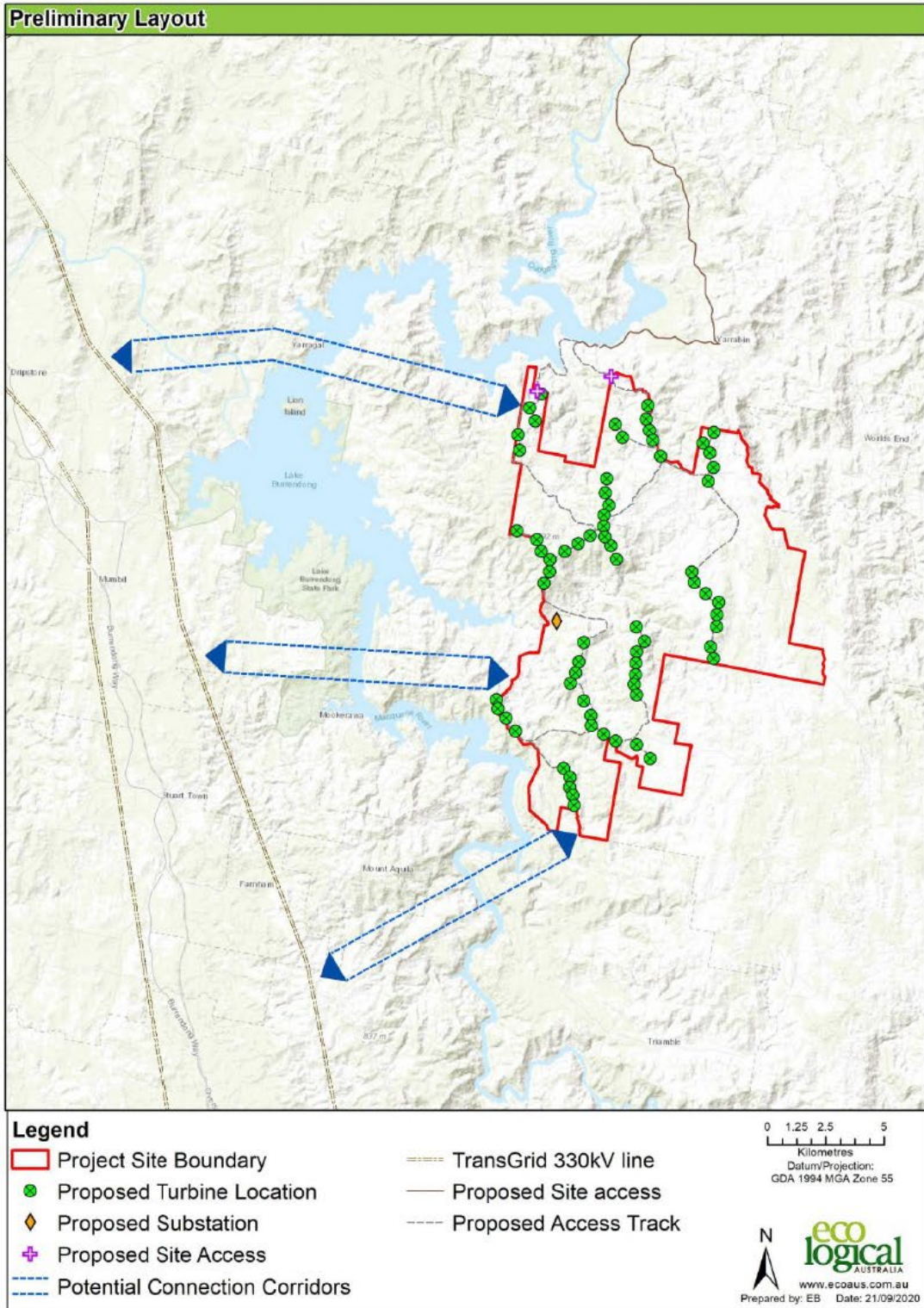


Figure 1-2: Project preliminary layout

1.3 Document Purpose

The Proponent is seeking State Significant Development (SSD) consent under Division 4.7 of Part 4 of the *Environmental Planning & Assessment Act 1979* (EP&A Act) for the Project.

This Scoping Report has been prepared to support an application to the Secretary of the Department of Planning, Industry and Environment (DPIE) for Secretary’s Environmental Assessment Requirements (SEARs) to guide the preparation of the Environmental Impact Statement (EIS) for the Project. This Scoping Report has been prepared in consideration of the ‘NSW Wind Energy Framework’ which comprises:

- ‘Wind Energy Guideline’ (Wind Guideline) (DPE, 2016a)
- ‘Wind Energy: Visual Assessment Bulletin’ (Visual Bulletin) (DPE, 2016b)
- ‘Wind Energy: Noise Assessment Bulletin’ (Noise Bulletin) (DPE, 2016c)
- ‘Standard SEARs
- Wind Energy Framework Q&As.

It has also been prepared in accordance with Section 4.2 (SEARs and Preliminary Environmental Assessment (PEA)) of the Wind Guideline and the DPE’s *Guideline 3 – Scoping an Environmental Impact Statement* (Guideline 3) (DPE, 2017). **Table 1-1** indicates where each requirement is addressed.

Table 1-1: Wind Guideline PEA and DPE Guideline 3 Requirements and where addressed

| Item | Section |
|---|-------------------------|
| Wind Guideline PEA Requirements | |
| Describes the proposed wind energy project and its location in context (e.g. it should identify the preliminary turbine layout, nearby dwellings, key public viewpoints and other key landscape features). Proponents should demonstrate the suitability of their chosen location and the viability of wind resources in that area. | Section 3 and Section 4 |
| Describes steps taken to assist potentially affected people and groups in understanding the proposed development and what it could mean for them. | Section 5 |
| Describes the proposed overall approach to stakeholder consultation for the EIS development process. | Section 5 |
| Identified the key issues for the particular project. | Section 7 |
| Includes the results of early consultation, including in relation to landscape values, and assesses the preliminary turbine layout against the preliminary assessment tools contained in the Visual Assessment Bulletin, including negotiations with landholders. | Section 7.1 |
| Provides a high-level assessment of the environmental impacts of the Project (focussing on those key issues). | Section 7 |
| Report on the outcomes of community consultation undertaken to date. | Section 5 |
| DPE ‘Guideline 3’ Process | |
| Describe the Project. | Section 3 |
| Identify the relevant strategic and statutory context. | Section 2 |
| Summarise the results of any early community engagement. | Section 5 |
| Identify the scale and nature of the impacts of the Project. | Section 7 |
| Outline the proposed approach to assessment and community engagement. | Section 7 and Section 5 |

2. Planning Framework

2.1 Commonwealth Legislation

2.1.1 Environment Protection and Biodiversity Conservation Act 1999

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) is the central piece of environmental legislation for the Australian government. It provides the legal framework to protect and manage Matters of National Environmental Significance (MNES), while also considering cultural values and society's economic and social needs. The EPBC Act protects MNES, such as threatened species and ecological communities, migratory species (protected under international agreements), and national heritage places (among others).

Any actions that will, or are likely to, have a significant impact on MNES require referral to, and approval from, the Australian Government Environment Minister. Significant impacts are defined by the Commonwealth guidelines and policies for MNES (Department of the Environment, 2013; Department of Agriculture, Water and the Environment, 2020).

Some MNES have been identified as potentially occurring on or near the Project Site, including Threatened Ecological Communities (TEC). If during the preparation of the biodiversity assessment it becomes apparent that a significant impact on any MNES is likely, a referral will be made. If the Commonwealth determine that the development would have a significant impact on a MNES, the development would become a 'Controlled Action', and assessed under the recently signed NSW Bilateral Agreement with the Commonwealth.

2.1.2 Native Title Act 1993

The *Native Title Act 1993* recognises the rights and interests of Indigenous people to land and aims to provide for the recognition and protection of common law native title rights.

A review of the potential for Native Title will be undertaken for the Project.

2.2 State Legislation

2.2.1 Environmental Planning and Assessment Act 1979

The EP&A Act is the principal planning legislation for NSW. It provides a framework for the overall environmental planning and assessment of development proposals. As the activity is considered SSD, the assessment framework for the Project is Division 4.7 of the EP&A Act.

Under the provisions of section 4.15 of the EP&A Act, the consent authority is required to consider several matters pertaining to the relevant Plans and Policies that apply to any development application for SSD. These matters will be identified and assessed through the preparation of the EIS.

2.2.2 State Environmental Planning Policy (State and Regional Development) 2011

Clause 20 of Schedule 1 of the *State Environmental Planning Policy (State and Regional Development) 2011* (SEPP(SRD)) states that "development for the purpose of electricity generating works or heat or their co-generation (using any energy source, including gas, coal, biofuel, distillate, waste, hydro, wave,

solar or wind power) that have a capital investment value of more than \$30 million” shall be classified as SSD under Division 4.7 of the EP&A Act.

The Project has a capital investment value estimated to be greater than \$30 million, and therefore is deemed SSD.

2.2.3 State Environmental Planning Policy (Infrastructure) 2007

The *State Environmental Planning Policy (Infrastructure) 2007* (ISEPP) was introduced to facilitate the effective delivery of infrastructure across NSW. ISEPP provides the permissibility and development assessment provisions which apply across the State for infrastructure sectors.

Part 3, Division 4 of the ISEPP applies to the Project as it is ‘electricity generating works’ which is defined as a building or place used for the purpose of making or generating electricity. Pursuant to Clause 34(1b) of the ISEPP, development for the purpose of electricity generating works may be carried out by any person with consent on any land in a prescribed rural, industrial or special use zone. The prescribed zone that is relevant to this project is RU1 (Primary Production). The other zones within the project site are not prescribed zones. This issue is discussed further below.

2.2.4 Other State Environmental Planning Policies

Other State Environmental Planning Policy’s (SEPP) which will be considered in the preparation of the EIS include (but is not limited to):

- *SEPP (Primary Production and Rural Development) 2019*
- *SEPP (Koala Habitat Protection) 2019*
- *SEPP No. 33 – Hazardous and Offensive Development*
- *SEPP No. 55 – Remediation of Land.*

2.2.5 Other Legislation

Section 4.42 of the EP&A Act lists authorisations which must be consistently applied to SSD projects that are authorised by a development consent. For the Project, Section 4.42 approvals will be confirmed in the EIS however may include:

- Environment Protection Licence under the *NSW Protection of the Environment Operations Act 1997*
- Work in or over a public road approval under the *Roads Act 1993*
- Approval for works over Crown Land under the *Crowns Land Management Act 2016*
- Bushfire risk assessment and associated management plan under *Rural Fires Act 1997*
- Water Access licence(s) under the *Water Management Act 2000*
- Construction Certificates and Building Certificates under the EP&A Act
- Management plans and other conditions of development consent.

2.3 Local Planning Regulations

2.3.1 Local Environmental Plans

The Project Site is located within both the Dubbo Regional Council and Mid-Western Regional Council LGAs. The Dubbo Regional Council was formed following the amalgamation of the Wellington and

Dubbo Shire Councils in 2016. The land on which the Project is proposed to be located is within the former Wellington Council LGA to which the Wellington Local Environmental Plan (LEP) 2012 applies. Within the Mid-Western Regional Council LGA, the Mid-Western Regional LEP 2012 applies.

The Project Site is situated on land zoned as RU1 (Primary Production) and E3 (Environmental Management) under both the Wellington LEP 2012 the Mid-Western Regional LEP 2012 (Figure 2-1). Wind energy systems are prohibited in these zonings under the LEPs.

However, pursuant to clause 34(1b) of the ISEPP, development for the purpose of electricity generating works may be carried out by any person with consent on any land in a prescribed rural, industrial or special use zone, which in this case is the RU1 (Primary Production) zone. Whilst the other zone is not a prescribed zone, clause 4.38(3) of the EP&A Act which relates to State Significant Development states, *'Development consent may be granted despite the development being partly prohibited by an environmental planning instrument'*.

Given that the Project is partly located on prescribed rural land (RU1), and the proposed activity is to generate electricity from wind, the Project is permissible with consent.

The Project Site is subject to both the Wellington and Mid-Western Regional Development Control Plans (DCP). Both DCPs provide development standards and guides local development in terms of building design, landscaping, car parking, heritage and stormwater management, among others, but does not contain any specific provisions relevant to large scale wind farm developments.

Section 3.42 (1) of the EP&A Act states the principal purpose of DCPs is to provide 'guidance' to development proponents and consent authorities and to assist 'facilitating development that is permissible'. Accordingly, local provisions under the relevant DCP are not statutory requirements.

No planning (or draft planning) agreements related to the Project have been (or may be) entered into under section 7.4 of the EP&A Act.

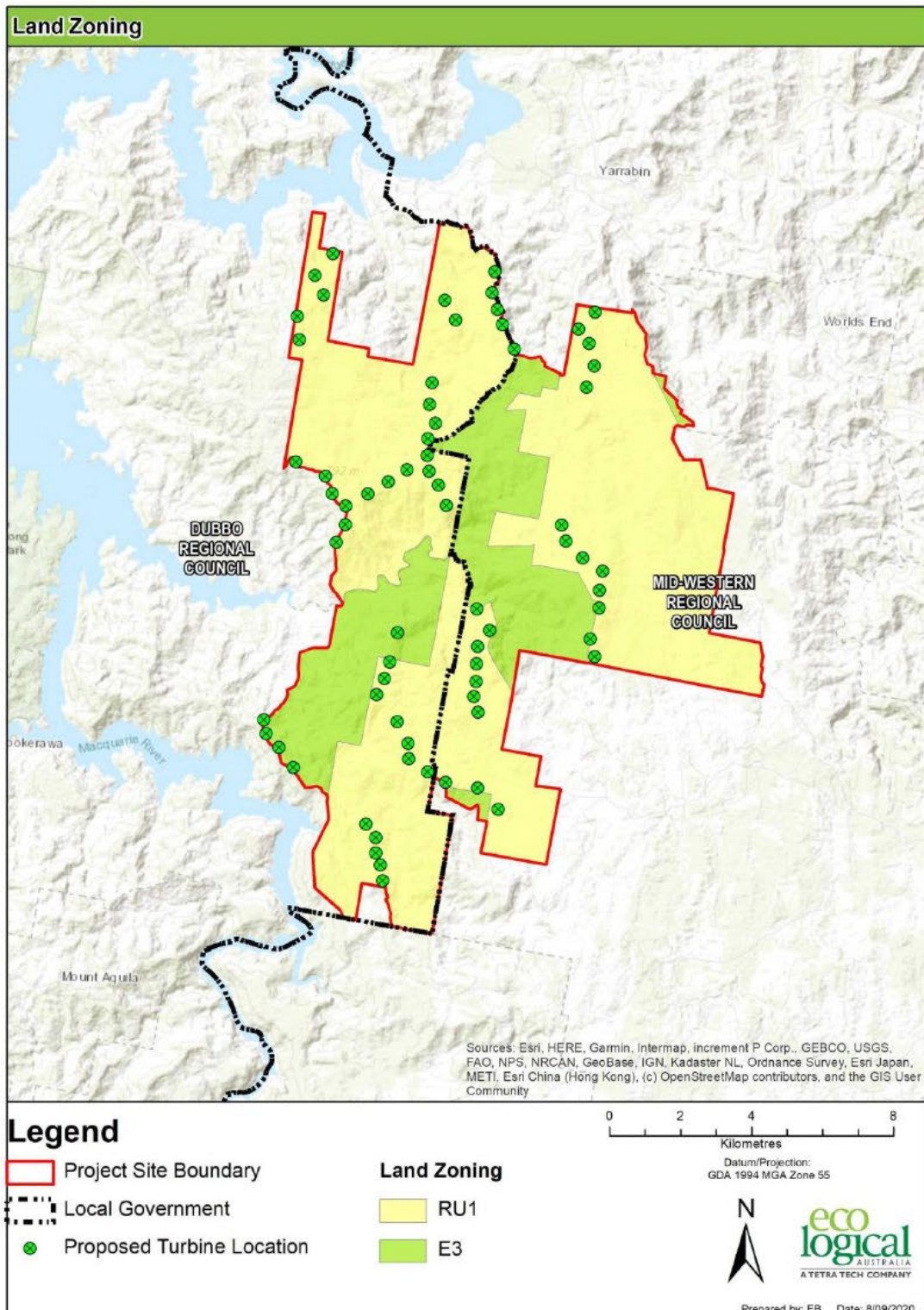


Figure 2-1: Land zoning within the Project site

2.3.2 Other Relevant Policies

2.3.2.1 State Policies

The Central West Orana Regional Plan 2036 is a 20-year blueprint for the future of the Central West and Orana region. The Plan seeks to create a leading diverse regional economy in NSW, with a vibrant network of centres leveraging the opportunities of being at the heart of NSW. The 'vision' of the Regional Plan seeks, in part, to promote landmark solar, wind and bioenergy projects and distinguish the region as a leader in renewable energy development. The Plan identifies the Central West area has significant potential for renewable energy industries with vast open spaces and higher altitude tablelands. Areas in the Central West, including Blayney, Oberon and Wellington, are suitable for wind farms and TransGrid's NSW Connection Opportunities identifies Parkes and Wellington as having capacity for renewable energy generation. Under the Plan, it is identified new renewable energy projects require a strategic approach and should, where possible, incorporate small-scale co-generation measures into their design.

The Project, which seeks consent for a wind farm using modern renewable energy technology, complies with the actions of Direction 9 of the Central West and Orana Regional Plan which seek to:

- Identify locations with renewable energy generation potential and access to the electricity network
- Facilitate small-scale renewable energy projects using bioenergy, solar, wind, small-scale hydro, geothermal or innovative storage technologies through local environmental plans
- Promote best practice community engagement and maximise community benefits from all utility-scale renewable energy projects.

2.3.3 Local Policies

2.3.3.1 Dubbo Regional Council Draft Local Strategic Planning Statement 2020

The Dubbo Regional Council Local Strategic Planning Statement (LSPS) plans for the economic, social and environmental land use needs of the community over the next 20 years. It sets land use planning priorities to ensure that the future development within the LGA is appropriate for the local context. The LSPS is closely linked to both the Dubbo and Wellington LEPs and DCPs, as well as the Central West and Orana Regional Plan 2036. The LSPS acknowledges that renewable energy will play a key part in Dubbo's sustainable future, particularly as the Queensland-NSW Interconnector transmission lines are constructed, facilitating energy transfer to the north and south of the LGA. One of the key Planning Priorities within the LSPS is to therefore promote renewable energy generation, in particular, undertake the following actions:

- *Work together with neighbouring councils on cross-boundary issues concerning electricity generation and transmission*
- *Collaborate with State agencies and key landowners to deliver key infrastructure projects.*
- *Utilise the Department's Large-Scale Energy Guideline to advise proponents on the optimum location of new renewable industries*
- *Investigate and implement Voluntary Planning Agreements with state significant scale development to mitigate impacts on local services and facilities*
- *Monitor the sterilisation of productive agricultural land as a result of renewable energy development, with an objective of minimising sterilisation.*

3. Project Description

3.1 Site Context

The Project site is located approximately 30 km south-east of Wellington and to the east of Lake Burrendong, within the Central-west region of NSW. The nearest rural community to the Project Site is Hargraves, with a number of localities also in proximity, including Biara, Maitland Bar, Mookerawa, Yarrabin and Yarragal.

The Project site is located in proximity to an existing hydroelectric power station, the Burrendong Power Station, which is located at the foot of the Burrendong Dam on the Macquarie River. The station has a total generating capacity of 19 MW and generates power using summer irrigation and flood mitigation flows.

The Project site is located within proximity to several approved wind and solar renewable energy projects, including Bodangora Wind Farm (approximately 30 km to the north-west in operation), Crudine Ridge Wind Farm (approximately 40 km to the south-east and is currently under construction), the proposed Uungula Wind Farm (approximately 15 km to the north-west), Wellington Solar Farm (approximately 20 km to the north-west), Maryvale Solar Farm (approximately 40 km to the north-west), Suntop Solar Farm (approximately 25 km to the west), and Beryl Solar Farm (approximately 35 km to the north-east) (Figure 3-1).

The Project site is located in close proximity to Lake Burrendong where WaterNSW is currently running a program for new renewable energy generation and hydro energy storage. Additional generation capacity of > 500 MW is possible.

The Project site is comprised of a number of elevated ridges, with nearby land mainly used for sheep grazing and other agriculture activities the dominant land use (Figure 3-2). It is proposed that these existing uses will continue with minimal interruption from the Project’s construction and operation.

A combination of desktop searches and community consultation has identified a total of 62 residential dwellings within 8 km of a proposed turbine location (see **Figure 7-1** and Table 3-1). Of these dwellings, a total of 12 are owned by landowners associated with the Project.

Table 3-1: Associated and non-associated receptors within 3.4 km and 8 km of a proposed WTG location

| | Within 3.4 km | 3.4 km to 8 km |
|--------------------------|---------------|----------------|
| Associated Receptors | 11 | 1 |
| Non-Associated Receptors | 16 | 34 |
| TOTAL | 27 | 35 |

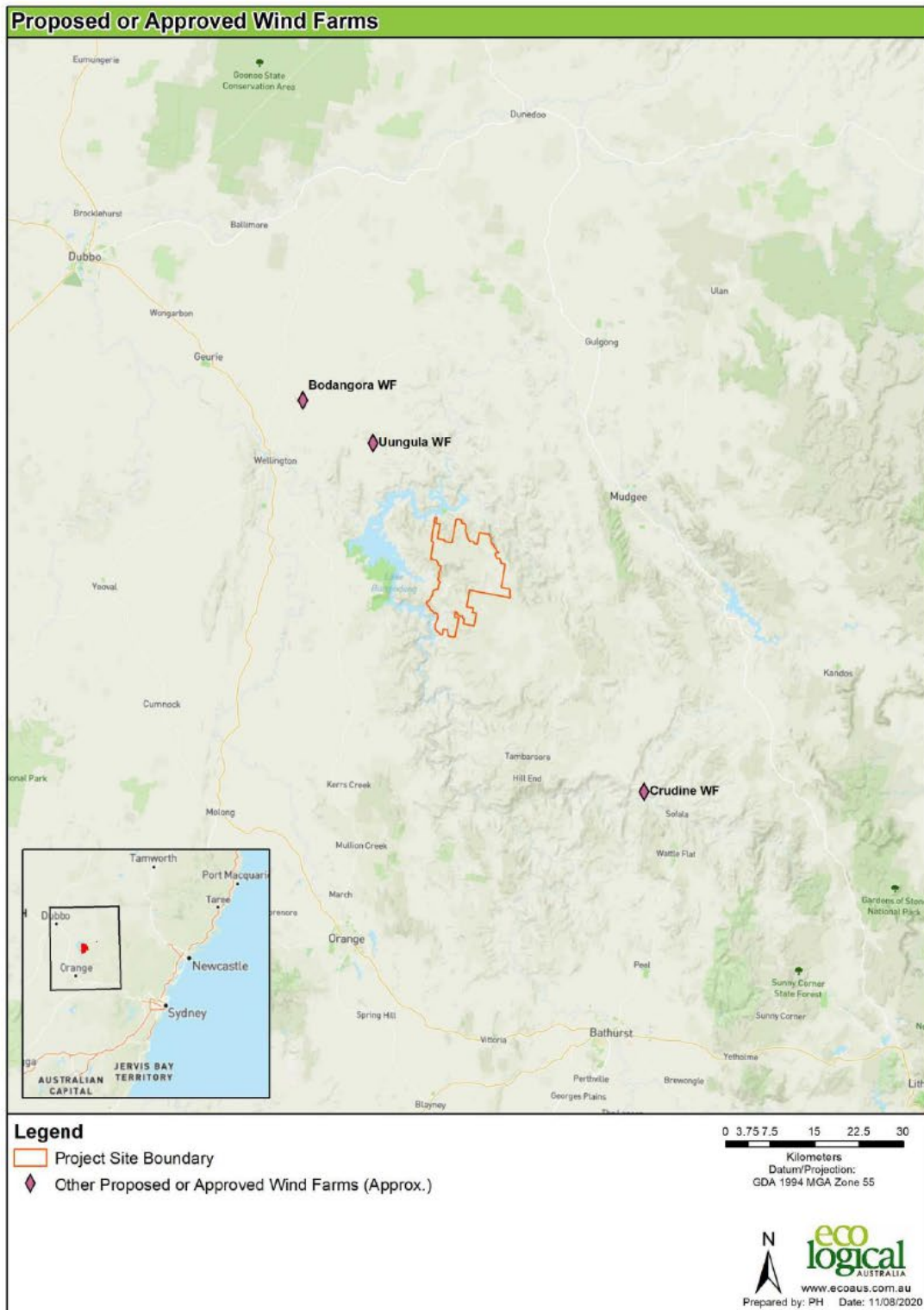


Figure 3-1: Proposed or approved wind farms in the locality



Figure 3-2: Elevated ridges and grazing within the Project area

3.2 Project Overview

The Project will involve the construction, operation and decommissioning of key components as follows:

- Around 69 WTGs, each with
 - Three blades mounted on a tubular steel or steel and concrete tower with a combined height (blade plus tower) to tip not exceeding 250 m
 - A crane hardstand area
 - Turbine laydown area
- Substation and transmission connection
- Underground cable and overhead powerline electrical connections
- Other associated infrastructure
- Minor local road upgrades to enable delivery access for installation and maintenance of WTGs and related facilities
- Ancillary activities (including boundary adjustments and subdivision if required).

3.2.1 Wind Turbines

Final WTG numbers and power output for the Project site is dependent on the final geographic footprint as well as outcomes of the various engineering and environmental studies and is subject to change. It is expected that the Project could comprise around 50 to 90 WTG.

3.2.2 Electrical Connections

To export the electricity generated from the Project, a new physical connection to the existing electricity network will be required. Sufficient capacity exists within the existing network to transmit the electricity to the required load centres.

A new wind farm powerline is proposed to connect the Project to the TransGrid 330kV transmission network located on the western side of Lake Burrendong. Three potential connection corridors will be investigated as part of the environmental assessment process as shown in **Figure 1-2**.

Alternately, the Project may connect to new infrastructure established as part of the Central West Orana Renewable Energy Zone (REZ) depending on final decisions in relation to the location of the proposed new infrastructure.

3.2.3 Other Associated Infrastructure

Various ancillary infrastructure will be required for the Project including (but not limited to): onsite operations building, equipment storage facilities, concrete batching plant facilities, rock crushing, temporary and permanent laydown pads, construction compounds, access tracks to each turbine, temporary and permanent wind monitoring masts, communications equipment and other related facilities.

3.2.4 Minor Local Road Upgrades

Traffic associated with the construction phase of the Project will consist of both light vehicles for transporting workers and heavy and over-sized vehicles for delivery of plant and turbine components.

Upgrades to the existing road network will be required where necessary to facilitate the construction, ongoing maintenance and decommissioning of the Project.

3.2.5 Ancillary Activities

Materials will need to be sourced for the construction, ongoing maintenance and decommissioning of the Project (including but not limited to): road and construction materials, water and concrete.

Geotechnical assessments will be required to inform detailed engineering design in relation to the positioning of Project infrastructure. Boundary adjustments and subdivision may also be required to assist in detailed design for infrastructure.

3.3 Options Considered

3.3.1 Overview

The Project is still in its early stages of design, with the development of the preliminary Project layout considering:

- Results from the preliminary assessments undertaken to date
- Feedback from associated and neighbouring landowners
- Wind resource monitoring data
- Additional desktop assessments
- The principles outlined in the Wind Energy Guideline.

The development of a wind farm layout is, by nature an iterative process, with opportunity for refinement and revision as more information is obtained from environmental studies, ongoing feedback from consultation and updated wind monitoring. The evolution of the Project design will be focused around three core principles:

- Minimising and/or avoiding negative environmental and community impacts
- Maximising positive impacts (clean energy production resulting in greenhouse gas reduction)
- Incorporating practical and economic limitations in relation to the construction and operation of the site.

3.3.2 Site Selection and Feasibility

In 2018 Epuron commenced discussions with landowners in relation to their interest in being involved in a wind energy project in the region. In 2019, Epuron commenced wind monitoring onsite with portable SoDAR devices and since then has installed one wind monitoring mast as shown on **Figure 3-3**.

An early assessment of the wind resource identified an investigation area comprising several elevated ridgelines that had the potential for hosting WTGs. This investigation area was used as the basis for early consultation activities and to get feedback from the community and other stakeholders over the Project. This feedback has been considered in the design of the preliminary layout.

3.3.3 Scoping Report Preliminary Layout

Using the investigation area as a starting point, a preliminary site layout comprising of 69 WTG was developed as shown in **Figure 1-2**. The preliminary layout outlined within this Scoping Report has been informed by the following:

- The principles outlined in the Wind Guideline

- Landowner and community feedback in relation to the Project site
- Wind speed assessments based on additional wind data
- Results from the preliminary noise impact assessment (NIA) (Section 7.1.2)
- Results from the preliminary landscape and visual impact assessment (PLVIA) (Section 7.1.1)
- Technical constraints including in relation to access (biodiversity and traffic and transport)
- Consideration of commercial viability.

3.3.4 Refinement and Revision

EIS studies will provide further information in determining the optimised locations for Project infrastructure. Additional considerations will include, but will not be limited to, the identification of any environmental constraints and the outcome of geotechnical investigations and the ongoing community and stakeholder consultation process. There are a number of proposed WTGs located close to the current site boundary. The centre of the WTG towers will be located at least 100 m from the property boundary to avoid blade overhang.

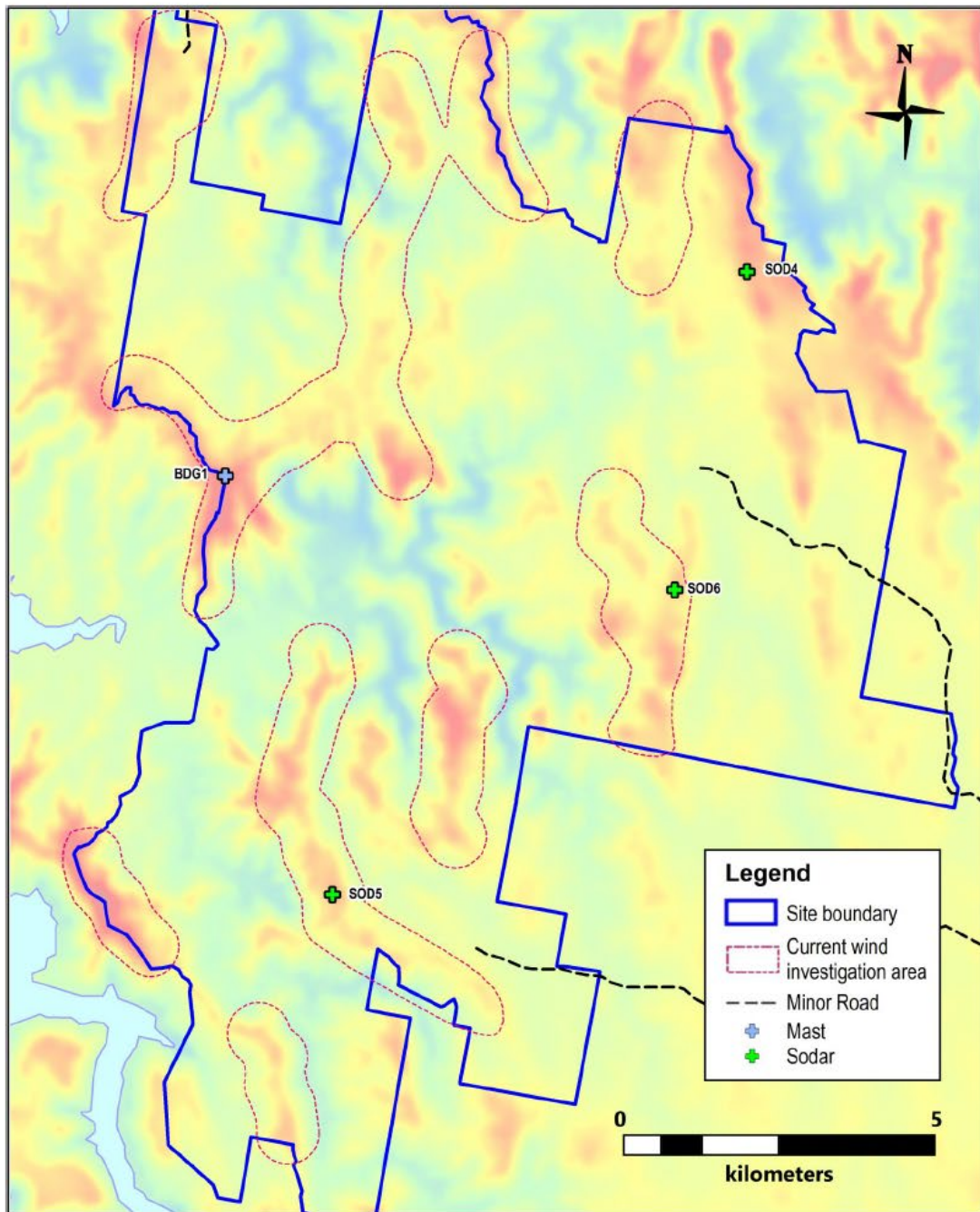


Figure 3-3: Site wind monitoring locations and wind resource map

4. Project Justification

4.1 Project Viability

Epuron has been developing wind energy projects in NSW for the past 15 years and over that period has developed considerable experience in site identification and selection. There are several key areas of consideration when selecting a site for development, including:

- **Wind Resource:** To confirm the viability of wind projects, Epuron has established a vast network of wind monitoring masts across NSW, which have confirmed that wind speeds at the Project site are sufficient for a viable wind farm (**Figure 3-3**).
- **Environmental Impacts:** The properties selected for involvement in the Project are generally used for agricultural purposes. Ridgelines where turbines are proposed are mostly cleared of vegetation.
- **Access to Local Electricity Network:** The Project site is located directly east of connection points to the electricity network which have sufficient capacity to export the design output from the Project.
- **Local Communities:** The low population density of the surrounding area will assist in reducing any residual noise or visual impacts from the Project.
- **Proximity to resources:** During the construction phase it will be necessary to source water and materials for the construction of roads and turbine foundations. In the local area there are a number of active quarries and water sources that will be able to accommodate the requirements for construction of a project of this size.
- **Economic impact:** The local population centres of Wellington and Mudgee are well established to cater for an increase in workforce having serviced the mining and energy industry.

4.1.1 Australian Government Energy Policies

The Climate Solutions Fund was established in February 2019 by the Department of the Energy and Environment (DoEE), which is designed to help achieve Australia's emissions reduction target of 5% below 2000 levels by 2020 and 26-28% below 2005 emissions by 2030. The fund will operate alongside existing programmes working to reduce Australia's emissions growth such as the Renewable Energy Target (RET).

The *Renewable Energy Act 2000* (RE Act) was passed by Federal Parliament in August 2009 and aims to acquire 45,000 GWh of Australia's electricity from renewable sources by 2020. However, this was then reduced to 37,000 GWh in 2015. To meet the RET, it is estimated that approximately 6,400 MW of new large-scale renewable energy capacity is required to be built and connected to the National Energy Market (NEM) by 2020, with wind power expected to form most of this new generation capacity. The Project will therefore contribute to both the increasing local and global need for such renewable projects, as well as aid in mitigating the issues of global warming and climate change.

4.1.2 NSW Commitments

4.1.2.1 NSW Net Zero Plan Stage 1: 2020 – 2030

The Net Zero Plan Stage 1: 2020-2030 is the foundation for NSW’s action on climate change and goal to reach net zero emissions by 2050. It outlines the NSW Government’s plan to grow the economy, create jobs and reduce emissions over the next decade. The plan aims to enhance the prosperity and quality of life of the people of NSW, while helping the state to deliver a 35% cut in emissions by 2030 compared to 2005 levels (**Figure 4-1**) (DPIE, 2020). Currently the majority of emissions in NSW are derived from electricity generation. The plan will support a range of initiatives targeting electricity and energy efficiency, electric vehicles, hydrogen, primary industries, coal innovation, organic waste and carbon financing.

The implementation of the Net Zero Plan, together with the NSW Electricity Strategy, will result in more than \$11.6 billion of new investment for NSW, including \$7 billion in regional NSW. This will support the creation of almost 2400 new jobs, including 1700 jobs located in the regions.

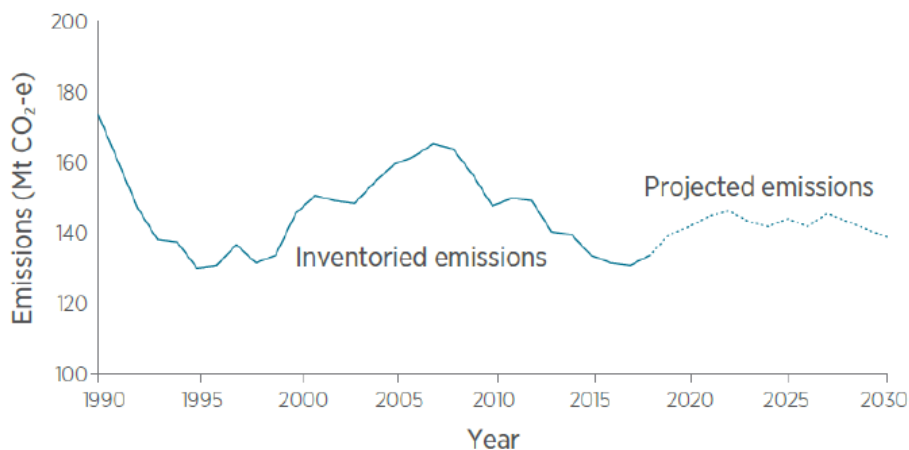


Figure 4-1: NSW total annual emissions to 2030 (DPIE, 2020). Note MtCO₂-e = Mega tonnes of carbon dioxide equivalent (DPIE, 2020)

4.1.2.2 Electricity Strategy

The NSW Electricity Strategy is the NSW Government’s plan for a reliable, affordable and sustainable electricity future that supports a growing economy. The strategy encourages an estimated \$8 billion of new private investment in NSW’s electricity system over the next decade, including \$5.6 billion in regional NSW. It will also support an estimated 1,200 jobs, mostly in regional NSW. The strategy aligns closely with the NSW Government’s Net Zero Plan Stage 1: 2020 – 2030.

Significantly for the Project, the strategy supports the development of new transmission infrastructure to connect low-cost generation to the electricity system by developing REZs, including the pilot REZ for the state in the Central-West region. This pilot REZ will see the Government support network upgrades to encourage the connection of 3,000 MW of new renewable energy capacity into the network. The Project is located squarely within the Central-West REZ and would account for greater than 10% of this target capacity.

4.1.2.3 Renewable Energy Zones and Central-West Renewable Energy Zone Pilot

The NSW Government's Electricity Strategy sets out a plan to deliver three REZs in the State's Central-West, New England and South-West regions to aid in unlocking a significant amount of large-scale renewable energy and storage projects.

The NSW Government is in the early stages of feasibility and planning for the state's first REZ, the Central-West Orana REZ, (**Figure 4-2**), in which the Project is located. This REZ will play a vital role in delivering affordable energy to help replace the state's existing power stations as they retire over the coming decades. In particular, the Central-West Orana REZ will:

- unlock up to 3,000 MW of new generation by the mid-2020s
- be worth around \$4.4 billion in private sector investment once fully developed
- provide enough generation capacity to power approximately 1.3 million homes
- support 450 construction jobs within the local region.

The Central-West region is the planned location for the first REZ due to existing investment and interest, with around 4,500 MW of projects either approved or in the planning system.

4.2 Project Benefits

The Project will provide numerous benefits, including to:

- Provide sustainable, renewable energy in turn, reducing greenhouse gas emissions and the impacts of climate change
- Aid in assisting both the State and Federal Government achieve renewable energy targets
- Provide additional generation capacity to the grid to assist in meeting future load demands as thermal generators retire
- Provide local and regional economic benefits through investment opportunities and direct and indirect full-time employment construction and operation jobs
- Maximise local business participation through contracted work
- Provide ongoing economic stimulus through payments to associated landholders.

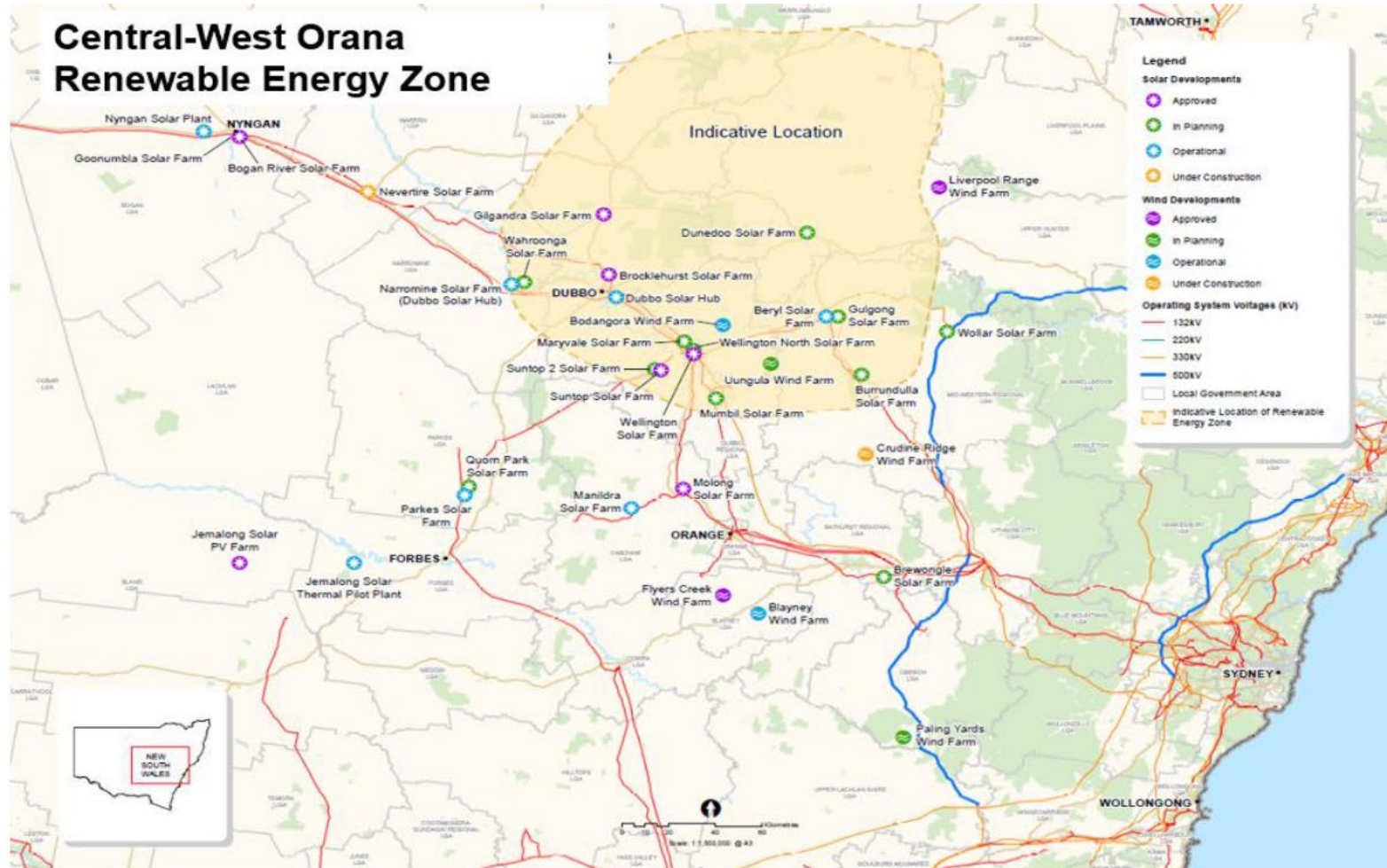


Figure 4-2: Location of central west renewable energy zones

5. Stakeholder Engagement

5.1 Consultation Objectives

Due to the general requirements of wind farms, such as good wind speeds, elevated land and the need to be in proximity to transmission lines, they are generally situated within rural areas close to rural dwellings and regional communities. This is known to cause conflict with local communities, who may feel they are impacted by the development, however, do not directly benefit.

Accordingly, Epuron's stakeholder engagement for the Project is focused on mitigating direct impacts of the Project, while at the same time creating benefits for the local community. In particular, Epuron's consultation has the following objectives:

- Ensure the community is fully informed about the Project and provide multiple opportunities for dialogue in various forms and opportunities for feedback
- Engage with stakeholders to understand local views, concerns and impacts and ensure the Project team are fully aware
- Incorporate feedback into the design of the Project, where possible, and outline where such feedback has been incorporated
- Build and maintain positive relationships with local communities and other stakeholders.

5.2 Consultation Approach

The Wind Guideline (DPE, 2016a) and Visual Bulletin (DPE, 2016b) outline an expectation for early and meaningful consultation with the local community and other stakeholders to enable feedback that can be incorporated into the design of the Project.

The following section describes the consultation conducted to date for the Project.

5.2.1 Stakeholders

The following preliminary stakeholder groups were identified for the Project:

- State and Federal Government Agencies
- Local Councils and business organisations
- Surrounding communities
- Potential involved landowners
- Dwellings within 5 km of a potential WTG location
- Local media.

A variety of methods have been implemented to consult with the stakeholders above to date and are proposed going forward. A summary is provided below.

5.2.1.1 Meetings and Introduction Letters

Meetings with State agencies, local Councils and businesses, and landowners have been since mid-2018. Meetings have been held either via face to face or via phone with DPIE, Crown Lands, WaterNSW, Dubbo Regional Council, Mid-Western Regional Council, TransGrid, and Reflections Holiday Parks. Dubbo Regional Council noted that the current land zoning E3 would need to be addressed to enable the

construction and operation of a wind farm on this land, but as outlined in Section 2.3.1 acknowledged that consent may be granted for SSD.

Introductory letters were sent to neighbours of the Project Site in September 2019, where details could be obtained. Epuron will continue regular mail-outs to all interested parties.

Where possible any feedback received has been incorporated into the design of the Project (see a summary of issues and further discussion in Section 5.4).

5.2.1.2 Newsletter

A newsletter containing information about the Project was distributed in May 2020 and uploaded to the Project website. Approximately 80 newsletters were sent out, including to 34 neighbours to the Project site. The newsletter included a feedback form. Four feedback forms were returned, two supporting the Project and two opposed to the Project.

Other responses to date are as follows:

- Dubbo Daily Liberal newspaper – interview on 11 May
- Dubbo radio 2DU – interview on 13th May
- Email or phone-call from four neighbours either requesting to be added to the mailing list for future newsletters, confirming contact details, or seeking to be an involved landowner
- Approximately 13 responses from individuals and organisations looking for work on the Project.

5.3 Ongoing Engagement

Ongoing engagement with the local community and other stakeholders will be undertaken during the preparation of the EIS, and moving forward during the construction, commissioning and operation, and decommissioning stages of the Project.

The objectives and consultation activities are outlined in **Table 5-1** below.

Table 5-1: Consultation objectives and activities

| Stage | Objectives | Consultation Activities |
|------------------------|---|--|
| Planning and Approvals | <ol style="list-style-type: none"> 1. Maintain communication channels for enquiries and information 2. Proactively gather views and expectation and address queries 3. Prepare a Social Impact Assessment (SIA) 4. Keep communications flowing to update the community | <ul style="list-style-type: none"> • Face to face meetings • Phone calls • Updates on project website • Establish Community Consultation Committee (CCC) • Newsletters • Community Information Sessions • Exploration of community partnerships |
| Construction | <ol style="list-style-type: none"> 1. Reduce community concerns by open dialogue and acknowledging and responding to issues 2. Demonstrate commitment to the wellbeing of the community 3. Avoid, minimise or remediate impacts 4. Maximise the opportunities of construction for communities | <ul style="list-style-type: none"> • Face to face visits • Phone calls • Updates on project website • CCC • Community partnerships • Complaints management mechanisms |

| Stage | Objectives | Consultation Activities |
|-----------------------------|--|--|
| Commissioning and Operation | <ol style="list-style-type: none"> 1. Be an active member of the community 2. Strengthen collaboration through partnerships 3. Build a sense of community pride in a well-run wind farm | <ul style="list-style-type: none"> • CCC • Community partnerships • Ongoing consultation • Community events • Evaluation of engagement and improvements as required • Complaints management mechanisms |
| Decommissioning | <ol style="list-style-type: none"> 1. Reduce community stress and concerns 2. Acknowledge and respond to issues | <ul style="list-style-type: none"> • Ongoing consultation • Easy access to plans and information • Complaints management mechanisms |

5.4 Key Issues Raised

Issues such as operational noise, visual impact and potential impact on property values from the Project have been raised during discussions with Project neighbours.

5.5 Government Agencies and Other Stakeholders

A preliminary meeting was held with DPIE on 10 December 2019 prior to preparation of this Scoping Study where the following issues were requested to be included within this Scoping Report:

- Consider cumulative impact of nearby renewable energy projects
- Try to avoid wind turbines within 2 or more 60-degree sectors from a particular viewpoint (as per the visual bulletin)
- Identify planned access route to site and site access point
- Road upgrades, access to private land (sail overs) outside site boundary and the associated biodiversity impacts need to be considered in the EIS
- Stakeholder management – status of consultation and planned consultation.

Epuron will continue to consult throughout the planning process with government agencies and statutory stakeholders including:

- DPIE
- DPIE - Biodiversity Conservation Division (BCD)
- DPIE- Water
- DPIE- Division of Resources and Energy (DRE)
- DPIE- Crown Lands
- Councils –Dubbo Regional Council and Mid-Western Regional Council
- Environment Protection Authority (EPA)
- Transport NSW
- Local Land Services (LLS)
- NSW Rural Fire Service (RFS)
- Civil Aviation Safety Authority (CASA)
- Air services Australia
- Commonwealth Department of Agriculture, Water and Environment (DAWE).

Epuron submitted a grid connection enquiry for the Project. TransGrid provided a connection enquiry response on 12 July 2018.

6. Preliminary Environmental Risk Assessment

A preliminary environmental risk assessment has been undertaken for all potential environmental impacts that may need to be considered within the EIS for the Project. The results of this risk analysis are provided in **Appendix A**. The preliminary risk rating is the risk rating prior to detailed assessment, or any mitigation being applied and is therefore precautionary and worst-case for the purposes of this Scoping Study. The preliminary environmental risk assessment has been based upon experience with other wind farm approvals, together with a preliminary assessment of the Project Site, to identify the key issues to be assessed in relation to the Project. The preliminary environmental risk assessment also included a review of the Wind Energy Framework as well as the SEARs for recent wind farm projects.

Table 6-1 summarises the results of the preliminary environmental risk assessment provided in **Appendix A**, and outlines the potential impacts and risks, as well as all assessments (including specialist assessments) that will be completed to assess and minimise environmental risk during the completion of the EIS.

Table 6-1: Preliminary risk assessment summary

| Factor | Potential Impact | Preliminary Risk Range | Assessment Approach |
|------------------------------|---|------------------------|---|
| Landscape and Visual | Reduction in visual amenity, impact on scenic/landscape character, lighting impacts, shadow flicker disturbance, and cumulative impacts. | Low - Medium | Independent specialist assessment in accordance with the Visual Bulletin (DPE, 2016b) |
| Noise and Vibration | Nuisance noise levels during construction, nuisance noise levels during operation, road traffic noise, and vibration. | Low - Medium | Independent specialist assessment in accordance with the Noise Bulletin (DPE, 2016c) |
| Biodiversity | Disturbance/loss vegetation during construction and maintenance, injury and mortality from loss or modification of habitat for terrestrial species, bird and bat strike through direct collision or barotrauma, loss or modification of habitat for aquatic species, introduction/spread of weeds, introduction/spread of pests, sedimentation and erosion, soil and water pollution, and indirect impacts of proposal e.g. light, noise, dust. | Low - High | Independent specialist assessment in accordance with the Biodiversity Assessment Methodology (BAM) (OEH, 2017). |
| Traffic and Transport | Increase in traffic volumes, and increased traffic risks and/or reduced safety. | Low - Medium | Independent specialist assessment |
| Hazards / Risk | Aviation safety, effects on telecommunications systems, health issues relating to electromagnetic fields, health issues relating to low frequency noise and infrasound, health issues relating to shadow flicker and blade glint, use of lithium-ion batteries, bushfire and electrical fire, and blade throw. | Low - Medium | Epuron assessment or independent specialist assessment |
| Heritage | Impacts on known artefacts/values and impacts on unknown artefacts/values. | Low | Independent specialist assessment |

| Factor | Potential Impact | Preliminary Risk Range | Assessment Approach |
|----------------------------|--|------------------------|--|
| Water and Soils | Degradation of water quality, disturbance and erosion of soils and productive topsoil, availability of water for construction, soil compaction leading to concentrated runoff and erosion, soil contamination due to spills, introduction/spread of weeds, reduced agricultural viability, dust deposition, reduction in water quantity, flooding, and degradation of water quality. | Low | Independent assessment or specialist |
| Waste | Contamination of land and water, resource wastage, and human and environmental health. | Low | Chapter within EIS |
| Social and Economic | Safety, land use change and rezoning of E3, health, water consumption, and decreased land value. | Low - Medium | Epuron assessment or independent specialist assessment |

7. Preliminary Environmental Assessment

7.1 Landscape and Visual Amenity

A Preliminary Landscape and Visual Impact Assessment (PLVIA) has been prepared in accordance with the Visual Bulletin and is provided in **Appendix B**. Preliminary assessment tools have been used to provide an early indication of where turbines require careful consideration because of potential visual impacts. The tools apply to both dwellings and key public viewpoints in the study area. The tools are not determinative and are not designed to provide a ‘yes’ or ‘no’ answer as to whether particular turbines are acceptable. Rather the tools provide an early indication of where placement of turbines will require further assessment and justification, and where consultation with potentially affected landowners needs to be focused – including discussions for landholder agreements.

7.1.1 Preliminary Assessment

7.1.1.1 Visual Magnitude Assessment (Preliminary Assessment Tool 1)

The assessment of visual magnitude was undertaken in two steps:

1. Map the proposed WTG locations, non-associated dwellings and key public viewpoints within a GIS
2. Identify non-associated dwellings and key public viewpoint locations that fall within the calculated proximity threshold of 3,400 m

Figure 7-1 identifies the proposed WTG locations, receptors locations, and illustrates the results of the visual magnitude assessment.

Table 7-1: WTGs within 3,400 m of a dwelling or viewpoint location

| Dwelling or Viewpoint | No. of WTGs within 3,400 m | WTG ID |
|-----------------------|----------------------------|--|
| R23-1 | 5 | 58, 59, 60, 24, 25 |
| L6-1 | 2 | 28, 29 |
| R8-1 | 7 | 15, 1, 2, 3, 14, 16, 17 |
| U10-1 | 5 | 1, 2, 3, 4, 5 |
| S7-1 | 2 | 1, 14 |
| U7-1 | 1 | 1 |
| U8-1 | 1 | 1 |
| T8-1 | 3 | 1, 2, 3 |
| U8-2 | 3 | 1, 2, 3 |
| U9-2 | 4 | 1, 2, 3, 4 |
| U9-1 | 5 | 1, 2, 3, 4, 5 |
| V11-2 | 2 | 1, 4 |
| U11-1 | 5 | 1, 2, 3, 4, 5 |
| K7-1 | 4 | 28, 29, 30, 31 |
| O17-1 | 18 | 7, 6, 36, 19, 20, 21, 50, 22, 37, 44, 45, 46, 43, 42, 39, 38, 40, 41 |
| R14-1 | 13 | 7, 8, 6, 3, 35, 4, 5, 18, 36, 37, 39, 38, 40 |

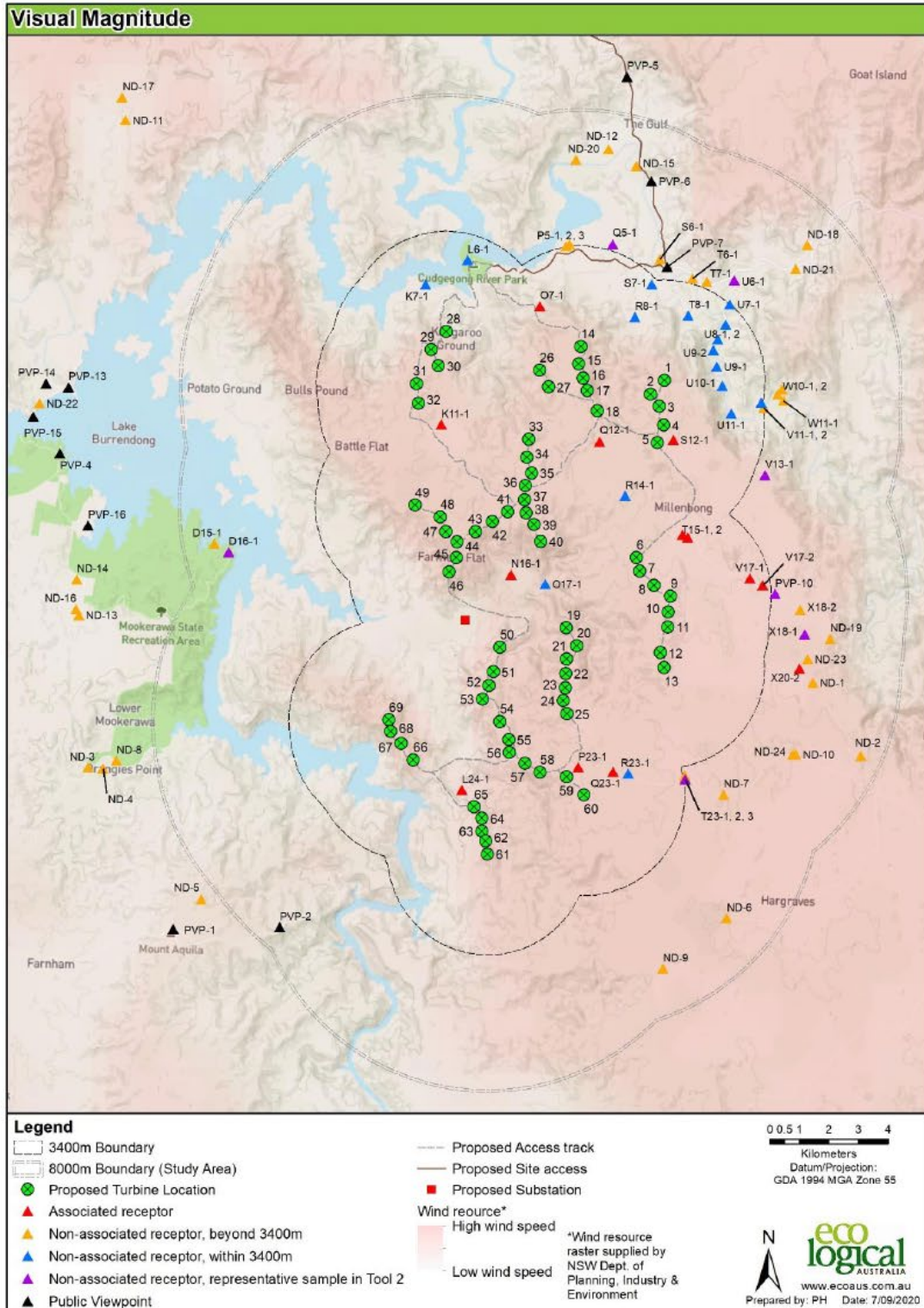


Figure 7-1: Visual magnitude analysis

7.1.1.2 Multiple Wind Turbine Assessment (Preliminary Assessment Tool 2)

This assessment provides a preliminary indication of potential cumulative impacts arising from the proposed wind turbines on the non-associated dwellings and key public viewpoints located within 3,400 m of the proposed turbine locations. The Multiple Wind Turbine Tool considers turbines visible within 60° view sectors and located within a distance of 3,400 m of the receptor location.

In addition, non-associated dwellings and key public viewpoints located between 3,400 m and 8,000m of the proposed WTG locations were identified. Seven of these receptors were selected as representative locations and included in the Multiple Wind Turbine assessment.

The PLVIA has determined that two non-associated receptors within 3,400 m of the WTGs may have views toward WTGs within three or more 60° sectors which are shown red-highlighted cells within Appendix B of the PLVIA (**Appendix B**). Appendix C of the PLVIA (**Appendix B**) contains the mapping results illustrating the dwelling, viewpoint and WTG locations in relation to the Multiple Wind Turbine analysis.

7.1.1.3 Zone of Theoretical Visual Influence

Although not stipulated as a preliminary assessment tool (DPE, 2016b) a preliminary Zone of Theoretical Visual Influence (ZTVI) was computed for the Project to visualise the potential number of turbines that may be visible from dwellings and key public viewpoints.

ZTVI mapping is based on a locally available Digital Elevation Model (DEM) provided by the NSW Government, comprising a mosaic of 1m, 2m and 5m cell resolution. The ZTVI mapping assumes a bare-earth model (where buildings, infrastructure, and vegetation does not obscure views). **Figure 7-2** shows the result of the analysis.

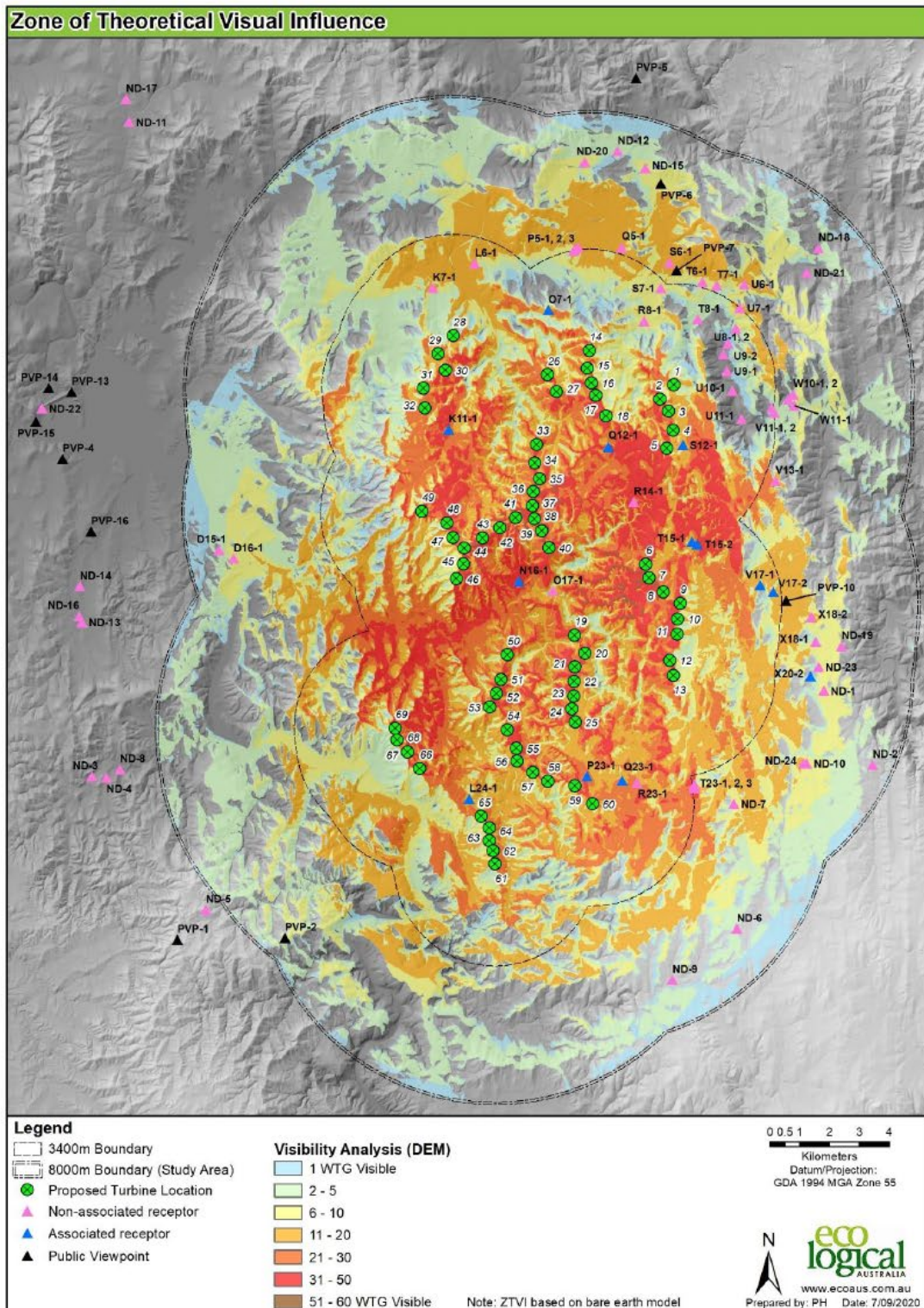


Figure 7-2: Zone of theoretical visual influence

7.2 Noise and Vibration

Epuron have undertaken a Preliminary NIA in accordance with the Noise Bulletin (DPE, 2016c) and has been based on:

- The minimum (base) operational noise limit determined in accordance the Noise Bulletin (DPE, 2016c)
- Preliminary noise modelling using windPRO software for the preliminary turbine layout and a representative WTG model
- A comparison of the predicted noise levels with the base noise criteria.

Construction noise and cumulative noise impacts were not assessed as part of the Preliminary Noise Assessment, however, will be completed as part of the EIS.

7.2.1 Assessment Parameters

7.2.1.1 Sensitive Noise Receivers

A total of 13 noise sensitive receivers (non-involved dwellings) were identified within 3 km of the proposed WTG locations.

7.2.1.2 Wind Turbine Model

The representative WTG selected is the Vestas V162-5.6 MW. Details of this model are detailed in Table 7-2.

Table 7-2: Candidate WTG model details

| Item | Detail |
|------------------------|-------------|
| Model | Vestas V162 |
| Rated Power | 5.6 MW |
| Rotor Diameter | 162 m |
| Hub Height | 150 m |
| Tip Height | 231 m |
| Operating Mode | Mode 0 |
| Serrated Trailing Edge | Yes |

7.2.2 Results

In accordance with the Noise Bulletin (DPE, 2016c), the predicted equivalent noise level ($L_{Aeq,10 \text{ minute}}$) should not exceed 35 dB(A) or the background noise ($L_{A90(10 \text{ minute})}$) by more than 5 dB(A), whichever is the greater, at all relevant non-associated receivers.

As shown in **Table 7-3**, the predicted noise levels for the Project are below this criteria for all the identified receivers. These results confirm that the project can be designed and operated to comply with the operational noise requirements.

Table 7-3: Predicted noise levels for 10 m/s wind speed at hub height

| Receiver | Distance to nearest turbine (m) | Predicted noise dB(A) | Criteria dB(A) | Compliance |
|----------|---------------------------------|-----------------------|----------------|------------|
| O17-1 | 1446 | 33.7 | 35 | Yes |
| R23-1 | 1662 | 30.3 | 35 | Yes |
| K7-1 | 1750 | 30.9 | 35 | Yes |
| U9-1 | 1831 | 27.1 | 35 | Yes |
| U9-2 | 1948 | 26.4 | 35 | Yes |
| U10-1 | 1965 | 27.3 | 35 | Yes |
| R8-1 | 2081 | 30.3 | 35 | Yes |
| R14-1 | 2102 | 33.5 | 35 | Yes |
| U8-1 | 2282 | 24.4 | 35 | Yes |
| U11-1 | 2309 | 26.5 | 35 | Yes |
| T8-1 | 2345 | 26.2 | 35 | Yes |
| L6-1 | 2533 | 28.0 | 35 | Yes |
| U8-1 | 2807 | 24.4 | 35 | Yes |

Predicted noise levels in the table above include a 1 dB(A) allowance for modelling errors. Noise levels at the 10 m/s hub height wind speed were chosen to represent the worst-case noise level.

Further noise modelling and assessment works are to be undertaken to accompany the EIS. This is expected to include an assessment of other noise considerations including background noise levels (if monitoring is required), special noise characteristics, construction and ancillary infrastructure, and review of cumulative noise considerations if required.

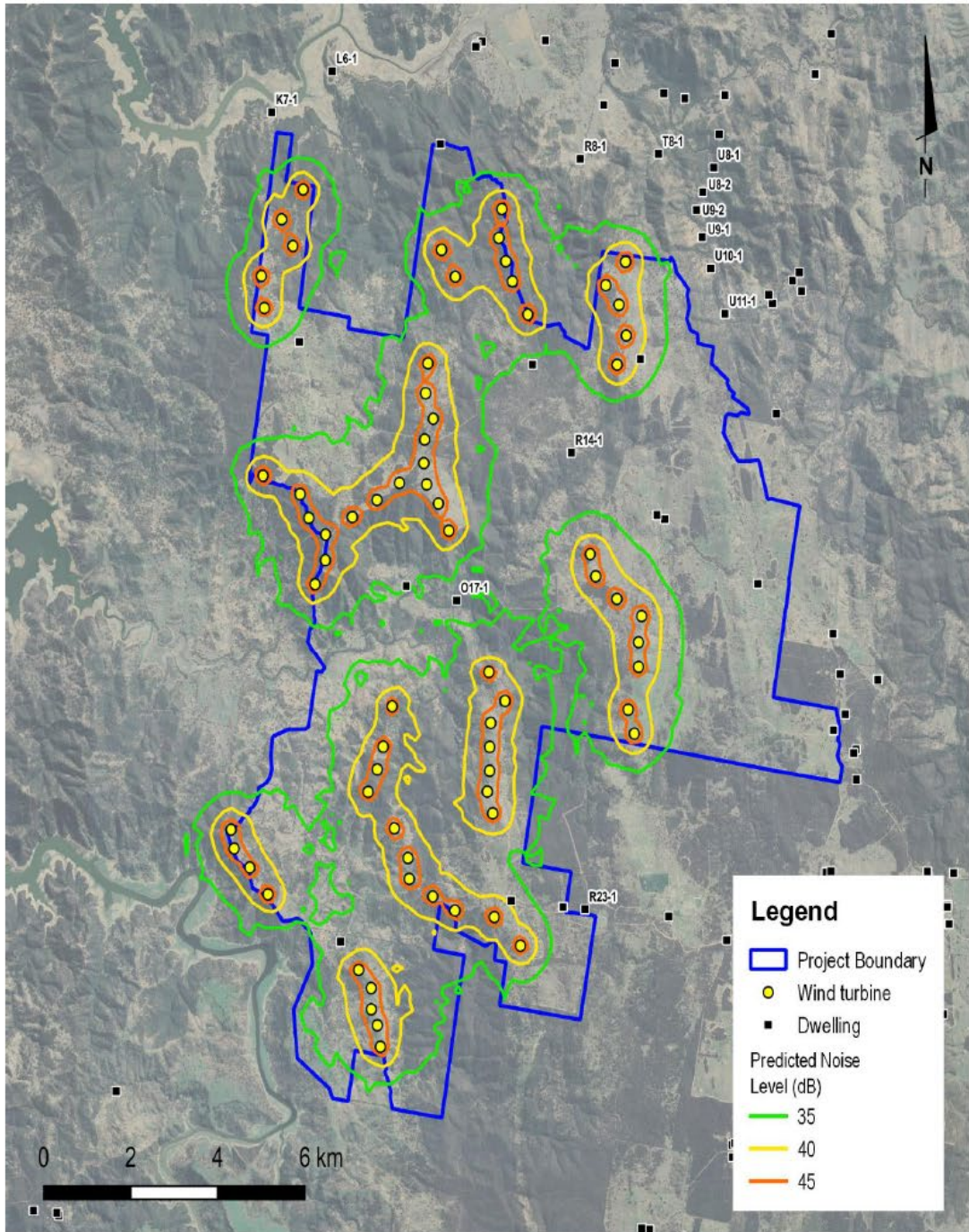


Figure 7-3: Predicted noise level contours

7.3 Biodiversity

7.3.1 Literature and Database Review and Field Assessment

A desktop literature review and data audit was undertaken to identify the potential presence of any threatened species, populations and ecological communities listed under the *Biodiversity Conservation Act 2016* (BC Act) and the EPBC Act within the Project Site and surrounds which could be affected by the Project. Additional species were added to the list based on ELA databases and local knowledge.

The results of the desktop assessment were combined to produce a list of threatened and migratory species and ecological communities, listed under the BC Act and/or EPBC Act, that could potentially occur within the Project Site.

A one-day field survey was undertaken by Eco Logical Australia (ELA) Senior Botanist David Allworth on 25 October 2019. The field survey was to enable:

- initial determinations of vegetation communities present, where possible assigning Plant Community Types (PCT) in accordance with the PCT criteria set out in the Vegetation Information System (VIS) database (OEH 2019)
- preliminary assessment of the potential habitat for threatened flora and fauna (including records of hollow-bearing trees, rocky outcrops)
- preliminary determination of the potential for vegetation communities identified to meet the listing criteria of Endangered Ecological Community (EEC) under the BC Act and/or Critically Endangered Ecological Community (CEEC) under the EPBC Act
- record opportunistic fauna observations.

7.3.2 Results

7.3.2.1 Vegetation Communities

The desktop assessment identified a list of vegetation communities that may potentially occur within the Project Site based on SEED vegetation (DPIE, 2019a) mapping (**Appendix C**). There is currently no mapping available of PCTs for the central part of the Project Site although older mapping using the NSW Biometric Vegetation Types (BVT) (DPIE, 2019b) covers the full Project Site.

The vegetation communities that have been observed in the Project Site are not always consistent with the SEED vegetation mapping. In particular, the widely mapped areas of Tumbledown Red Gum on hills, shown in **Appendix C**, was not observed during the field survey.

The Project Site is in South Western Slopes bioregion within the Central Tablelands of NSW; however, the vegetation of the Project Site is more consistent with the bordering South-East Highlands bioregion. This is probably due to the altitude of area.

Five vegetation communities were identified in the Project Site during the field survey. These communities are described as they were seen in the field and the best fit PCT(s) allocated (**Table 7-4**). These vegetation communities were identified through preliminary observations and no rapid or full floristic plot data was collected. Further field survey, in accordance with the (BAM will be undertaken to accompany a Biodiversity Development Assessment Report (BDAR) and the EIS.

Table 7-4: Initial PCTs validated within the Project Site

| Vegetation Community | Plant Community Type | BC Status | EPBC Status | Vegetation Description |
|---|--|-------------|--------------|---|
| White Box Grassy Woodland (Figure 7-4) | PCT 266: White Box Grassy Woodland in the upper slopes sub-region of the NSW South-Western Slopes Bioregion. | E | CE | This vegetation community commonly occurs on areas of Red Podzolic soils (Murphy & Lawrie 1998) but is not restricted to this soil type. The understorey species include <i>Brachychiton populneus</i> (Kurrajong), <i>Olearia sp.</i> (Sticky Daisy) and <i>Cassinia sp.</i> (Sifton Bush). Ground layer is dominated by <i>Austrostipa sp.</i> (Speargrass) and <i>Rytidosperma sp.</i> (Wallaby Grass). This community is represented within the study area as both a remnant woodland and in its derived native grassland form. Occasionally <i>Eucalyptus melliodora</i> (Yellow Box) is seen as a component of this community. Much of this community exists in a cleared or part-cleared condition due to growing on the more fertile parts of the study area. |
| White Box shrubby woodland/open forest | PCT 273: White Box shrubby open forest on fine grained sediments in the Mudgee region of the central western slopes of NSW PCT 268: White Box - Blakely's Red Gum - Long-leaved Box - Nortons Box - Red Stringybark grass-shrub woodland on shallow soils on hills in the NSW South Western Slopes Bioregion. | E (PCT 268) | CE (PCT 268) | These vegetation communities often occur on stony ridge tops. The dominant tree is <i>Eucalyptus albens</i> (White Box), other canopy species occur such as <i>Eucalyptus macrorhyncha</i> (Red Stringybark), <i>Eucalyptus blakelyi</i> (Blakely's Red Gum) and <i>Eucalyptus melliodora</i> , with an understorey dominated by <i>Olearia sp.</i> and groundcover of <i>Stypandra glauca</i> (Nodding Blue Lily), <i>Austrostipa sp.</i> and <i>Rytidosperma sp.</i> |
| Long-leaved Box (<i>Eucalyptus goniocalyx</i>) on rocky outcrops | PCT 268: White Box - Blakely's Red Gum - Long-leaved Box - Nortons Box - Red Stringybark grass-shrub woodland on shallow soils on hills in the NSW South Western Slopes Bioregion. | - | - | This vegetation community features low growing <i>Eucalyptus goniocalyx</i> (Long-leaved Box) in pure stands on rock outcrops. There is a sparse understorey of <i>Stypandra glauca</i> and occasional grasses in the ground layer. |
| Red Box (<i>Eucalyptus polyanthemos</i>) and Mugga Ironbark (<i>Eucalyptus sideroxylon</i>) on shallow soils | PCT 358: Mugga Ironbark - Red Box - White Box - Black Cypress Pine tall woodland on rises and hills in the northern NSW South Western Slopes Bioregion. | - | - | This community occurs with very sparse understorey and large amounts of ground litter. Occasional <i>Acacia paradoxa</i> (Kangaroo Thorn) and <i>Stypandra glauca</i> are seen. |
| <i>Eucalyptus polyanthemos</i> (Red Box) – <i>Eucalyptus macrorhyncha</i> – <i>Eucalyptus goniocalyx</i> – <i>Eucalyptus dives</i> (Peppermint) on shallow soil | PCT 287: Long-leaved Box - Red Box - Red Stringybark mixed open forest on hills and hillslopes in the NSW South Western Slopes Bioregion. | - | - | The understorey had <i>Stypandra glauca</i> (Nodding Blue Lily), <i>Olearia sp.</i> (Sticky Daisy) and a few grasses amongst a thick cover of litter. Surface rock was common. |

E = Endangered; CE = Critically Endangered



Figure 7-4: *Eucalyptus albens* grassy woodland

7.3.2.2 Threatened Flora and Fauna

The desktop assessment identified three TECs, 39 threatened fauna species and nine threatened flora species that may potentially occur within a 10 km radius of the Project Site and surrounding area. Records of koala, *Pachycephala inornata* (Gilbert's Whistler), Spotted-tailed Quoll and Swift Parrot are located near the Project Site (**Appendix C**), indicating the potential for these species within the Project Site.

Habitat features were identified in the preliminary study area that would provide suitable habitat for a number of threatened species. Along the ridge lines rocky outcrops were observed which may provide habitat for threatened reptile species such as *Aprasia parapulchella* (Pink-tailed Legless Lizard), and threatened cave dependent microbats including the *Chalinolobus dwyeri* (Large-eared Pied Bat). An abundance of tree hollows was noted providing potential habitat for hollow dependant species which may include *Calyptorhynchus lathami* (Glossy Black-Cockatoo), *Nyctophilus corbeni* (Corben's Long-eared Bat) and threatened owls such as the *Ninox connivens* (Barking Owl). Large woody debris scattered across the Project Site may provide suitable foraging habitat for a variety of threatened woodland birds. The Project Site also contains an abundance of the Koala feed trees *Eucalyptus albens* (White Box).

Further targeted surveys will be undertaken in accordance with the BAM during the preparation of the BDAR and EIS to determine the presence of these threatened species as well as impact avoidance, mitigation and offset obligations, if required.

7.3.2.3 Other Considerations

If required, a Bird and Bat Adaptive Management Plan (BBAMP) will be prepared as a condition of approval. This is to provide an overall strategy for managing and mitigating any significant bird and bat strikes arising from operations of the wind energy facility. Studies have shown that 'at-risk' species such as *Aquila audax* (Wedge-tailed Eagles), *Haliaeetus leucogaster* (White-Bellied Sea Eagles), *Pteropus poliocephalus* (Grey Headed Flying foxes) and microbats can be impacted by blade strike or barotrauma. Pre-construction surveys will need to be implemented to provide baseline data on bird and bat populations with ongoing monitoring during the operational phase.

The final project layout will represent all areas that will be directly impacted by the works, including, but not limited to the building envelope, any clearing for bushfire asset protection zones (APZs), access tracks, driveways and construction areas. Access, including upgrading public roads to facilitate the movement of turbines onto the site, might require road widening, realignment and track clearing and could impact on the extent of areas to be included in the BDAR.

Additional TECs such as *Eucalyptus microcarpa* (Grey Box) Grassy Woodlands or *Eucalyptus conica* (Fuzzy Box) Woodlands which occur in neighbouring areas could be impacted in obtaining access to the Project area. Potential impacts to these vegetation communities may also add additional plant and animal species that will be included in the targeted surveys, if required.

Several threatened and/or migratory species listed under the EPBC Act potentially occur within the preliminary study area. Whether or not the final Project layout will have a significant impact on MNES will be identified during the preparation of the BDAR and consideration of additional approval pathways (e.g. Referral to the Commonwealth), will be undertaken, if required.

7.4 Traffic and Transport

The Project has the potential to generate increased traffic volumes during the construction phase, with minimal traffic impacts during ongoing operations. A preliminary Route Study was undertaken (Rex J. Andrews, 2019) to determine the most appropriate route to transport the oversize wind turbine components to site.

The WTG equipment is likely to be imported from various countries and will arrive on ships into the Port of Newcastle. Two potential routes that were considered are:

1. Port of Newcastle to Yarrabin via Mudgee (**Figure 7-5**)
2. Port of Newcastle to Yarrabin via Wellington and Goolma (**Figure 7-6**)

The closest roads to the Project that are classified as State Roads are Goolma Road and the Castlereagh Highway. Regional Roads and Local Roads that may be used to access the Project from the State Road network are:

- Hill End Road
- Twelve Mile Road
- Yarrabin Road
- Burrendong Dam Road

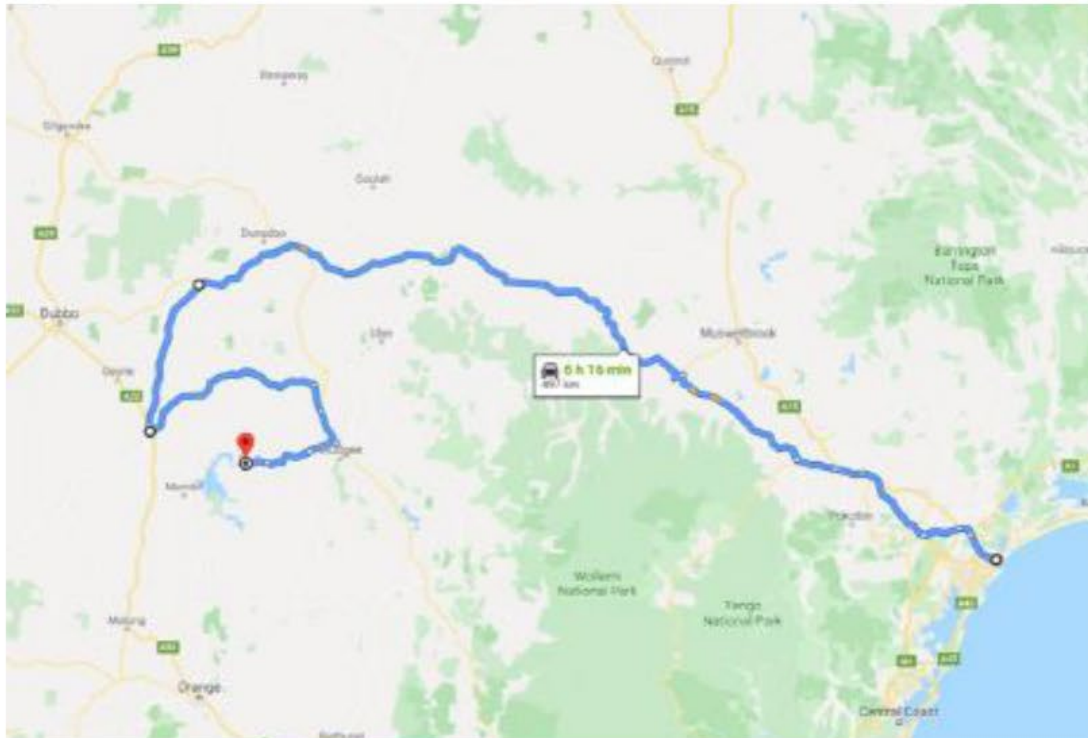


Figure 7-5: Option 1 - Port of Newcastle to Yarrabin via Mudgee (Rex J. Andrews, 2019)

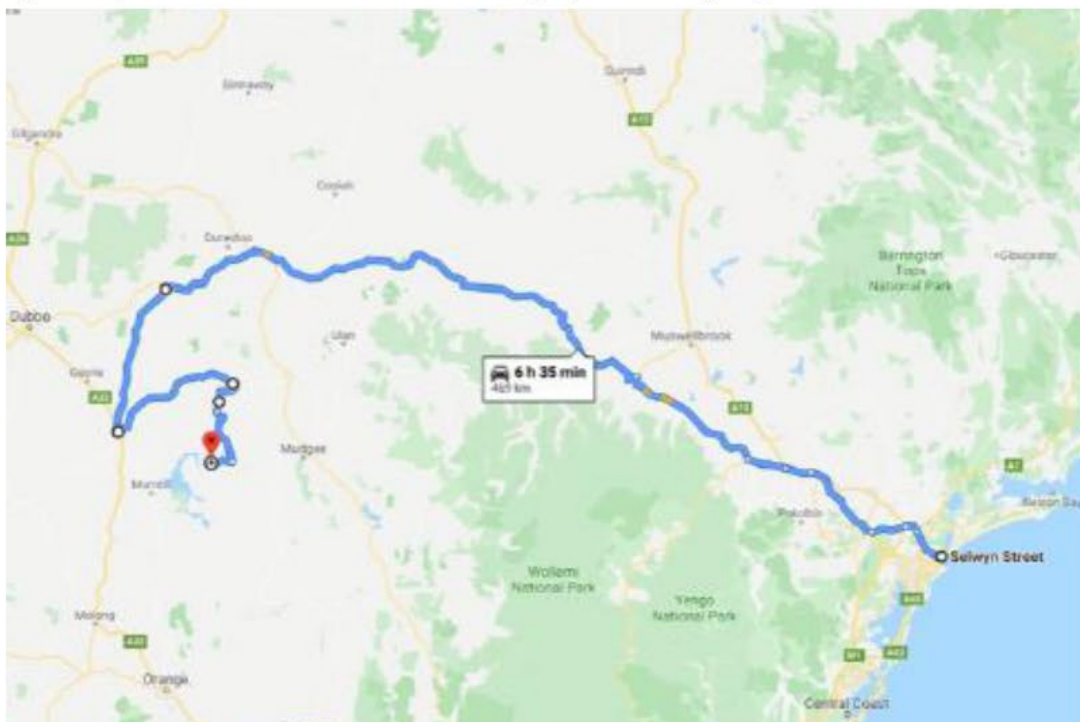


Figure 7-6: Option 2 - Port of Newcastle to Yarrabin via Wellington and Goolma (Rex J. Andrews, 2019)

The Route Study identified the route via Wellington and Goolma as the preferred option and noted that extensive upgrades to the existing gravel road would be required. **Table 7-5** summarises the pros and cons of the preferred route.

Table 7-5: Pros and cons of the second option route studied (Rex J. Andrews, 2019)

| Option Two: Via Twelve Mile | |
|-----------------------------|---|
| Pros | <ul style="list-style-type: none"> • Shortest distance • Considerably less vegetation removal than Option One, however the route still requires a large amount of tree removal and trimming. • Less number of bridges than Option One. • Less road modifications on corners than Option One. • Less impact to local traffic than Option One. |
| Cons | <ul style="list-style-type: none"> • road widening is required along Twelve Mile Road, Yarrabin Road & Burrendong Dam Road. • Gravel Road for the majority of the route. • Replacement of a bridge over Piambong Road would be required. • Many crests are unlikely to have adequate clearance for the trailers to traverse Yarrabin and Burrendong Dam Road. • Several floodways and culverts will need to be modified. |

A detailed Traffic and Transport Impact Assessment will be undertaken as part of the EIS and focus primarily on the preferred transportation route for construction traffic generally in accordance with the 'Guide to Traffic Generating Developments' (RTA, 2002), Road Design Guide and relevant Austroads Standards and 'Austroads Guide to Traffic management' (Austroads, No Date).

7.5 Hazards and Risks

7.5.1 Aviation

Mudgee Airport and Dubbo Airport, Wellington aerodrome (Bodangora aerodrome), and the Gulgong Aero Park are all located within 30 nautical miles (nm) to the Project Site. There is also a probability for other aviation activities as unlicensed private air strips exist within proximity to the Project site.

An Aeronautical Impact Assessment will be undertaken in accordance with the National Airports Safeguarding Framework Guideline D: Managing Wind Turbine Risk to Aircraft (DIRDC, 2012).

7.5.2 Telecommunications and Electromagnetic Interference

Large structures, such as wind turbines can cause interference when located close to or within telecommunication signal pathways, degrading the performance of the signals. Electromagnetic emissions can also be produced from mechanical generators and machinery, also having the potential to affect signals.

A Telecommunications and Electromagnetic Interference Assessment will be undertaken to identify all telecommunication infrastructure in proximity to the Project site.

7.5.3 Bushfire and Electrical Fire

The Project has the potential to be exposed to bushfire risk from grasslands and nearby areas of dense vegetation as well as carrying the risk of a potential fire starting within the Project site. To ensure there is minimal risk of the Project causing a bushfire and that the Project doesn't impact on aerial fighting of bushfires, a Bushfire Risk Assessment will be undertaken in accordance with Planning for Bush Fire Protection (PBP), A guide for councils, planners, fire authorities and developers 2019 (NSW RFS, 2019).

7.5.4 Other Hazards and Risks

Other potential hazards and risks such as public health regarding electromagnetic fields, low frequency and noise infrasound and shadow flicker will also be assessed, as well as blade throw.

7.6 Aboriginal Heritage

An Aboriginal Heritage Information Management System (AHIMS) database search was undertaken on 29 April 2020 for the area containing and surrounding the Project Boundary.

The AHIMS search did not identify any Aboriginal sites/places recorded within the Project sit boundary (**Figure 7-7**).

Based on the size of the Project site and the presence of multiple archaeologically sensitive landscape features, an Aboriginal Cultural Heritage Assessment (ACHA) for the proposed Project will be required to be prepared in accordance with the requirements of the *National Parks and Wildlife Act 1974*.

As a component of the ACHA process, consultation with the Aboriginal Community will be undertaken in accordance with the '*Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*' (DECCW, 2010a). In addition, it is likely that archaeological test excavation will be required in accordance with the '*Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW*' (OEH, 2011), the '*Code of Practice for Archaeological Investigations of Aboriginal Objects in NSW*' (DECCW, 2010b). The scope of the ACHA will include:

- Desktop review, including an extensive AHIMS database search, Native Title Search, and a review of previously completed studies conducted in the area to assist in the development of a predictive model
- Aboriginal stakeholder consultation in line with the '*Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*' (DECCW 2010a)
- A comprehensive site inspection with members of the local Aboriginal community to identify and record any sites of Aboriginal Cultural Heritage (social, historical, scientific and aesthetic values) within the project boundary, specifically within areas proposed to be impacted by the proposed windfarm, as well as relocating and rerecording existing sites registered on the AHIMS database within the Project Site
- Archaeological test excavation of areas of archaeological potential identified during desktop and field assessment, undertaken in partnership with members of the local Aboriginal community
- Preparation of an ACHA to meet the DPIE guidelines and provide to the local Aboriginal community for comment
- This will include an assessment of any additional Aboriginal Cultural Heritage issues or places identified during the field work

- Development of appropriate management and mitigation strategies for any Aboriginal sites or areas identified as culturally significant by the located Aboriginal community that are identified to be directly or indirectly impacted by the proposed Project.

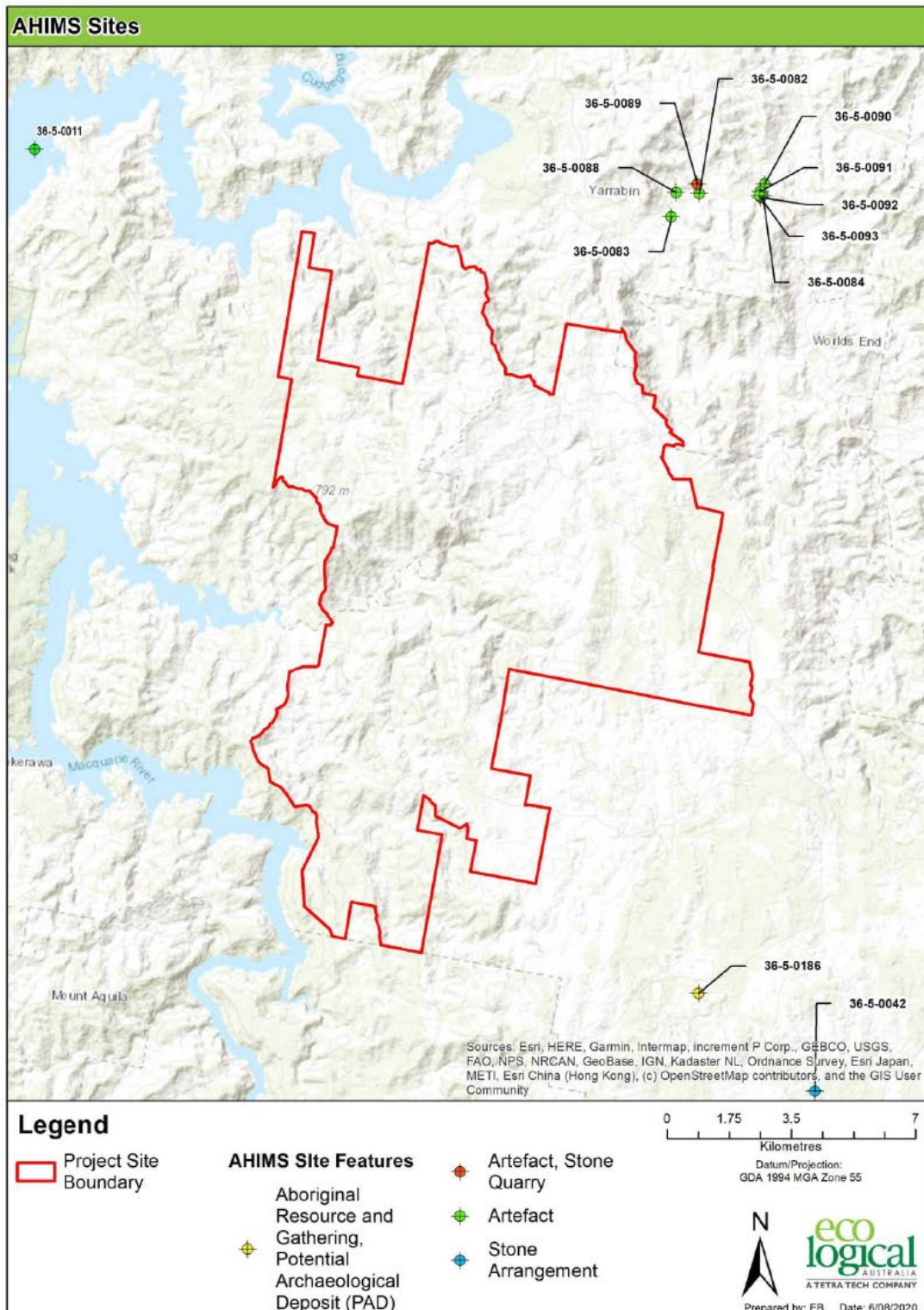


Figure 7-7: AHIMS sites within and in proximity to the Project Site

7.7 Historic Heritage

A search of available historic heritage registers was undertaken within 5 km of the Project Boundary (heritage search area) including:

- Commonwealth Heritage List
- National Heritage List
- NSW State Heritage Register (SHR)
- Dubbo LEP 2011
- Wellington LEP 2012
- Mid-Western Regional LEP 2012.

There were no World, Commonwealth, National, State, or locally listed heritage items identified as being within the Project Site. The two closest heritage items to the study area is listed on the Wellington LEP and are located approximately 4.9 km and 7.1 km from the Project Site at their closest points respectively (**Figure 7-8**).

- Item Number: 1979 (Wingvee Homestead and Woolshed and Quartz Roasting)
- Item Number: 1976 (Triamble Homestead and Woolshed).

If required, a Statement of Heritage Impact (SoHI) will be completed for the Project in accordance with the NSW Heritage Council *Statements of Heritage Impact Guidelines 2002*. The scope of the SoHI will include:

- A review of any relevant existing heritage assessment reports and other sources of information regarding heritage items in the region
- A field survey of the Project site in conjunction with the Aboriginal heritage survey, with an emphasis on sites identified during preliminary research and areas with archaeological potential and the recording of any items located
- Preparation of a SoHI which considers the potential for impacts on any significant adjacent heritage items
- Identification of any necessary impact mitigation and management measures.

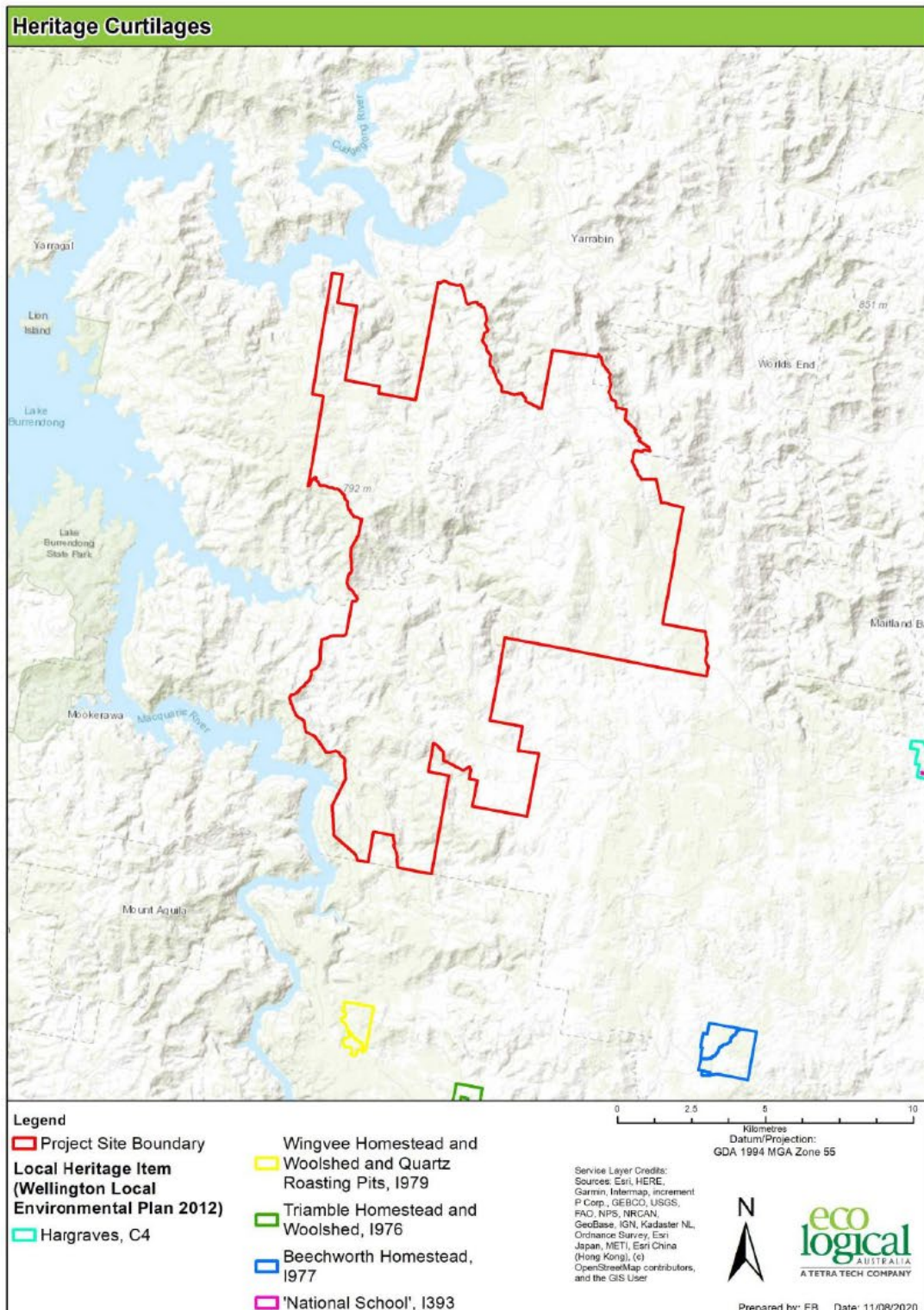


Figure 7-8: Heritage curtillages in proximity to the Project site

7.8 Water and Soils

The Project site is within the Macquarie River catchment area. The Macquarie River runs through the Project site with several smaller tributaries running through the landscape comprising 1st, 2nd, 3rd and 4th order Strahler streams and ephemeral creeks.

The Burrendong Dam is also located within the Project site, which is managed by the Water Sharing Plan for the Macquarie and Cudgegong Regulated Rivers Water Source 2016 and the NSW Government, who manages licensed water for the environment. Lake Burrendong, which was created with the construction of Burrendong Dam, is one of the largest inland dams in NSW and the most prominent water body of the region.

Several creeks and drainage lines, which occur in or around the Project Site have been identified as Key Fish Habitat. These are aquatic areas that have been identified as important to the sustainability of the maintenance of fish populations. Access tracks may traverse some of these areas and will be further assessed as part of the EIS.

A water impact assessment will be undertaken as part of the EIS and will include, but not be limited to:

- Quantification of water demand and identification of both surface and groundwater sources and potential impacts regarding water usage and water quality
- Flood modelling
- Assessment of potential impacts to riparian land and aquatic habitat.

7.9 Social and Economic Factors

A Social and Economic Assessment will review the impacts and benefits of the Project for the region and State as a whole, including consideration of any increase in demand for local services such as accommodation.

7.10 Minor Issues

Additional consideration will be given to the following potential impacts within the EIS:

- Resource requirements and waste
- Public health impacts regarding infrasound and Electromagnetic Fields
- Air quality impacts in regarding construction dust
- Decommissioning.

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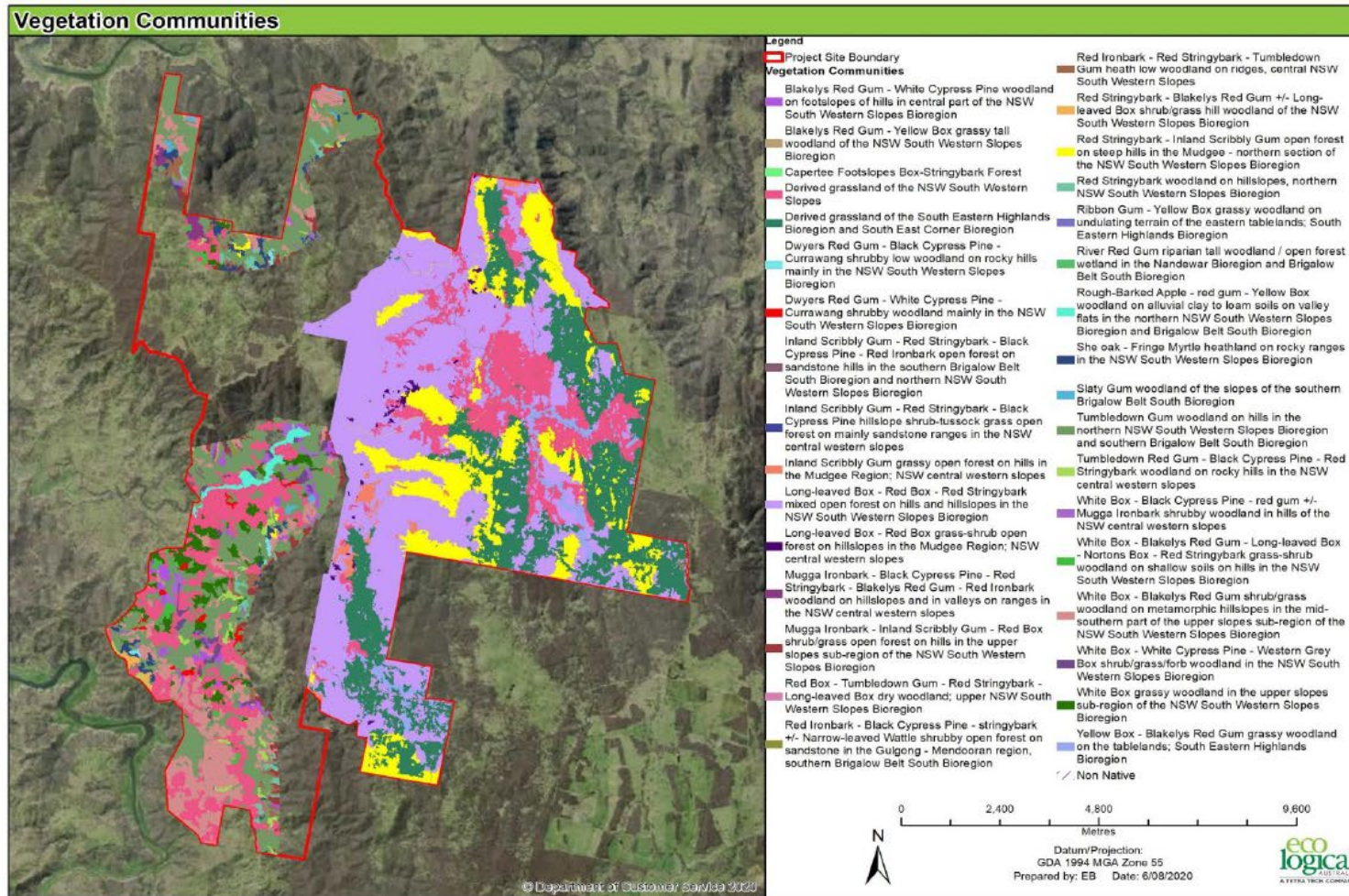
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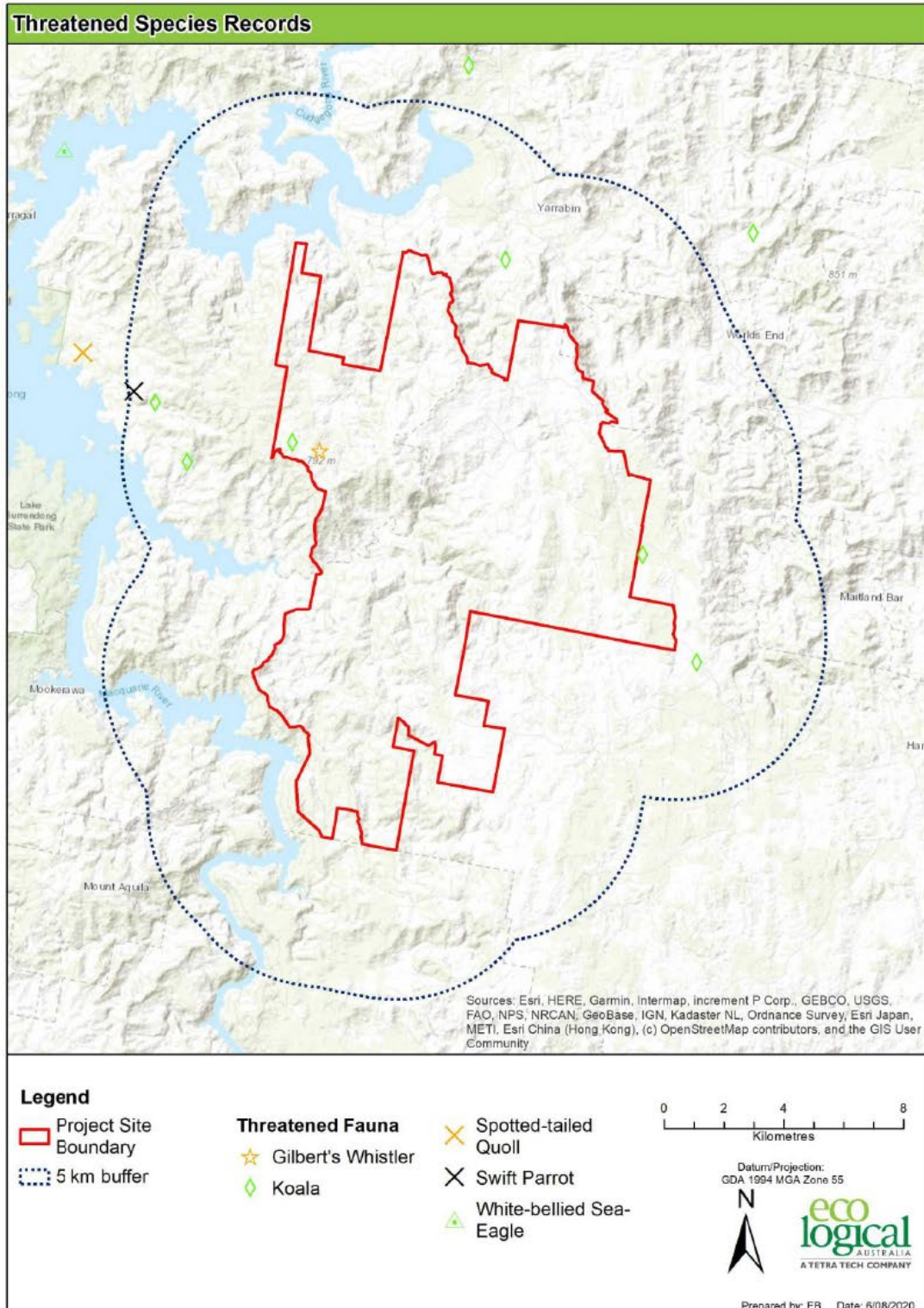
Appendix A Preliminary Environmental Risk Assessment

Appendix B Preliminary Landscape and Visual Impact Assessment

Appendix C Biodiversity Mapping



Plant Community Types within the preliminary Project Site



Threatened species within the preliminary Project site and surrounds



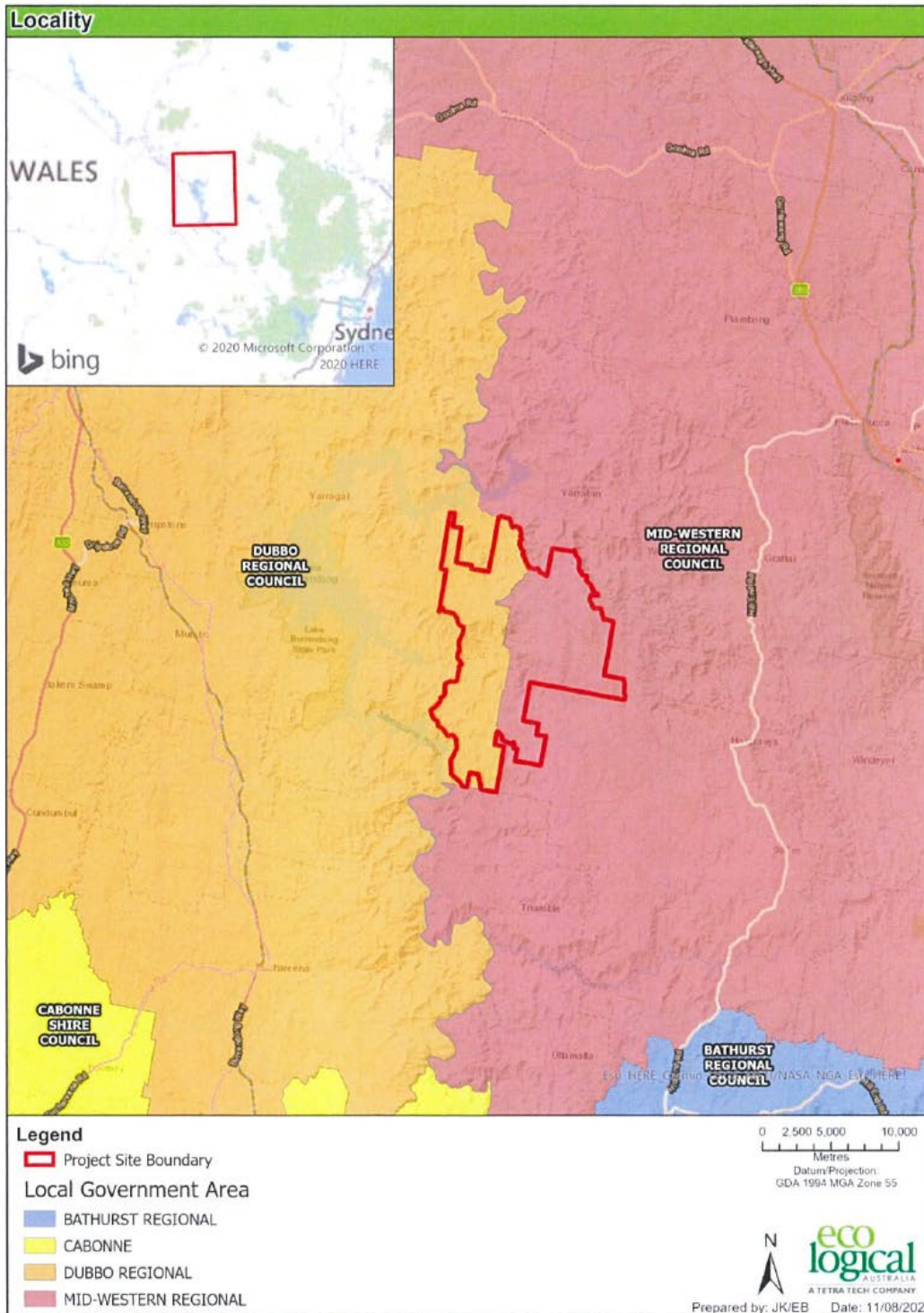


Figure 1-1: Project site locality and LGAs

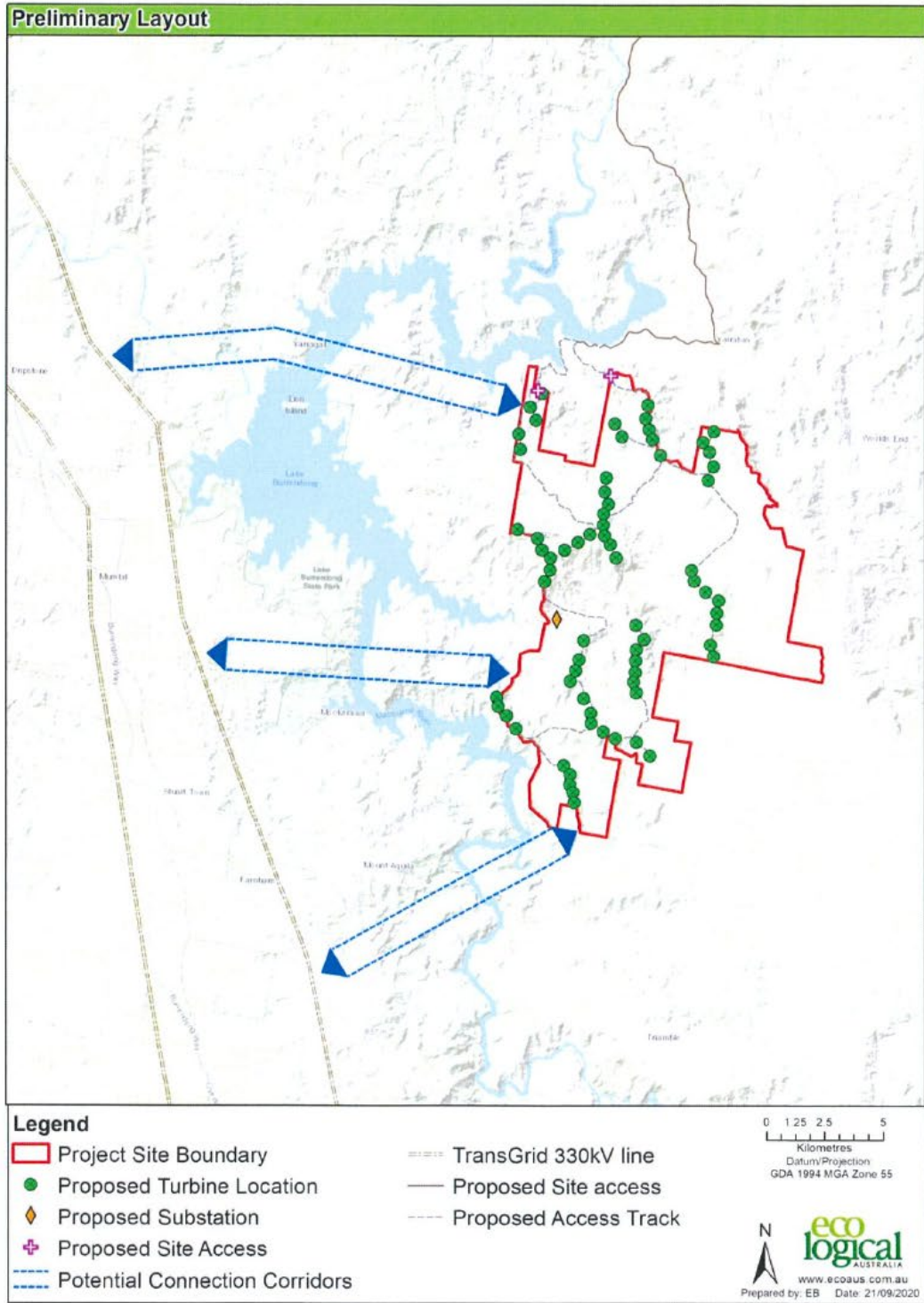


Figure 1-2: Project preliminary layout

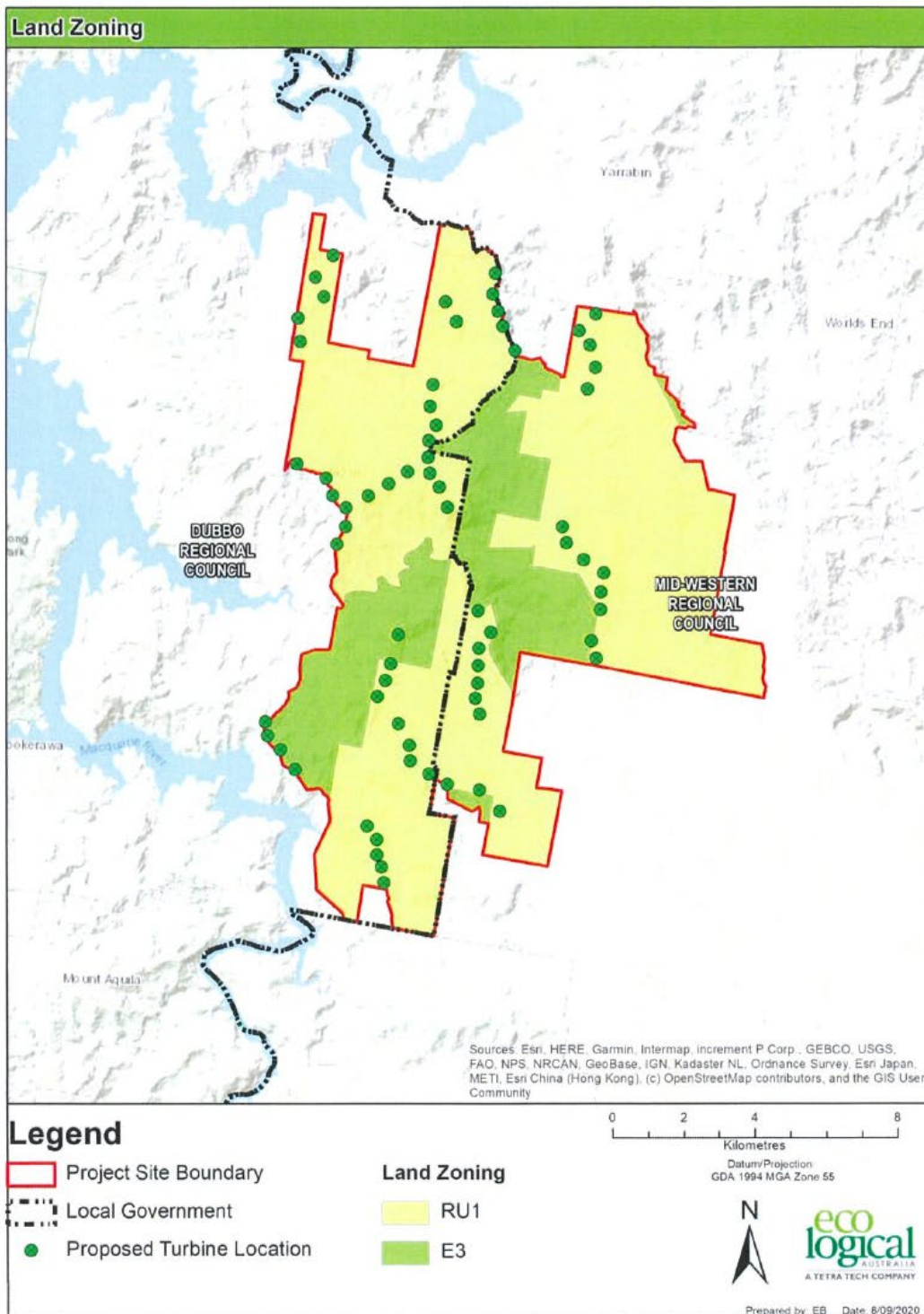


Figure 2-1: Land zoning within the Project site

Noise Assessment

Proposed Modification to Delivery Hours

Aldi

Mudgee, NSW



Prepared for: KDC Pty Ltd
November 2020
MAC201214-01RP1

Document Information

Noise Assessment



Proposed Modification to Delivery Hours

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1 Introduction

Muller Acoustic Consulting Pty Ltd (MAC) has been commissioned by KDC Pty Ltd (KDC) to prepare a Noise Assessment (NA) to quantify emissions from the proposed modification to delivery hours for Aldi Mudgee (the 'project') at 99 Church Street, Mudgee, NSW.

The NA has quantified potential operational and sleep disturbance noise emissions from the project and recommends reasonable and feasible noise controls where required.

The assessment has been undertaken in accordance with the following documents:

- NSW Environment Protection Authority (EPA), Noise Policy for Industry (NPI) 2017;
- Australian Standard AS 1055:2018 - Acoustics - Description and measurement of environmental noise - General Procedures; and
- International Standard ISO 9613:1993 - Acoustics - Attenuation of sound during propagation outdoors.

A glossary of terms, definitions and abbreviations used in this report is provided in **Appendix A**.

1.1 Proposal

Approval is being sought to extend current delivery hours to 24 hours, seven days per week. Therefore, the NA has quantified potential operational noise emissions pertaining to truck deliveries to surrounding residential receivers. It is understood that current deliveries are restricted to three (3) deliveries per day and must be carried out within the following approved operating hours:

- Monday to Wednesday and Friday: 8am to 8pm;
- Thursday: 8am to 9pm;
- Saturday: 8am to 6pm; and
- Sunday: 9am to 6pm.

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2 Project Description

2.1 General

The operation is located at 99 Church Street, Mudgee, NSW. This locality comprises primarily of residential, commercial and hotel receivers. It is noted that the commercial receivers (along the western boundary of the project site) are not anticipated to be affected as a result of the operation as they will be unoccupied during the night assessment period, hence have been excluded from this assessment.

2.2 Receiver Review

A review of receivers in proximity to the project has been completed and are summarised in **Table 1**. **Figure 1** provides a locality plan showing the position of these receivers in relation to the project.

| Table 1 Receiver Locations | | | | |
|----------------------------|--------------------|---------|-----------------|--|
| Receiver | MGA 55 Coordinates | | Receiver Height | NPI Receiver Type |
| | Northing | Easting | | |
| R1 | 742951 | 6390580 | 1.5m | Residential |
| R2 | 742964 | 6390575 | 1.5m | |
| R3 | 742976 | 6390573 | 1.5m | |
| R4 | 742983 | 6390545 | 1.5m | |
| R5 | 742990 | 6390454 | 1.5m | |
| R6 | 742824 | 6390480 | 1.5m | |
| H1 | 7429314 | 6390469 | 4.0 | Hotels, motels, caretakers' quarters, holiday accommodation. |



FIGURE 1
 Locality Plan
 MAC201214-01
 Aldi - Mudgee

KEY

- Project Site
- Logger Location
- Receiver Locations
- Northern Boundary



3 Noise Policy and Guidelines

3.1 Noise Policy for Industry

The EPA released the Noise Policy for Industry (NPI) in October 2017 which provides a process for establishing noise criteria for consents and licenses enabling the EPA to regulate noise emissions from scheduled premises under the Protection of the Environment Operations Act 1997. The objectives of the NPI are to:

- provide noise criteria that is used to assess the change in both short term and long term noise levels;
- provide a clear and consistent framework for assessing environmental noise impacts from industrial premises and industrial development proposals;
- promote the use of best-practice noise mitigation measures that are feasible and reasonable where potential impacts have been identified; and
- support a process to guide the determination of achievable noise limits for planning approvals and/or licences, taking into account the matters that must be considered under the relevant legislation (such as the economic and social benefits and impacts of industrial development).

The policy sets out a process for industrial noise management involving the following key steps:

1. Determine the Project Noise Trigger Levels (PNTLs) (ie criteria) for a development. These are the levels (criteria), above which noise management measures are required to be considered. They are derived by considering two factors: shorter-term intrusiveness due to changes in the noise environment; and maintaining the noise amenity of an area.
2. Predict or measure the noise levels produced by the development with regard to the presence of annoying noise characteristics and meteorological effects such as temperature inversions and wind.
3. Compare the predicted or measured noise level with the PNTL, assessing impacts and the need for noise mitigation and management measures.
4. Consider residual noise impacts - that is, where noise levels exceed the PNTLs after the application of feasible and reasonable noise mitigation measures. This may involve balancing economic, social and environmental costs and benefits from the proposed development against the noise impacts, including consultation with the affected community where impacts are expected to be significant.

5. Set statutory compliance levels that reflect the best achievable and agreed noise limits for the development.
6. Monitor and report environmental noise levels from the development.

3.1.1 Project Noise Trigger Levels (PNTL)

The policy sets out the procedure to determine the PNTLs relevant to an industrial development. The PNTL is the lower (ie, the more stringent) value of the **Project Intrusiveness Noise Level (PINL)** and **Project Amenity Noise Level (PANL)** determined in accordance with Section 2.3 and Section 2.4 of the NPI.

3.1.2 Project Intrusiveness Noise Level (PINL)

The PINL ($L_{Aeq}(15min)$) is the RBL + 5dB and seeks to limit the degree of change a new noise source introduces to an existing environment. Hence, when assessing intrusiveness, background noise levels need to be measured.

Background noise levels need to be determined before intrusive noise can be assessed. The NPI states that background noise levels to be measured are those that are present at the time of the noise assessment and without the subject development operating. For the assessment of modifications to existing premises, the noise from the existing premises should be excluded from background noise measurements. It is note that the exception is where the premises has been operating for a significant period of time and is considered a normal part of the acoustic environment; it may be included in the background noise assessment under the following circumstances:

- the development must have been operating for a period in excess of 10 years in the assessment period/s being considered and is considered a normal part of the acoustic environment; and,
- the development must be operating in accordance with noise limits and requirements imposed in a consent or licence and/or be applying best practice.

Where a project intrusiveness noise level has been derived in this way, the derived level applies for a period of 10 years to avoid continuous incremental increases in intrusiveness noise levels. This approach is consistent with the purpose of the intrusiveness noise level to limit significant change in the acoustic environment. The purpose of the project amenity noise level is to moderate against background noise creep.

3.1.3 Project Amenity Noise Level (PANL)

The PANL is relevant to a specific land use or locality. To limit continuing increases in intrusiveness levels, the ambient noise level within an area from all combined industrial sources should remain below the recommended amenity noise levels specified in Table 2.2 (of the NPI). The NPI defines two categories of amenity noise levels:

- **Amenity Noise Levels (ANL)** – are determined considering all current and future industrial noise within a receiver area; and
- **Project Amenity Noise Level (PANL)** – is the recommended level for a receiver area, specifically focusing the project being assessed.

Additionally, Section 2.4 of the NPI states: “to ensure that industrial noise levels (existing plus new) remain within the recommended amenity noise levels for an area, a project amenity noise level applies for each new source of industrial noise as follows”:

PANL for new industrial developments = recommended **ANL** minus 5dBA.

The following exceptions apply when deriving the PANL:

- areas with high traffic noise levels;
- proposed developments in major industrial clusters;
- existing industrial noise and cumulative industrial noise effects; and
- greenfield sites.

The NPI states with respect to high traffic noise areas:

The level of transport noise, road traffic noise in particular, may be high enough to make noise from an industrial source effectively inaudible, even though the LAeq noise level from that industrial noise source may exceed the project amenity noise level. In such cases the project amenity noise level may be derived from the LAeq, period(traffic) minus 15 dB(A).

Where relevant this assessment has considered influences of traffic with respect to amenity noise levels (ie areas where existing traffic noise levels are 10dB greater than the recommended amenity noise level).

The recommended amenity noise levels as per Table 2.2 of the NPI are reproduced in **Table 2**.

Table 2 Amenity Criteria

| Receiver Type | Noise Amenity Area | Time of day | Recommended amenity noise level dB LAeq(period) |
|--|--------------------|------------------------------------|---|
| Residential | Rural | Day | 50 |
| | | Evening | 45 |
| | | Night | 40 |
| | Suburban | Day | 55 |
| | | Evening | 45 |
| | | Night | 40 |
| | Urban | Day | 60 |
| | | Evening | 50 |
| | | Night | 45 |
| Hotels, motels, caretakers' quarters, holiday accommodation, permanent resident caravan parks. | See column 4 | See column 4 | 5dB above the recommended amenity noise level for a residence for the relevant noise amenity area and time of day |
| School Classroom | All | Noisiest 1-hour period when in use | 35 (internal) 45 (external) |
| Hospital ward | | | |
| - internal | All | Noisiest 1-hour | 35 |
| - external | All | Noisiest 1-hour | 50 |
| Place of worship | | | |
| - internal | All | When in use | 40 |
| Passive Recreation | All | When in use | 50 |
| Active Recreation | All | When in use | 55 |
| Commercial premises | All | When in use | 65 |
| Industrial | All | When in use | 70 |

Notes: The recommended amenity noise levels refer only to noise from industrial noise sources. However, they refer to noise from all such sources at the receiver location, and not only noise due to a specific project under consideration. The levels represent outdoor levels except where otherwise stated.

Types of receivers are defined as rural residential; suburban residential; urban residential; industrial interface; commercial; industrial – see Table 2.3 and Section 2.7 of the NPI.

Note: Day - the period from 7am to 6pm Monday to Saturday or 8am to 6pm on Sundays and public holidays; Evening - the period from 6pm to 10pm; Night - the remaining periods.

3.1.4 Maximum Noise Assessment Trigger Level

The potential for sleep disturbance from maximum noise level events from a project during the night-time period needs to be considered. The NPI considers sleep disturbance to be both awakenings and disturbance to sleep stages.

Where night-time noise levels from a development/premises at a residential location exceed the following criteria, a detailed maximum noise level event assessment should be undertaken:

- LAeq(15min) 40dB or the prevailing RBL plus 5dBA, whichever is the greater, and/or
- LAmax 52dB or the prevailing RBL plus 15dBA, whichever is the greater.

A detailed assessment should cover the maximum noise level, the extent to which the maximum noise level exceeds the rating background noise level, and the number of times this happens during the night-time period.

Other factors that may be important in assessing the impacts on sleep disturbance include:

- how often the events would occur;
- the distribution of likely events across the night-time period and the existing ambient maximum events in the absence of the development;
- whether there are times of day when there is a clear change in the noise environment (such as during early morning shoulder periods); and
- current understanding of effects of maximum noise level events at night.

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4 Noise Criteria

4.1 Background Noise Environment

4.1.1 Unattended Noise Monitoring

To quantify the existing background noise environment of the area, unattended noise monitoring was conducted on site at 99 Church Street, Mudgee, NSW (L1). The monitoring location is shown in **Figure 1** and is representative of the surrounding project catchment as per Fact Sheet B1.1 of the NPI.

The unattended noise survey was conducted in general accordance with the procedures described in Australian Standard AS 1055:2018, "Acoustics - Description and Measurement of Environmental Noise".

The measurements were carried out using one Svantek 977 noise analyser from Thursday 29 October 2020 to Wednesday 11 November 2020. Observations on-site identified the surrounding locality was typical of an urban environment, with traffic noise, commercial sources and environmental noise audible. Calibration of all instrumentation was checked prior to and following measurements. Drift in calibration did not exceed ± 0.5 dBA. All equipment carried appropriate and current NATA (or manufacturer) calibration certificates.

Data affected by adverse meteorological conditions have been excluded from the results in accordance with methodologies provided in Fact Sheet A4 of the NPI. Residential receptors situated in surrounding area have been classified under the EPA's suburban amenity category. The results of long-term unattended noise monitoring are provided in **Table 3**. The noise monitoring charts for the background monitoring assessment are provided in **Appendix B**.

Table 3 Background Noise Monitoring Summary

| Location | Measured background noise level, RBL dB LA90 | | | Measured dB LAeq(period) | | |
|----------|---|-------------|-------------|-----------------------------|-------------|-------------|
| | Day | Evening | Night | Day | Evening | Night |
| | 7am to 6pm | 6pm to 10pm | 10pm to 7am | 7am to 6pm | 6pm to 10pm | 10pm to 7am |
| L1 | 41 | 39 | 34 | 52 | 51 | 44 |

Note: Excludes periods of wind or rain affected data. Meteorological data obtained from the Bureau of Meteorology weather station Central Tablelands 32.5628°S 149.6149°E 471m AMSL.

4.1.2 Attended Noise Monitoring

To validate background noise levels, two 15-minute attended noise monitoring assessments were completed at the project site. Observations during the survey noted that non-project related road traffic noise was the dominant contributor to background noise levels.

The monitored noise level contributions and observed meteorological conditions for each measurement are presented in **Table 4**.

| Table 4 Operator-Attended Noise Survey Results – 29 October 2020 | | | | | | |
|--|------------|----------------------------|------------------|------------------|-------------|--------------------------|
| Location | Time (hrs) | Descriptor (dBA re 20 µPa) | | | Meteorology | Description and SPL, dBA |
| | | L _{Amax} | L _{Aeq} | L _{A90} | | |
| A1 | 9:40 | 74 | 54 | 42 | WD: SE | Local traffic 37-45 |
| | | | | | WS: <0.5m/s | Onsite vehicles 40-59 |
| | | | | | Temp: 20°C | Industrial noise 40-45 |
| A2 | 9:57 | 76 | 50 | 43 | WD: E | Local traffic 36-56 |
| | | | | | WS: <0.5m/s | Birds 36-60 |
| | | | | | Temp: 20°C | Dog Barking 40-76 |

Note: Day - the period from 7am to 6pm Monday to Saturday or 8am to 6pm on Sundays and public holidays; Evening - the period from 6pm to 10pm; Night - the remaining periods.

4.2 Operational Noise Criteria

4.2.1 Project Intrusiveness Noise Levels

The Project Intrusiveness Noise Levels (PINLs) for the project are presented in **Table 5** and have been determined based on the RBL +5dBA and applies to residential receivers only.

| Table 5 Intrusiveness Noise Levels | | | |
|------------------------------------|---------------------|-------------------------|------------------------|
| Receiver | Period ¹ | Measured RBL dB LA90 | PINL dB LAeq(15min) |
| R1-R6 | Night | 34 | 39 |

Note: As per Section 2.1 of the NPL, Intrusiveness Noise Levels only apply to residences.

Note 1: Day - the period from 7am to 6pm Monday to Saturday or 8am to 6pm on Sundays and public holidays; Evening - the period from 6pm to 10pm; Night - the remaining periods.

4.2.2 Project Amenity Noise Levels

The Project Amenity Noise Levels (PANLs) for residential receivers potentially affected by the project are presented in **Table 6**.

| Table 6 Amenity Noise Levels and Project Amenity Noise Levels | | | | | |
|---|--------------------|--------------------------------|---|-------------------------|----------------------------------|
| Receiver Type | Noise Amenity Area | Assessment Period ¹ | Recommended ANL dB LAeq(period) ² | PANL dB LAeq(period) | PANL LAeq(15min) ³ |
| R1-R6 | Suburban | Night | 40 | 40 | 43 |
| H1 | Suburban | Night | 45 ⁴ | 45 | 48 |

Note 1: Day - the period from 7am to 6pm Monday to Saturday or 8am to 6pm on Sundays and public holidays; Evening - the period from 6pm to 10pm; Night - the remaining periods.

Note 2: Recommended amenity noise levels as per Table 2.2 of the NPI.

Note 3: Includes a +3dB adjustment to the amenity period level to convert to a 15-minute assessment period as per Section 2.2 of the NPI.

Note 4: 5 dBA above recommended amenity noise level for residence as per Table 2.2 of NPI.

4.2.3 Project Noise Trigger Levels

The Project Noise Trigger Levels (PNTLs) are the lower of either the PINL or the PANL. **Table 7** presents the derivation of the PNTLs in accordance with the methodologies outlined in the NPI.

| Table 7 Project Noise Trigger Levels | | | | |
|--------------------------------------|---------------------|------------------------|------------------------|------------------------|
| Receiver | Period ¹ | PINL dB LAeq(15min) | PANL dB LAeq(15min) | PNTL dB LAeq(15min) |
| R1-R6 | Night | 39 | 43 | 39 |
| H1 | Night | n/a | 48 | 48 |

Note 1: Day - the period from 7am to 6pm Monday to Saturday or 8am to 6pm on Sundays and public holidays; Evening - the period from 6pm to 10pm; Night - the remaining periods.

4.2.4 Maximum Noise Assessment Trigger Levels

The maximum noise trigger levels shown in **Table 8** are based on night time RBLs and trigger levels as per Section 2.5 of the NPI. The trigger levels will be applied to transient noise events that have the potential to cause sleep disturbance.

| Table 8 Maximum Noise Assessment Trigger Levels | | | |
|--|-----------|--------------------------------------|-----------|
| Residential Receivers R1-R13 | | | |
| LAeq(15min) | | L_{Amax} | |
| 40dB LAeq(15min) or RBL + 5dB | | 52dB L _{Amax} or RBL + 15dB | |
| Trigger | 40 | Trigger | 52 |
| RBL 34+5dB | 39 | RBL 34+15dB | 49 |
| Highest | 40 | Highest | 52 |

Note: Monday to Saturday; Night 10pm to 7am. On Sundays and Public Holidays; Night 10pm to 8am.

Note: As per Section 2.5 of the NPI, the highest of the two criteria are adopted as the trigger level.

5 Noise Assessment Methodology

A computer model was developed to quantify project noise emissions to neighbouring receivers for typical construction activities and operations. DGMR (iNoise, Version 2020.0) noise modelling software was used to quantify noise emissions from typical construction activities and operations. iNoise is a new intuitive and quality assured software for industrial noise calculations in the environment. 3D noise modelling is considered industry best practice for assessing noise emissions from projects.

The model incorporated a three-dimensional digital terrain map giving all relevant topographic information used in the modelling process. Additionally, the model uses relevant noise source data, ground type, attenuation from barrier or buildings and atmospheric information to predict noise levels at the nearest potentially affected receivers.

The model calculation method used to predict noise levels was in accordance with ISO 9613-1 'Acoustics – Attenuation of sound during propagation outdoors. Part 1: Calculation of the absorption of sound by the atmosphere' and ISO 9613-2 'Acoustics – Attenuation of sound during propagation outdoors. Part 2: General method of calculation' including corrections for meteorological conditions using CONCAWE¹. The ISO 9613 standard from 1996 is the most used noise prediction method worldwide. Many countries refer to ISO 9613 in their noise legislation. However, the ISO 9613 standard does not contain guidelines for quality assured software implementation, which leads to differences between applications in calculated results. In 2015 this changed with the release of ISO/TR 17534-3. This quality standard gives clear recommendations for interpreting the ISO 9613 method. iNoise fully supports these recommendations. The models and results for the 19 test cases are included in the software.

¹ Report no. 4/18, 'the propagation of noise from petroleum and petrochemical complexes to neighbouring communities', Prepared by C.J. Manning, M.Sc., M.I.O.A. Acoustic Technology Limited (Ref.AT 931), CONCAWE, Den Haag May 1981

5.1 Sound Power Levels

Table 9 presents the sound power level for each noise source modelled in this assessment. It is noted that sound power levels were sourced from manufacturer's specifications or from in-field measurements at similar project sites. The sound power levels have been adjusted to account for duration over a 15-minute period.

| Table 9 Acoustically Significant Sources - Sound Power Levels (re 10-12 Watts) | | | | |
|---|----------|--|--|----------------------------|
| Item and number modelled per 15 minutes | Duration | Individual Sound Power Level dB LAeq(15min) | Total source Sound Power Level dB LAeq(15min) | Source Height ¹ |
| Operation | | | | |
| Truck Idle | 10 mins | 85 | 85 | 1.5m |
| Truck Manoeuvring | 5 mins | 92 | 92 | 1.5m |
| Truck Unloading | 10 mins | 92 | 92 | 0.5m |
| Sleep disturbance assessment (LAmax), Night time periods (10pm to 7am) | | | | |
| Truck delivery impact or reverse alarm | | | 105 | 0.5m |

Note 1: Height above the relative ground or building below source.

5.2 Noise Attenuation and Controls and Recommendations

The noise model incorporated the following controls:

- refrigeration units of trucks are switched off before entering site;
- existing northern boundary fence extended to a height of 2.1m above the carpark surface;
- the loading dock (and compactus) of the project would be lined with perforated corrugated steel sheeting over absorptive material such as Rockwool or alternatively be lined with Soundblock Whispercell or equivalent; and
- maintain all other existing boundary fences surrounding the operation and residences.

6 Noise Assessment Results

6.1 Operational Noise Results

Noise predictions from truck deliveries have been quantified at the identified receivers and are presented in **Table 10** and incorporates noise controls as per **Section 5.2**.

Noise levels from deliveries are predicted to satisfy the relevant NPI criteria at all nearest receivers.

| Table 10 Noise Predictions - Truck Deliveries | | | | |
|---|---------------------|-----------------------|----------------|------------|
| Receiver | Period ¹ | Predicted Noise Level | PNTL | Compliance |
| | | dB LAeq(15min) | dB LAeq(15min) | Achieved |
| R1 | Night | 37 | 39 | ✓ |
| R2 | Night | 38 | 39 | ✓ |
| R3 | Night | 34 | 39 | ✓ |
| R4 | Night | 34 | 39 | ✓ |
| R5 | Night | <30 | 39 | ✓ |
| R6 | Night | 31 | 39 | ✓ |
| H1 | Night | 40 | 48 | ✓ |

Note 1: Day - the period from 7am to 6pm Monday to Saturday or 8am to 6pm on Sundays and public holidays; Evening - the period from 6pm to 10pm; Night - the remaining periods.

6.2 Maximum Noise Level Assessment Results

To assess maximum noise events, typical LA_{max} noise levels from transient events were assessed to the nearest receivers. For the maximum noise assessment, a sound power level of 105dBA representing a reverse alarm was adopted.

Predicted noise levels from LA_{max} events for assessed receivers are presented in **Table 11**. Results identify that the maximum noise events trigger levels will be satisfied for all assessed receivers.

Table 11 Maximum Noise Levels Assessment (Night)¹

| Receiver | Predicted Noise Level | Trigger Level | Compliance Achieved |
|-----------------|-----------------------|----------------------|---------------------|
| | dB LA _{max} | dB LA _{max} | |
| R1 | 52 | 52 | ✓ |
| R2 | 52 | 52 | ✓ |
| R3 | 45 | 52 | ✓ |
| R4 | 40 | 52 | ✓ |
| R5 | 31 | 52 | ✓ |
| R6 | 41 | 52 | ✓ |
| H1 ² | 52 | 52 | ✓ |

Note 1: Day - the period from 7am to 6pm Monday to Saturday or 8am to 6pm on Sundays and public holidays; Evening - the period from 6pm to 10pm; Night - the remaining periods.

Note 2: Adopted the maximum noise trigger level for residential receivers.

7 Discussion and Conclusion

Muller Acoustic Consulting Pty Ltd (MAC) has completed a Noise Assessment to quantify emissions from the proposed modification to delivery hours for Aldi Mudgee (the 'project') at 99 Church Street, Mudgee, NSW.

The results of the Noise Assessment demonstrate that emissions from the project would satisfy the relevant PNTLs at all assessed receivers for the proposed extension of delivery hours, once the proposed noise control recommendations outlined in **Section 5.2** of this report are implemented.

Furthermore, sleep disturbance is not anticipated, as emissions from impact noise are predicted to remain below the EPA Guideline for maximum noise trigger levels.

Based on the Noise Assessment results, there are no noise related issues which would prevent Council approving the project. Additionally, the results of the assessment show compliance with the relative EPA guidelines and criteria once the noise control recommendations presented in **Section 5.2** of this report are implemented.

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Appendix A – Glossary of Terms

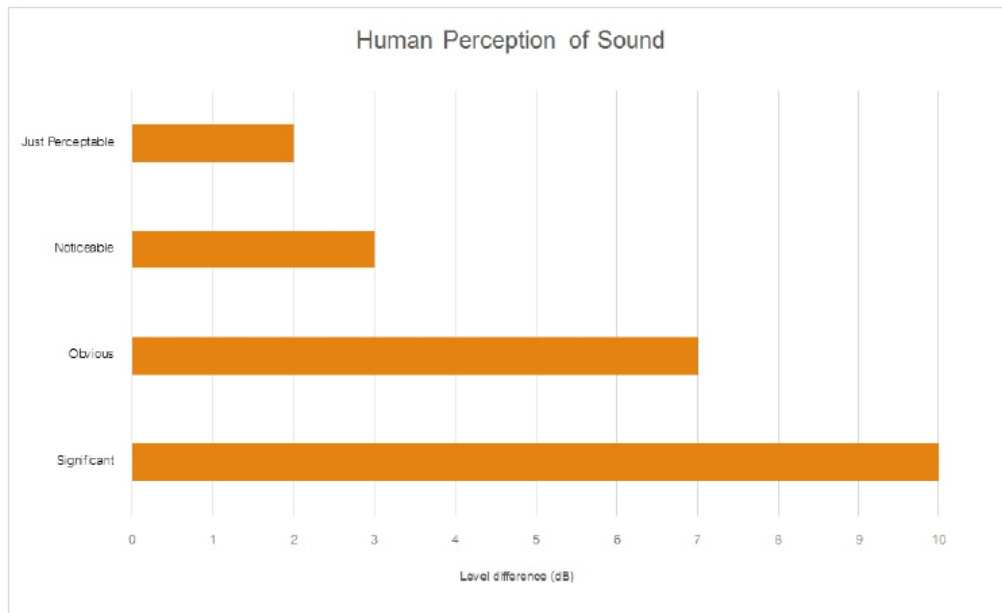
A number of technical terms have been used in this report and are explained in **Table A1**.

| Table A1 Glossary of Terms | |
|----------------------------|---|
| Term | Description |
| 1/3 Octave | Single octave bands divided into three parts |
| Octave | A division of the frequency range into bands, the upper frequency limit of each band being twice the lower frequency limit. |
| ABL | Assessment Background Level (ABL) is defined in the NPI as a single figure background level for each assessment period (day, evening and night). It is the tenth percentile of the measured LA90 statistical noise levels. |
| Ambient Noise | The noise associated with a given environment. Typically a composite of sounds from many sources located both near and far where no particular sound is dominant. |
| Extraneous Noise | Noise resulting from activities that are not typical of the area. Atypical activities include sources such as construction and holiday period traffic. |
| A Weighting | A standard weighting of the audible frequencies designed to reflect the response of the human ear to noise. |
| dBA | Noise is measured in units called decibels (dB). There are several scales for describing noise, the most common being the 'A-weighted' scale. This attempts to closely approximate the frequency response of the human ear. |
| dB(Z), dB(L) | Decibels Linear or decibels Z-weighted. |
| Hertz (Hz) | The measure of frequency of sound wave oscillations per second - 1 oscillation per second equals 1 hertz. |
| LA10 | A noise level which is exceeded 10 % of the time. It is approximately equivalent to the average of maximum noise levels. |
| LA90 | Commonly referred to as the background noise, this is the level exceeded 90 % of the time. |
| LAeq | The summation of noise over a selected period of time. It is the energy average noise from a source, and is the equivalent continuous sound pressure level over a given period. |
| LAmx | The maximum root mean squared (rms) sound pressure level received at the microphone during a measuring interval. |
| RBL | The Rating Background Level (RBL) is an overall single figure background level representing each assessment period over the whole monitoring period. The RBL is used to determine the intrusiveness criteria for noise assessment purposes and is the median of the ABL's. |
| Sound power level (LW) | This is a measure of the total power radiated by a source. The sound power of a source is a fundamental location of the source and is independent of the surrounding environment. Or a measure of the energy emitted from a source as sound and is given by : $= 10 \cdot \log_{10} (W/W_0)$ Where: W is the sound power in watts and W_0 is the sound reference power at 10-12 watts. |

Table A2 provides a list of common noise sources and their typical sound level.

| Table A2 Common Noise Sources and Their Typical Sound Pressure Levels (SPL), dBA | |
|--|---------------------|
| Source | Typical Sound Level |
| Threshold of pain | 140 |
| Jet engine | 130 |
| Hydraulic hammer | 120 |
| Chainsaw | 110 |
| Industrial workshop | 100 |
| Lawn-mower (operator position) | 90 |
| Heavy traffic (footpath) | 80 |
| Elevated speech | 70 |
| Typical conversation | 60 |
| Ambient suburban environment | 40 |
| Ambient rural environment | 30 |
| Bedroom (night with windows closed) | 20 |
| Threshold of hearing | 0 |

Figure A1 – Human Perception of Sound



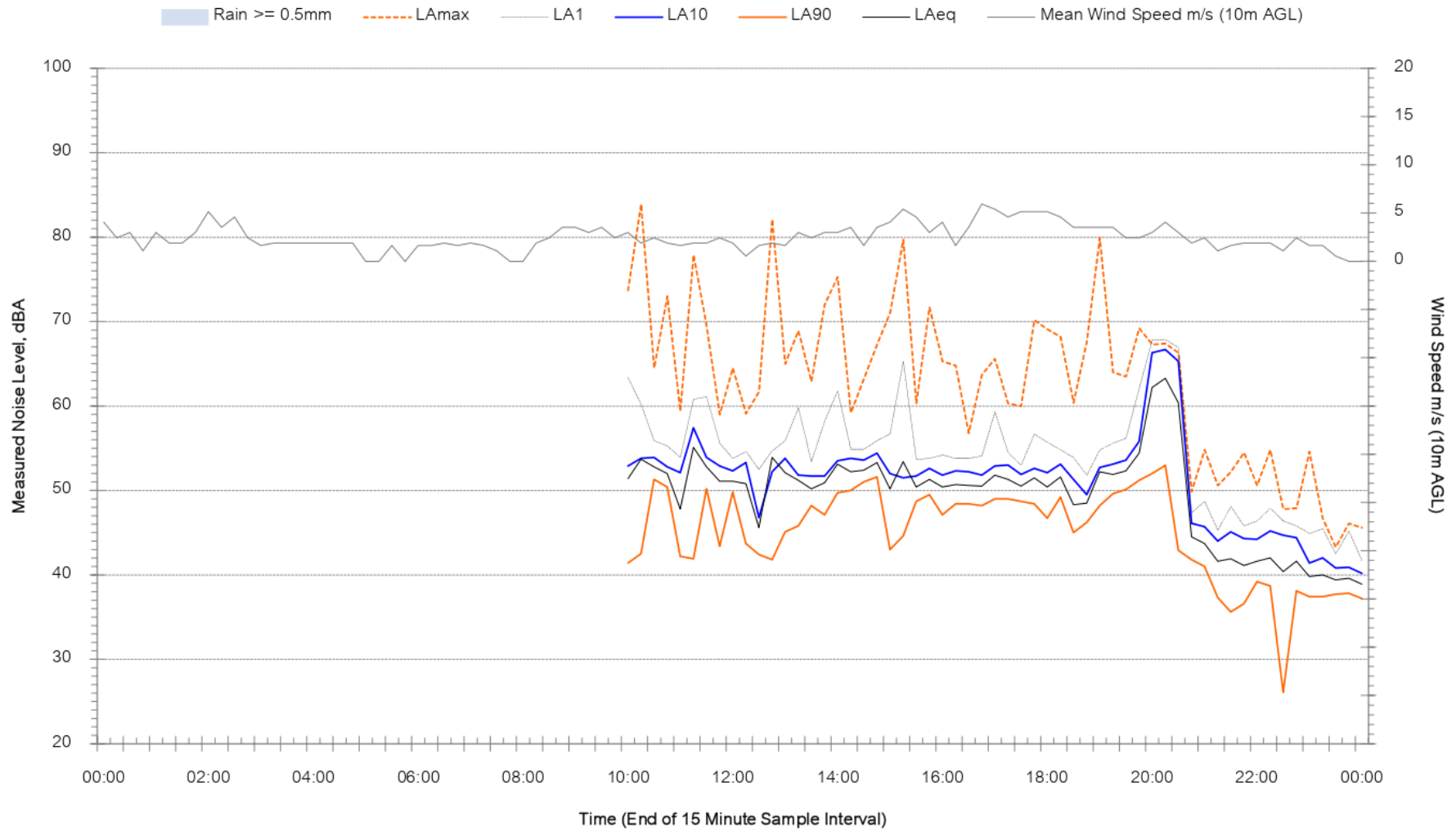
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Appendix B – Noise Monitoring Charts



Background Noise Levels

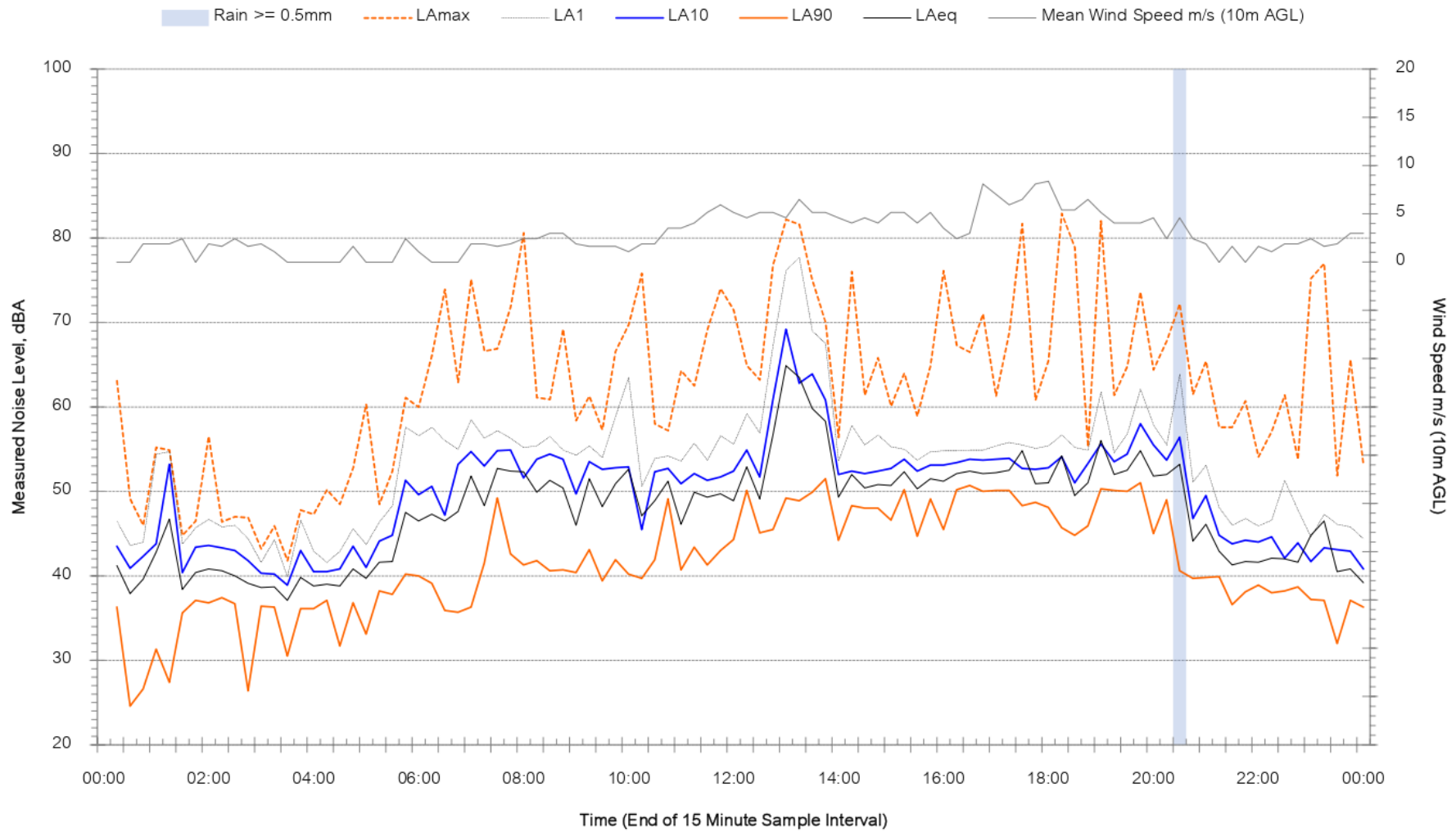
97 Church St, Mudgee - Thursday 29 October 2020





Background Noise Levels

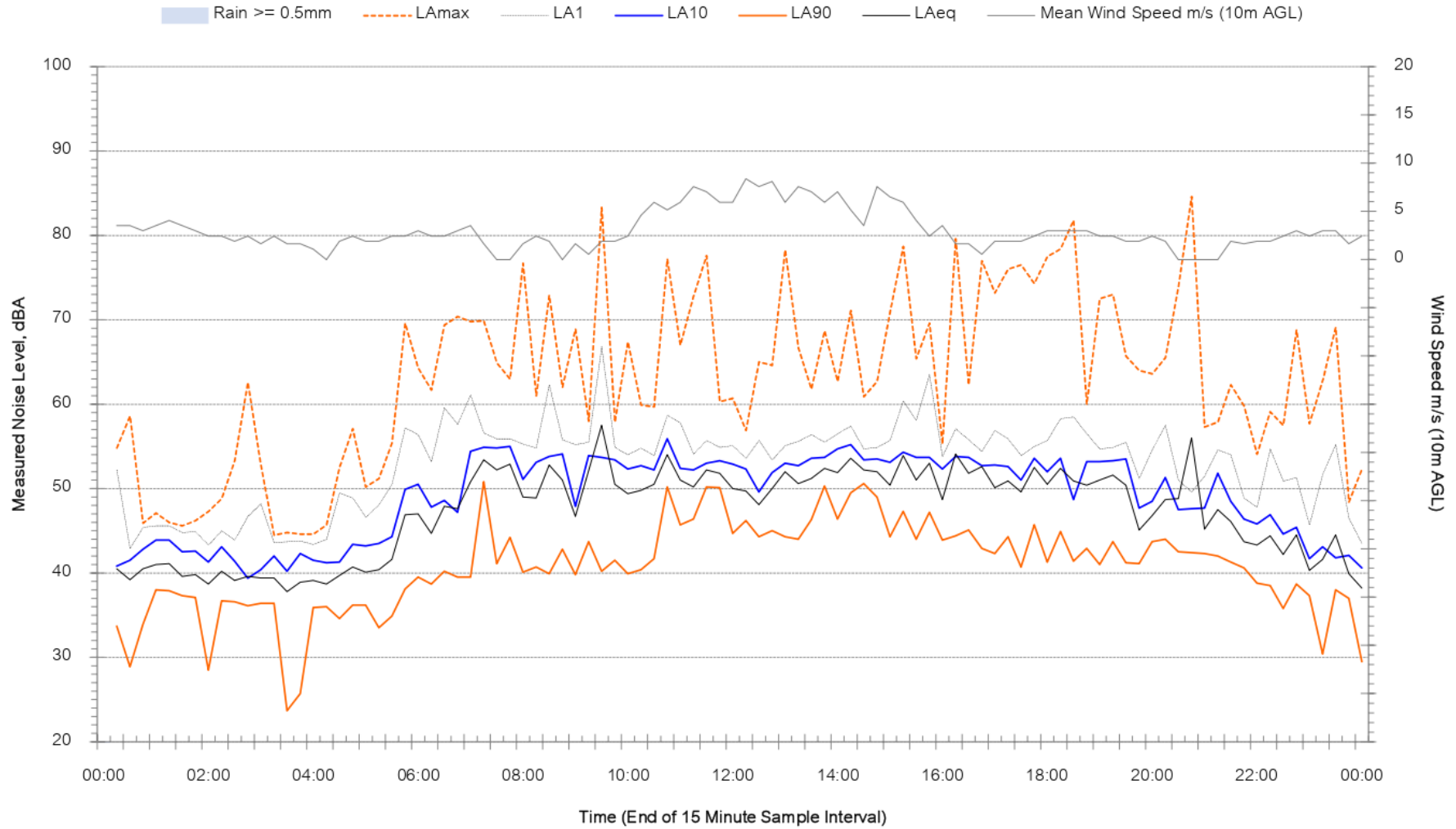
97 Church St, Mudgee - Friday 30 October 2020





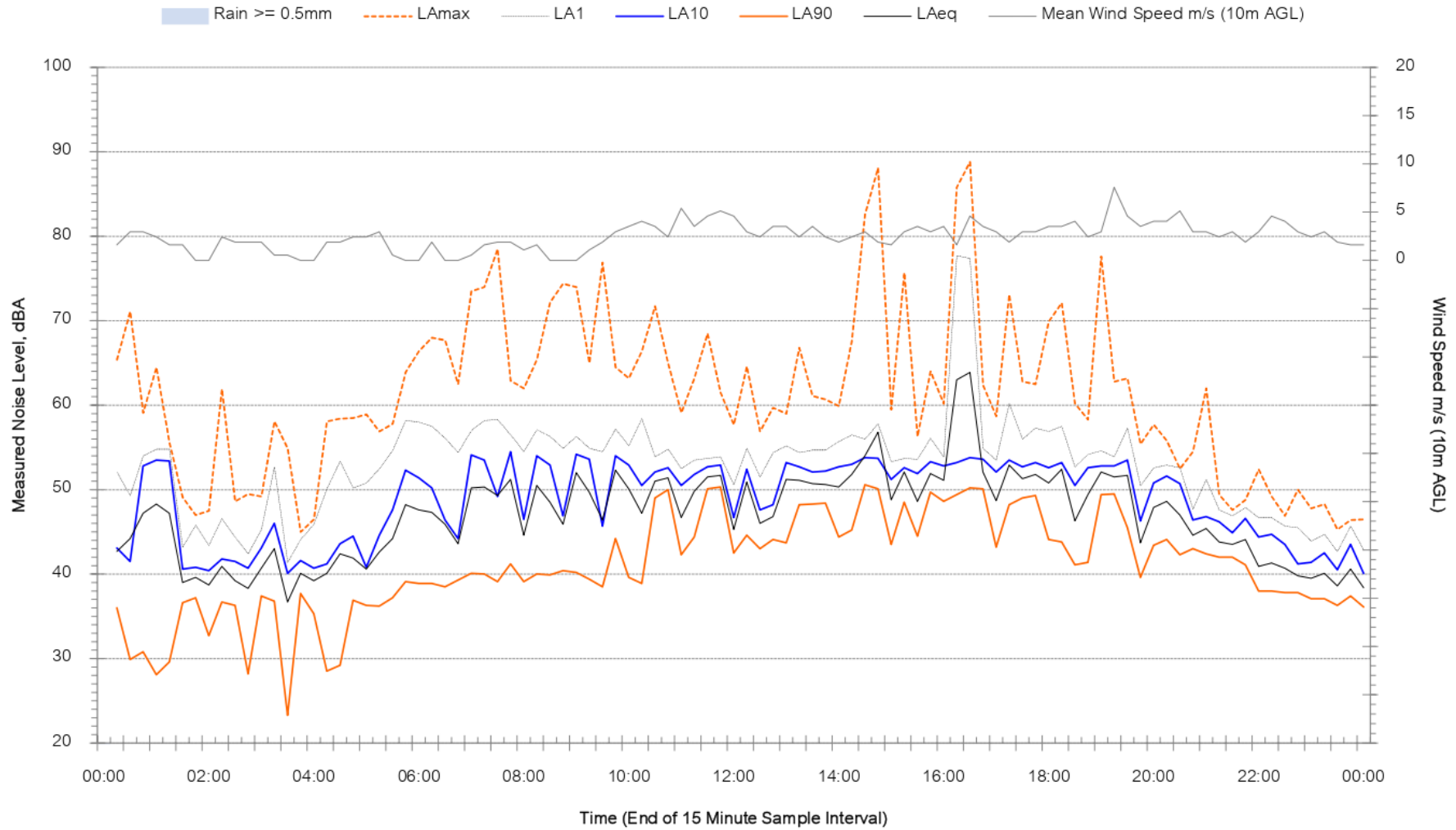
Background Noise Levels

97 Church St, Mudgee - Saturday 31 October 2020





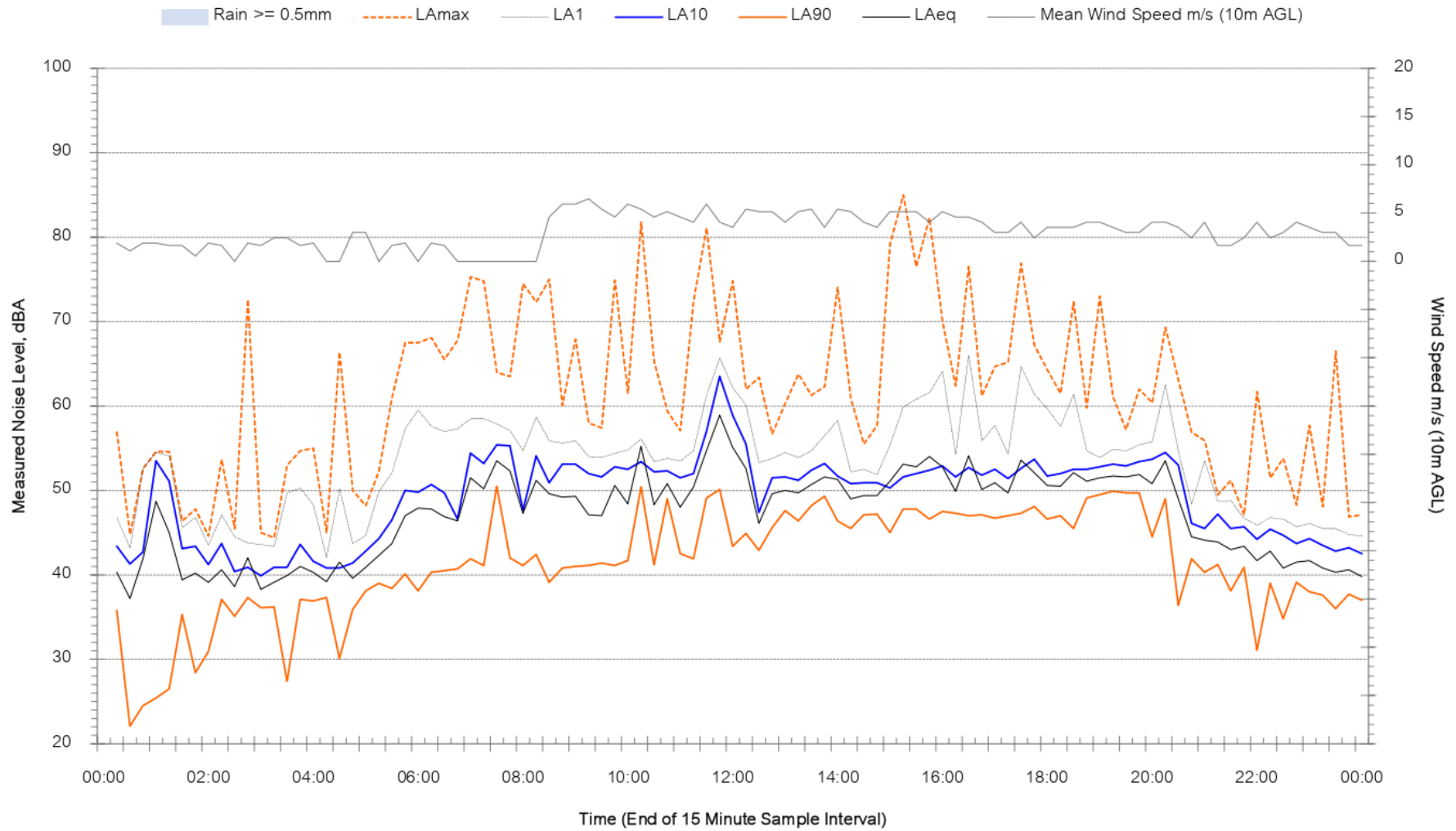
Background Noise Levels 97 Church St, Mudgee - Sunday 1 November 2020





Background Noise Levels

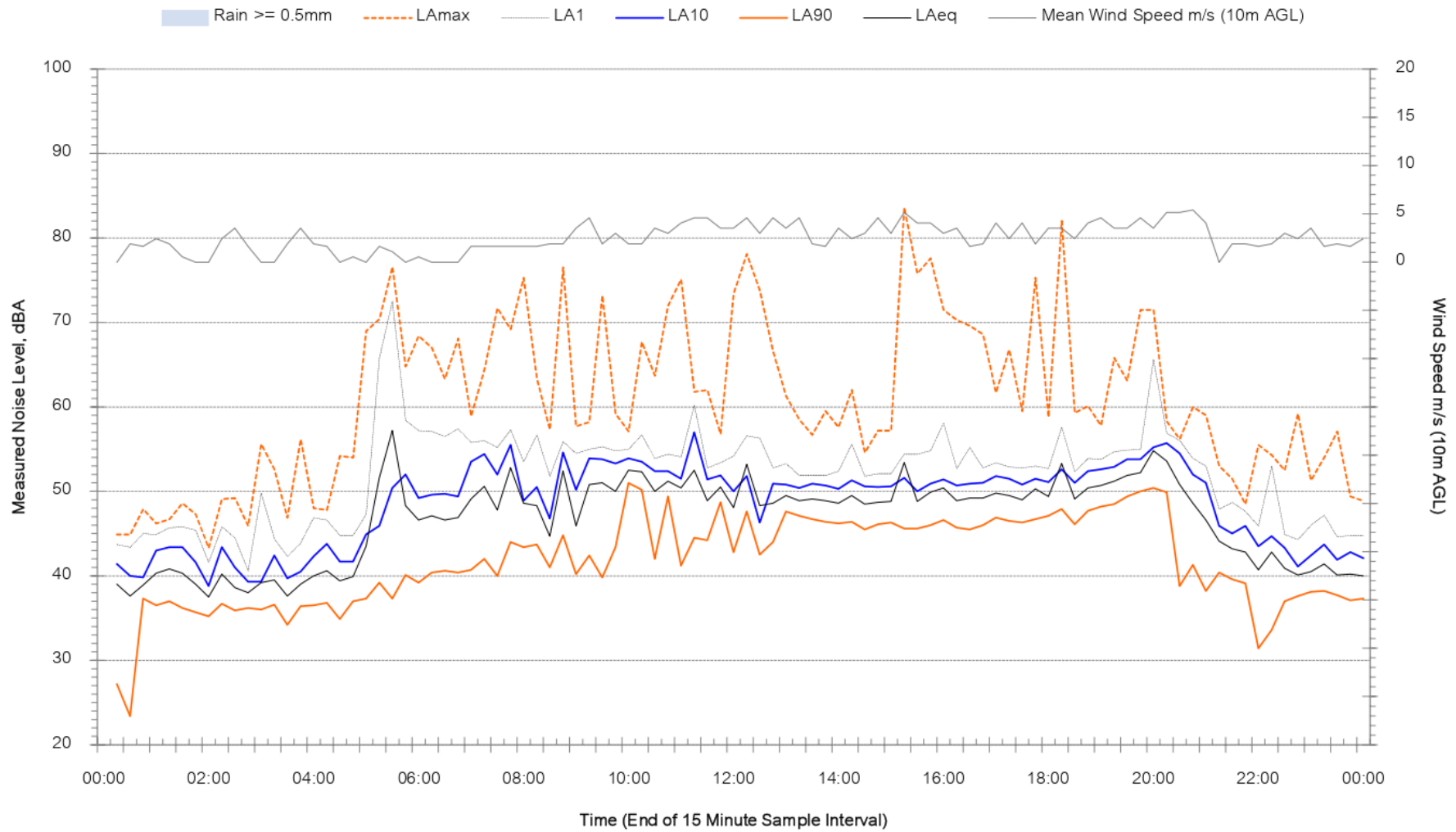
97 Church St, Mudgee - Monday 2 November 2020





Background Noise Levels

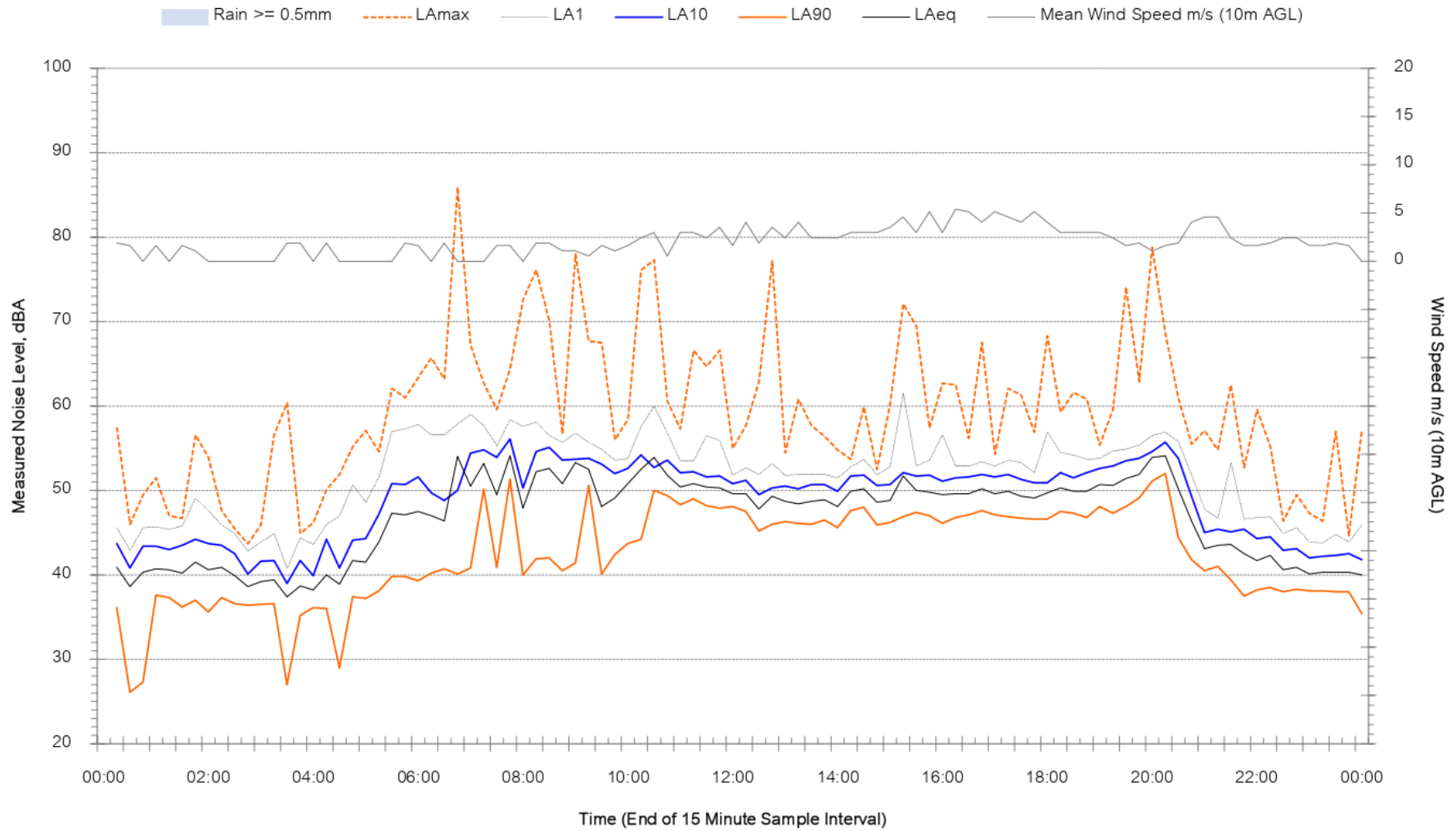
97 Church St, Mudgee - Tuesday 3 November 2020





Background Noise Levels

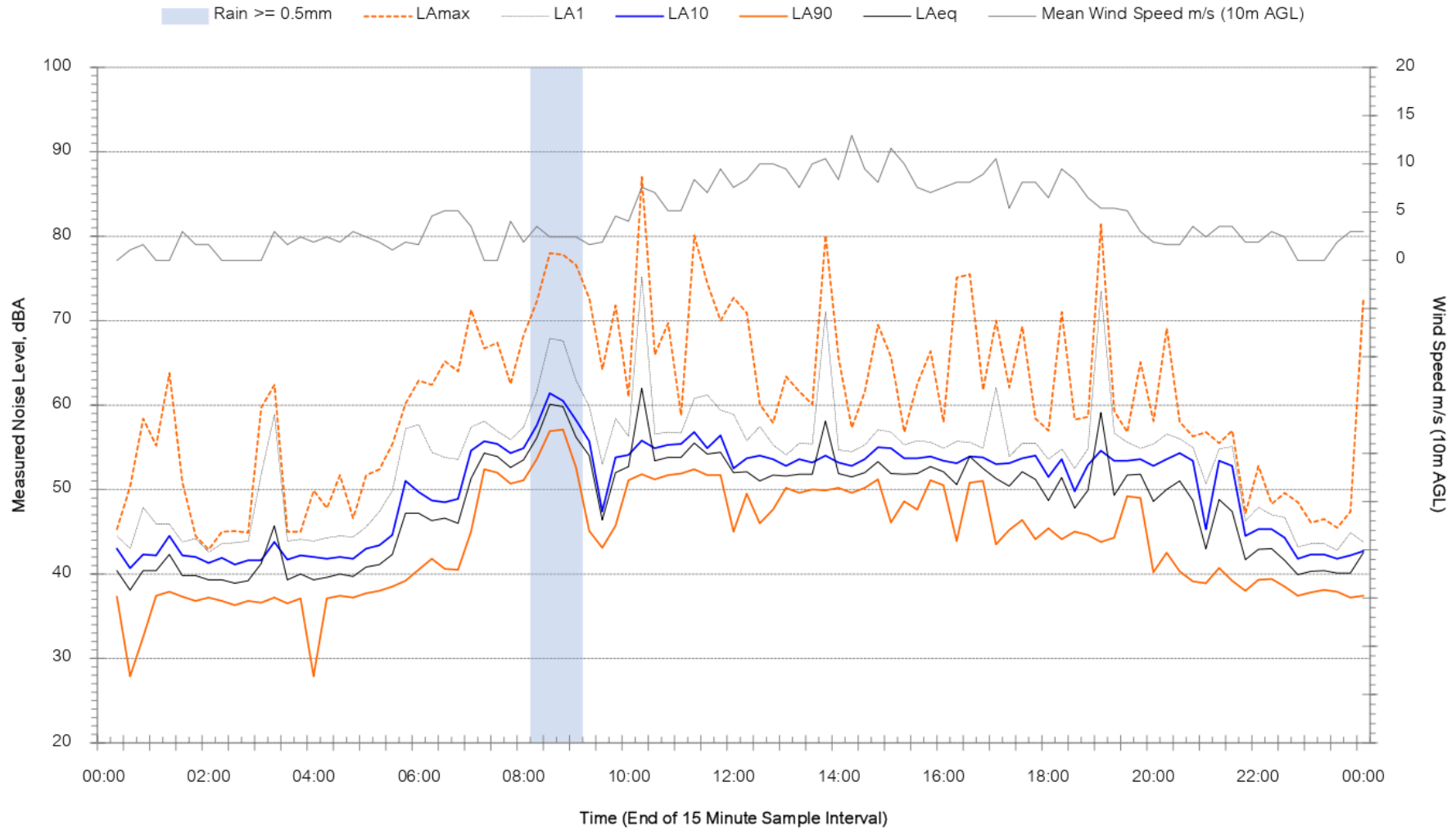
97 Church St, Mudgee - Wednesday 4 November 2020





Background Noise Levels

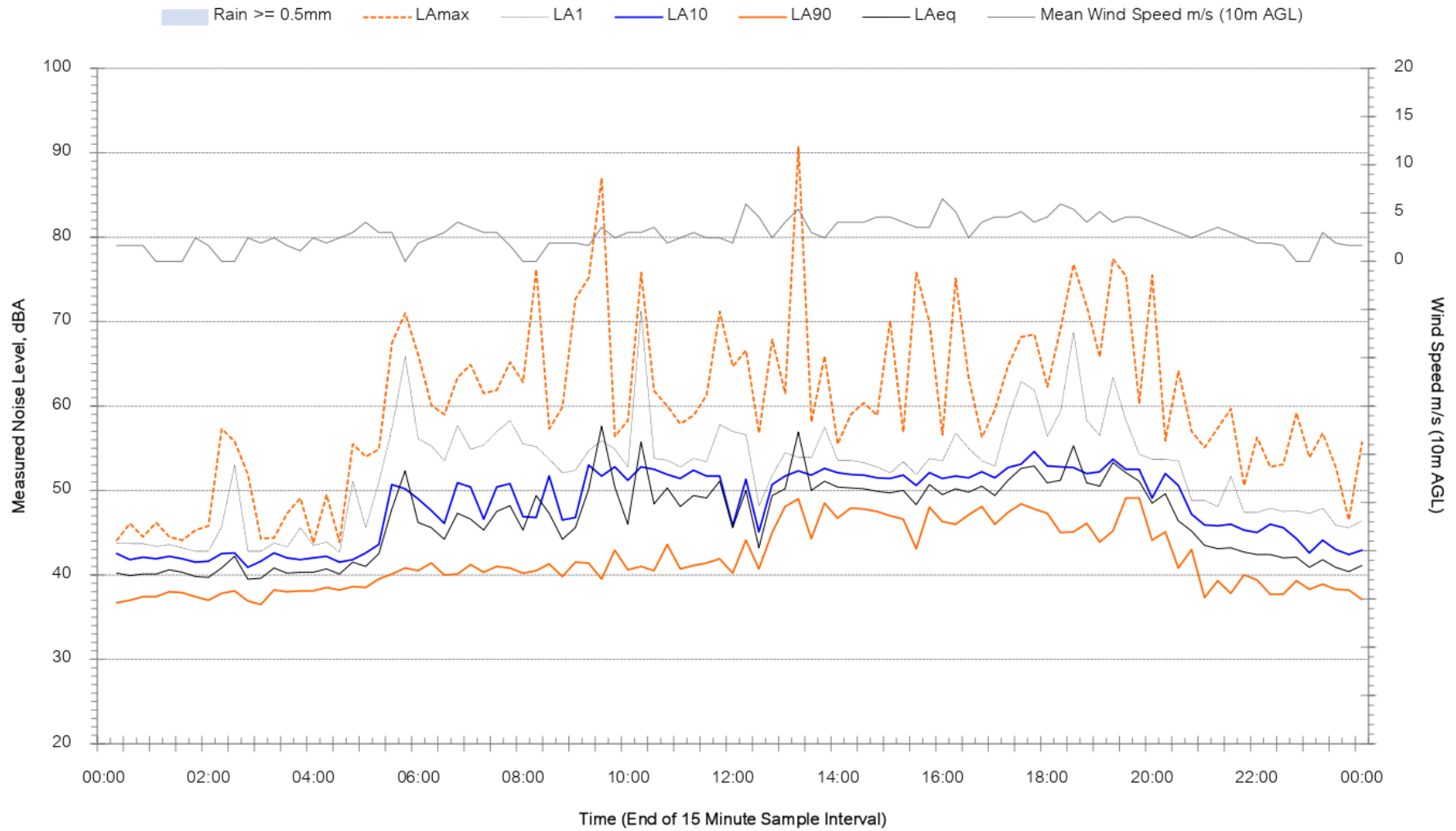
97 Church St, Mudgee - Thursday 5 November 2020





Background Noise Levels

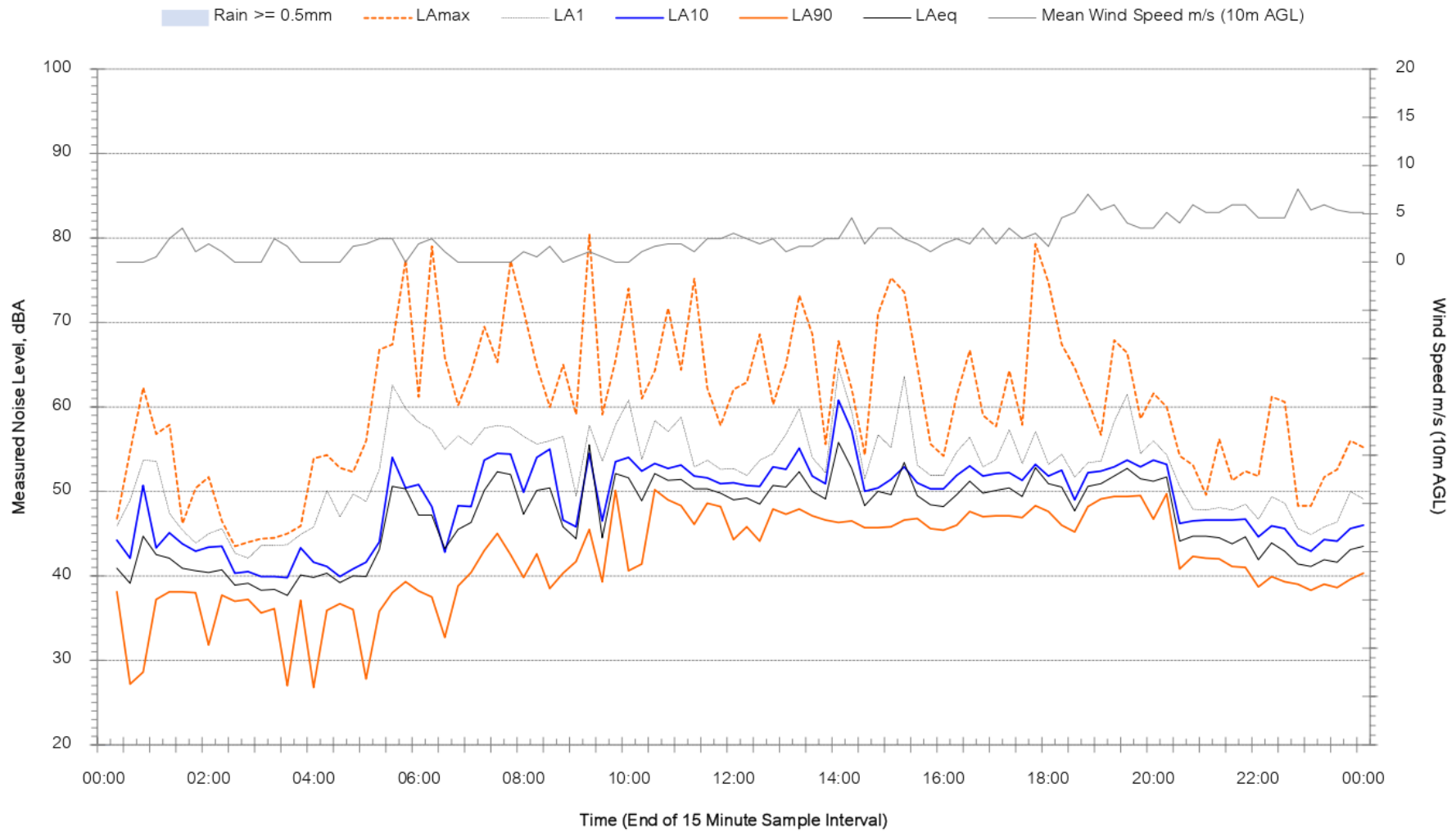
97 Church St, Mudgee - Friday 6 November 2020





Background Noise Levels

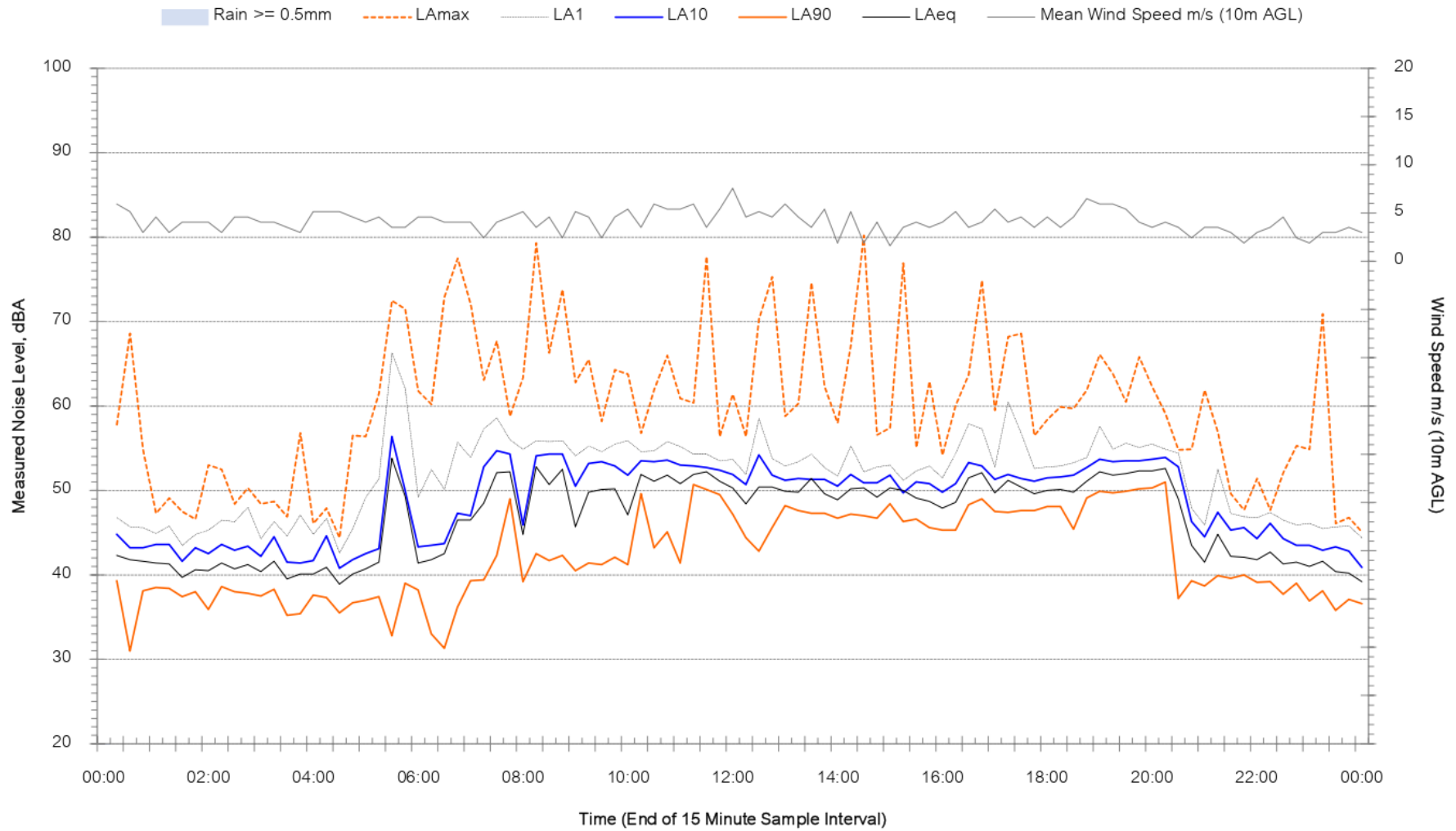
97 Church St, Mudgee - Saturday 7 November 2020





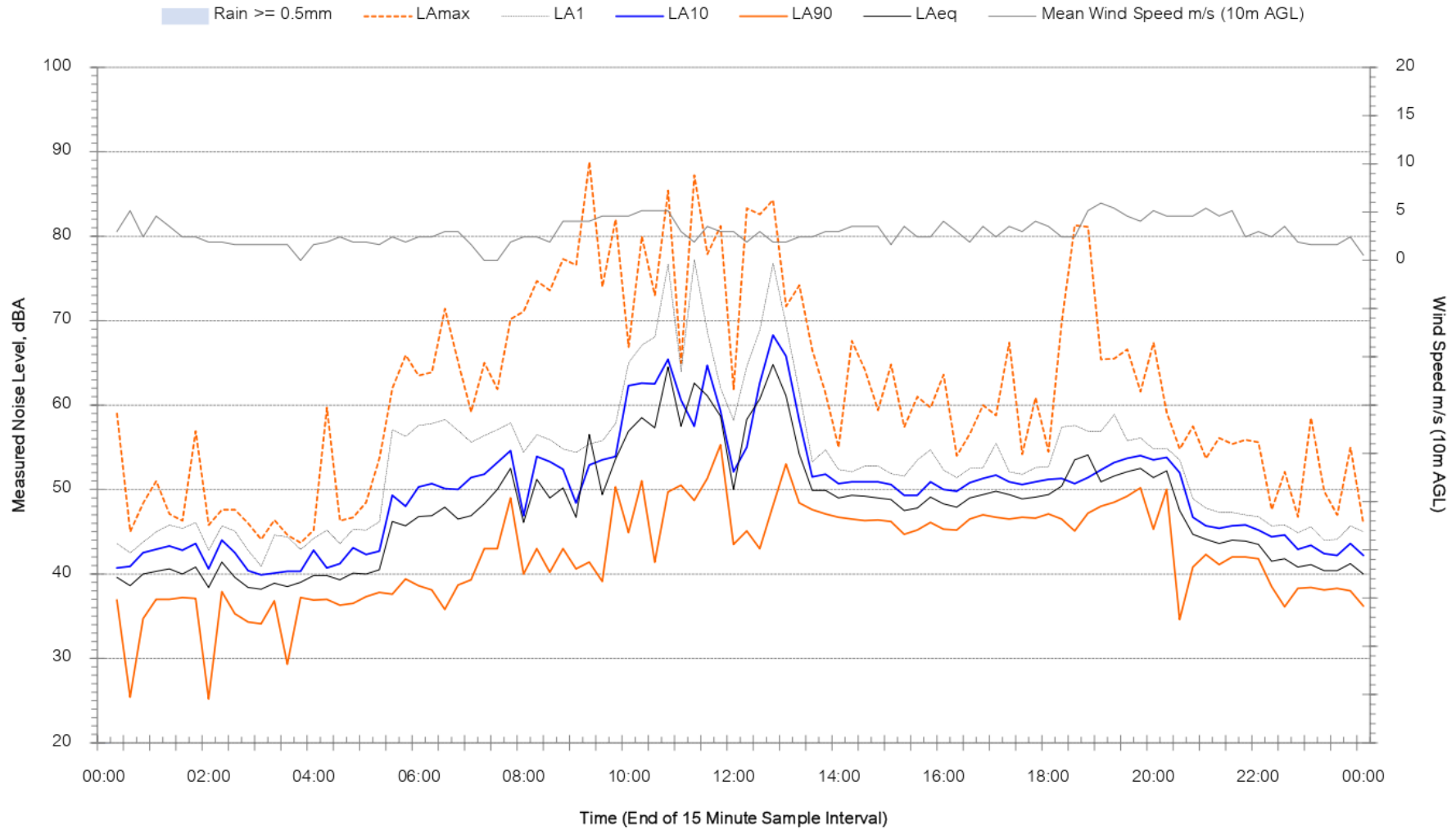
Background Noise Levels

97 Church St, Mudgee - Sunday 8 November 2020





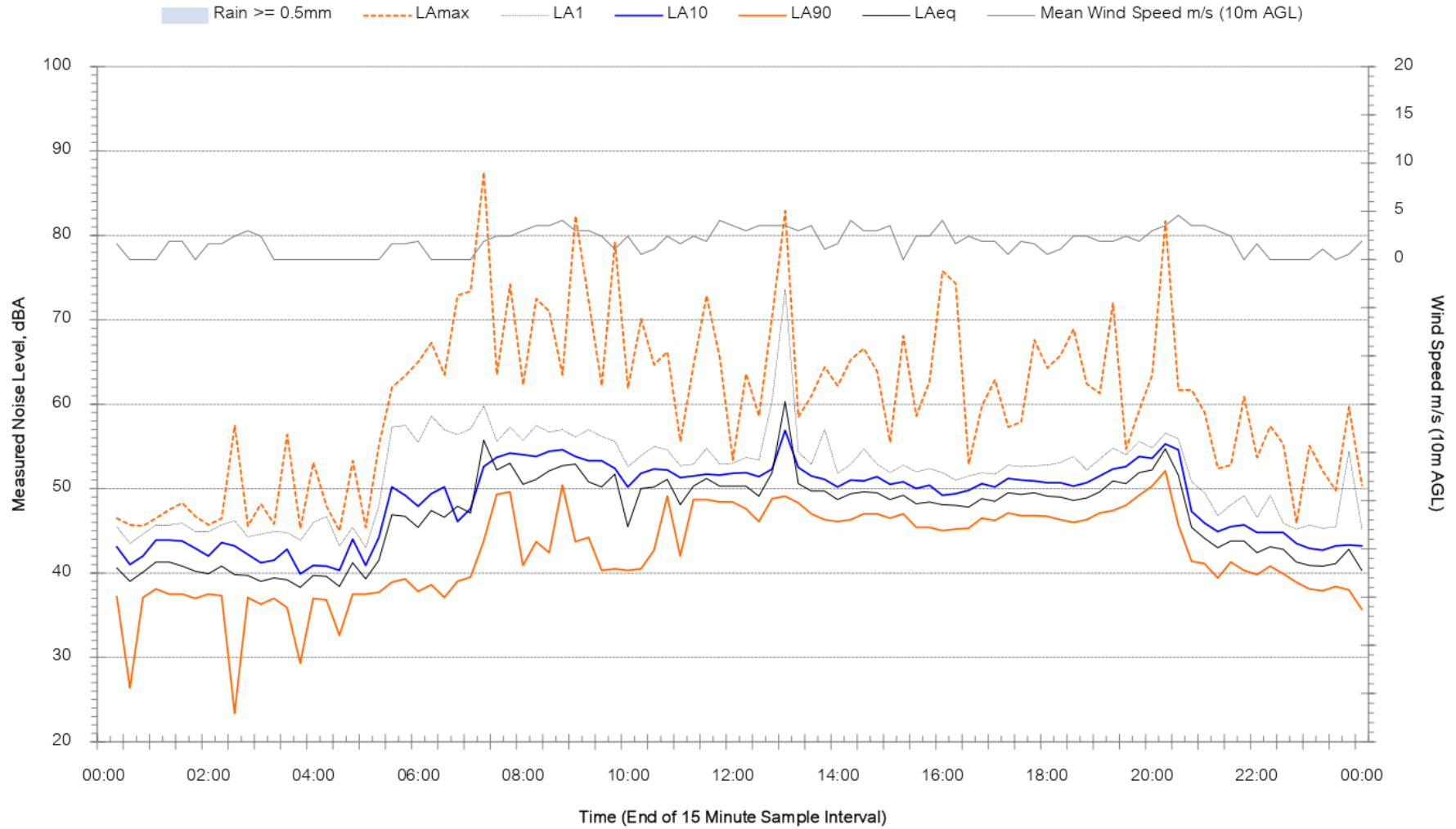
Background Noise Levels 97 Church St, Mudgee - Monday 9 November 2020





Background Noise Levels

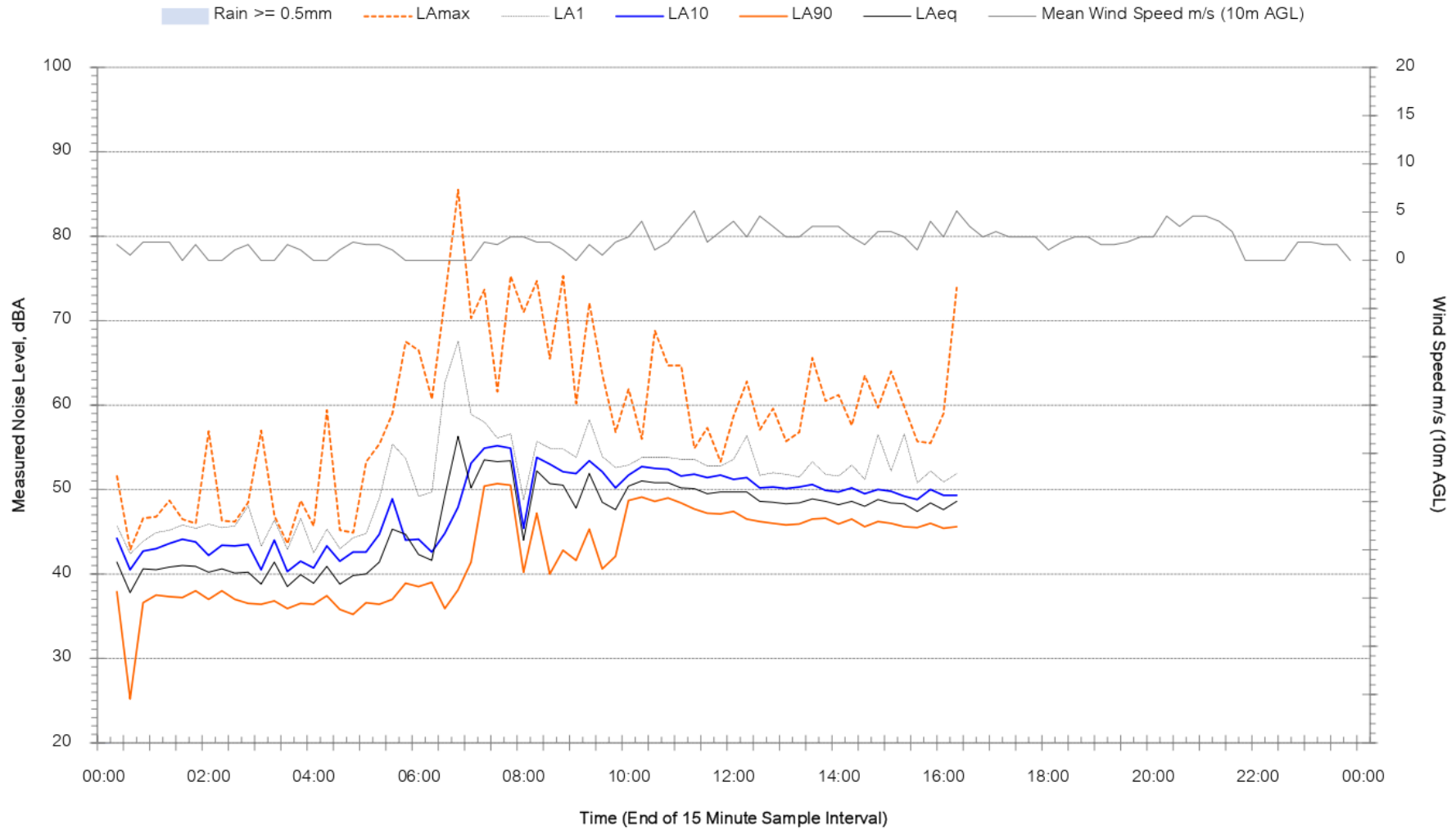
97 Church St, Mudgee - Tuesday 10 November 2020





Background Noise Levels

97 Church St, Mudgee - Wednesday 11 November 2020



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P: +61 2 4920 1833
www.mulleracoustic.com



From: [David Culey](#)
To: [Council](#)
Cc: [Brad Cam](#); [Cameron Amos](#)
Subject: Objection To Development Application MA0027/2021
Date: Wednesday, 13 January 2021 9:12:17 AM

Dear Mr Cam,

I write to you to object to the extension of delivery hours for the Aldi store at 99 Church Street Mudgee as proposed in Development Application MA0027/2021.

My property is located at [REDACTED] and the bedrooms of my property are located closest to the shared boundary fence with Aldi. The second bedroom of my property is located exactly where Receiver 4 (R4) was placed as it appears on the map at page 8 of the Noise Assessment Report (NAR) by Muller Acoustic Consulting.

My view is that the unrestricted hours of delivery as proposed in the Development Application will result in a real and detrimental loss of amenity for myself and my family and as such creates an adverse impact on amenity contrary to s1.2(e)(iii) of the *Mid-Western Regional Local Environmental Plan 2012*.

Specifically, I submit that not enough has been proposed that would mitigate and ameliorate the noise coming from the 24/7 deliveries of goods. Aldi has recommended that instructing delivery drivers to switch off their refrigeration units upon entry into the site would qualify as a noise level control they would be bound by. I would suggest that this is unrealistic in a real world situation and unenforceable on a practical basis.

Similarly, Aldi has proposed to extend the fence along the northern boundary to 2.1m in height. The fence I share with Aldi is along the eastern boundary and no proposal has been made to extend that fence even though R4 is closer to and shares a similar level of noise deterioration to Receivers 1-3 in the NAR.

I would note that the NAR has not addressed nor proposed controls for the increase in human and vehicular noise that would inevitably emanate from the site. It is difficult to predict how much communication would be required by the on site staff with the delivery drivers but I would suggest that communication would not be done in a whisper and that any raised voices in the middle of the night would be disruptive to sleep. This is also true of the truck reversing alarms that are, even on the current delivery hours, an annoyance and a detriment to amenity in the bedrooms of my property.

On a more general level, Aldi seeks to justify their application for unrestricted delivery hours by claiming they would benefit from the increase in “flexibility” this would allow them. Their Statement Of Environmental Effects states, “The proposed modification to the conditions **assists in decreasing the pressure** placed on logistics of deliveries that exists due to conditioned delivery hours.” (emphasis mine) I would remind Council that Aldi is a large, multinational corporation with a logistics operation that spans across the entire continent. It is well within their capabilities and they certainly have the resources to manage such an operation effectively without adversely affecting the local community. I would suggest this is born more from convenience than necessity and that Aldi’s convenience should not be at the expense of the amenity of neighbours and local residents.

Given the above reasons, I would strongly urge Council to reject the Development Application.

Yours faithfully,

David Culey



Mid-Western Regional Council
MUDGEE NSW 2850

ATTENTION: Mr. Brad Cam

Dear Sir

REF: Planning Application

I am writing to you to object to the above planning application for Aldi food store in Mudgee on the following grounds:

- **Traffic Noise:** The drastic increase in traffic noise and the impact on the local air quality would have a negative impact on my establishment situated next door to Aldi. Twenty (20) rooms in my Motor Inn have windows that face the path of the trucks.
- **Disrupted Sleep:** The increase in traffic noise will interrupt my guests sleep and as what I sell is a good night's sleep this would be unacceptable. Continually being woken by Aldi delivery trucks during the night would ensure guests will not return to my establishment.
- **The Local Economic Impact:** Tourism is one of Mudgee's major income streams, and the loss of 20 rooms per day will not only effect the town but have a large impact on my business.

I am available to discuss matters with you at your convenience.

Regards

Mr Greg Dowker
Owner
Winning Post Motor Inn





ABN 61 148 085 492

Suite 2B, 125 Bull St
Newcastle West 2302

02 4940 0442
reception@kdc.com.au
kdc.com.au

Our ref: 20489

04 February 2021

The General Manager
Mid-Western Regional Council
86 Market Street
Mudgee NSW 2850

Attention: Mr. Brad Cam

Dear Sir/Madam,

RE: Response to Submission for MA0027/2021– 99 Church Street, Mudgee NSW 2850

As a part of notification, *MA0027/2021 – Extension to Delivery Hours at the existing Aldi store to 24 hours, 7 days a week* at 99 Church Street, Mudgee NSW 2850 received one submission. The primary concerns identified in the submission are addressed below.

Traffic Noise

The drastic increase in traffic noise and the impact on the local air quality would have a negative impact on my establishment situated next door to Aldi. Twenty (20) rooms in my Motor Inn have windows that face the path of the trucks.

Response:

A Noise Impact Assessment (NIA) was conducted by Muller Acoustic Consultants (MAC) and was included in Appendix A of the Statement of Environmental Effects. The assessment quantified potential operational and sleep disturbance noise emissions from the proposal. The assessment utilised worst-case noise generation figures for the units and found the operation will comply with the applicable noise criteria at all surrounding receivers across all time periods.

While the proposal does aim to extend the existing delivery hours for Mudgee Aldi to 24 hours a day, 7 days a week, this will not result in an increase in the number of deliveries per day. The existing maximum of three (3) deliveries per day will remain. Therefore, the proposal is unlikely to impact the existing local air quality of the area.

Additionally, due to the minimal number of deliveries that will occur per day, the proposal will not lead to a drastic increase in traffic noise. The following controls were recommended as part of the noise assessment:

- + Refrigeration units of trucks are switched off before entering the site;
- + Existing northern boundary fence extended to a height of 2.1m above the carpark surface;
- + The loading dock (and compactus) of the project would be lined with perforated corrugated steel sheeting over absorptive material such as Rockwool or alternatively be lined with Soundblock Whispercell or equivalent; and
- + Maintain all other existing boundary fences surrounding the operation and residences.

It was concluded in the assessment that the extension to delivery hours would satisfy the relevant project noise trigger levels (PTNLs) following the completion of the above controls. Mudgee Aldi intend to implement the above controls to



As of October 2nd 2020, **KDC has joined the SLR Consulting team**. To learn more about SLR, and the additional expertise that we can now provide our clients, [take a read here >](#)



ensure any potential noise impacts are kept to a minimum. The assessment included The Motor Inn as a potential noise receiver in proximity to the property, therefore, potential noise impacts were taken into consideration. Following the implementation of the above controls, the noise assessment did not anticipate any potential impact to nearby properties, including the Motor Inn.

Disrupted Sleep

The increase in traffic noise will interrupt my guests sleep and as what I sell is a good night's sleep this would be unacceptable. Continually being woken by Aldi delivery trucks during the night would ensure guests will not return to my establishment.

Response:

As discussed above, a Noise Impact Assessment (NIA) by MAC was conducted and provided at Appendix A of the original SEE. Sleep disturbance was assessed against factors including how often the events would occur, the distribution of events throughout the night, current understanding of noise levels at night and if there are times of day when there is a clear change in the noise environment. The assessment included results of projected noise trigger levels for all nearby receivers at both day and night-time periods, including for the Motor Inn. As demonstrated in the assessment, emissions from noise impacts are predicted to remain below the EPA Guidelines for maximum noise trigger levels. It was determined that sleep disturbance would not be a potential impact of the proposed extension to delivery hours.

The Local Economic Impact

Tourism is one of Mudgee's major income streams, and the loss of 20 rooms per day will not only effect the town but have a large impact on my business.

Response:

As discussed above, the proposed extension to delivery hours is not predicted to have any significant noise impacts to any neighbouring properties. The NIA assessed a number of potential noise impacts that may occur to surrounding properties, specifically to residential properties. The assessment determined that the noise impacts resulting from the extension to delivery hours would be below EPA Guidelines for maximum noise level triggers and no sleep disturbance is anticipated.

Mudgee Aldi also intend to continue to receive a maximum of three (3) deliveries per day as per the original conditions of consent. Therefore, the maximum potential deliveries being received outside of the original approved operating hours are not considered to be excessive or likely to result in detrimental economic impacts to surrounding accommodation businesses or residents. Based on the above, it is considered Winning Post Motor Inn will be unlikely to incur the loss of 20 rooms per day due to the proposed extension to delivery hours and subsequently, no significant economic impact is anticipated.

We trust the above is a satisfactory response to the submission received. Please do not hesitate to contact us if you require any further information.

Yours sincerely,

Grace Moses
Town Planner
SLR Consulting Australia Pty Ltd

Planning Proposal Calderwood Road RYLSTONE

**Lot 1 DP1030555, Lots 93, 94, 97
and 98 in DP755426, and Lot 1
DP712926**

October 2020



Emma Yule t/a Atlas Environment and Planning (Atlas), responsible for the preparation and contents and information provided within this report declare that there is no current benefit nor expect to have a beneficial interest in the study area of this project and will not benefit from any of the recommendations outlined in this report.

The preparation of this report has been in accordance with the project brief provided by the client and has relied upon the information, data and results provided or collected from the sources and under the conditions outlined in the report.

Atlas accepts no liability for the accuracy or completeness of the data and information provided to it by, or obtained by it, from any third parties, even if that data has been incorporated into or relied upon for generating this report.

This report has been produced by Atlas using information that is available to the client as at the date stated within this report and cannot be relied upon in any way if situations at the subject site changes. Atlas is under no obligation to update the information contained within the report at any time.

This report has been prepared on behalf of and for the exclusive use of the Atlas client and is subject to and issued in connection with the provisions of the agreement between Atlas and its client. All information contained within this report are prepared for the exclusive use of the client to accompany this report for the land described herein and are not to be used for any other purpose or by any other person or entity. No reliance should be placed on the information contained in this report for any purposes apart from those stated therein. Atlas accepts no responsibility for any loss, damage suffered or inconveniences arising from, any person or entity using the plans or information in this study for purposes other than those stated above.

VERSION AND AMENDMENT CONTROL HISTORY

| VERSION | DATE | DESCRIPTION | QA/QC |
|---------|-----------|-------------------------|--------|
| 001 | SEPT 2020 | DRAFT FOR CLIENT REVIEW | CLIENT |
| 002 | OCT 2020 | FINAL | EY |



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1 OBJECTIVES AND INTENDED OUTCOMES OF THE PROPOSAL

1.1 STATEMENT OF INTENDED OUTCOMES

This planning proposal is intended to:

- Enable the land (approximately 42ha) to be developed into a rural residential estate, with a minimum lot size of 5ha; and
- Enable the land to be further developed into smaller lots, subject to connection to reticulated water or other arrangement later, with a minimum lot size of 2ha.

This is consistent with the Mid-Western Regional Comprehensive Land Use Strategy, which outlines suitable areas for rural residential expansion around Rylstone.



Figure 1: Location plan showing proximity of subject site to Rylstone

(Source: SIX Maps)

1.2 DETAILS OF THE PROPOSED DEVELOPMENT AND CONCEPT PLAN

The central purpose of this planning proposal is to make the necessary amendments to the Mid-Western Regional Local Environmental Plan 2012 (MWRLEP 2012) to enable the creation of one extra lot from the existing 5 lots. In the process the proposal will create dwelling entitlements for those lots that do not currently benefit from one.



The further purpose of the planning proposal is to demonstrate that a reduced minimum lot size of 2ha is unhindered, when the site has access to potential reticulated water/community bore, to enable the creation of a further 10 lots (16 lots in total).

It is envisaged that the initial 5ha lots to be created, with dwelling entitlements, will potentially be able to have individual bores drilled for a water source and rely upon rainwater as the source of primary potable water.

Two concept plans have been prepared by Jabek Pty Ltd, which detail the likely development outcomes for the site taking into consideration contours, road access, servicing and amenity to be afforded to each lot and building envelope (refer to **Appendix A**). Calderwood Road serves as the primary entry into the site and a final lot layout, to be prepared at DA stage, would likely continue to use Calderwood Road together with the establishment of a new road and use of the existing unformed road reserve that extends to the south from Calderwood Road.

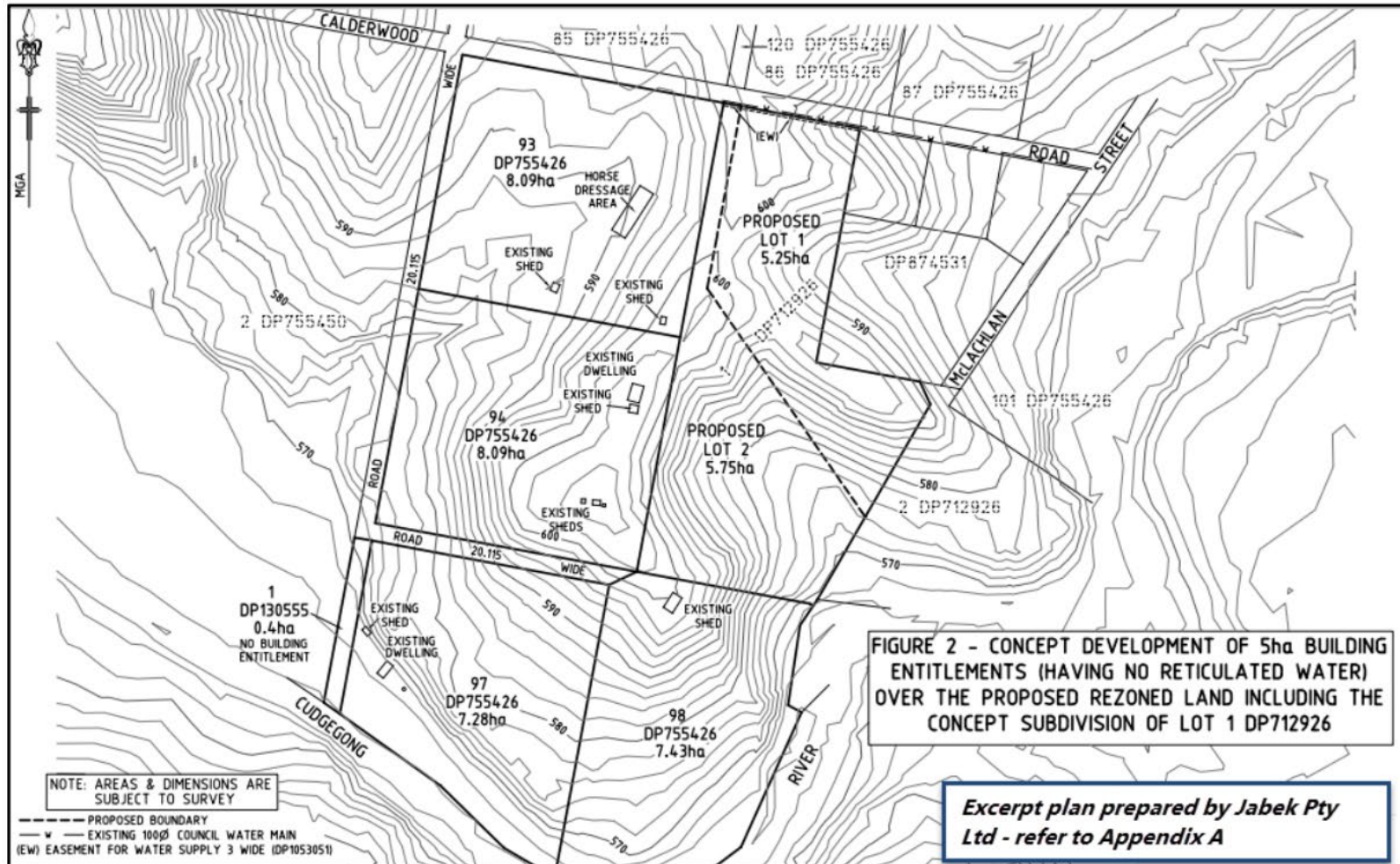
The site is gently undulating, with a dominant aspect to the south and east back across to Rylstone, creating an opportunity for a high quality rural/residential environment with limited constraints to be considered.



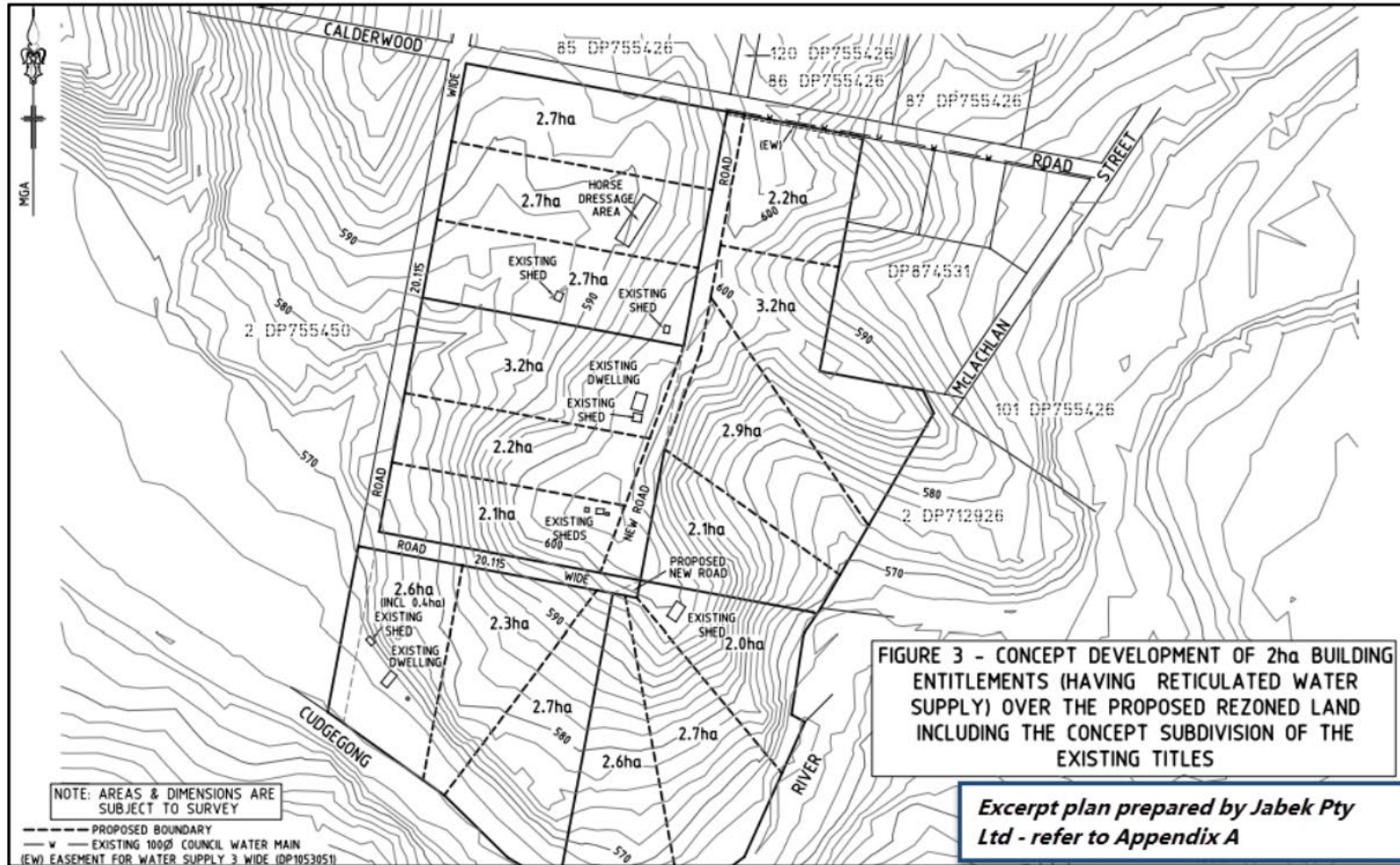
Summary:

| Concept 1 | Concept 2 |
|--|--|
| <p><i>Min lot size - 5 ha</i> <i>Potential for one additional lot (subdivision of Lot 1 DP712926)</i></p> <p><i>4 additional dwelling entitlements (upon subdivision)</i> <i>No new road</i></p> | <p><i>Min Lot size – 2ha</i> <i>Subdivision potential (6 lots into 16 lots); Can proceed after Concept 1 subdivision or stand alone.</i> <i>14 additional dwelling entitlements</i> <i>New road</i></p> |

1.2.1 Concept 1 – 5ha min lot size, no reticulated shared water



1.2.2 Concept 2 – 2ha min lot size, with reticulated shared water





2 EXPLANATION OF PROVISIONS

The following formal amendments to the MWRLEP 2012 are proposed to facilitate the intended outcomes of the proposal discussed in Part 1:

- Amend LZN_009A to show the subject land as R5 Large Lot Residential (currently RU1 Primary Production); and
- Amend LSZ_009A to show the minimum lot size as 5ha (currently 40ha); and
- Include an additional clause/mapping to reflect the ability for the land to be reduced to a 2ha minimum lot size when reticulated water or other suitable arrangement is provided in accordance with the intended outcomes of this planning proposal.





3 JUSTIFICATION

This section sets out the reasoning and justification for the proposed changes to the MWRLEP 2012, which ultimately will lead to further development of the site in line with the stated intended outcomes outlined in Part 1.

The following questions are in line with the requirements set out by the NSW Department of Planning and Environment through their document *A Guide to Preparing Planning Proposals (August 2016)*.

SECTION A - Need for the planning proposal

Q1: Is the planning proposal the result of any strategic study or report?

Answer: YES

The *Mid-Western Regional Comprehensive Land Use Strategy (CLUS)* prepared by Parsons Brinckerhoff and originally endorsed by Council in 2010 was developed to guide future land use planning in the Mid-Western Region and identify opportunities for growth.

The CLUS identifies the subject site (described as the north-west precinct) under Part 3 as a logical opportunity to develop large lot residential sites with a minimum lot size of 2ha. This is further reflected in figure 4.5 of the CLUS, which details the map indicating the area as a future large lot residential opportunity.

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

Answer: YES

It is considered that the planning proposal is the best and only way to achieve the intended outcomes. A review of the current MWRLEP 2012 has revealed that there is no other option to currently achieve the desired outcome for the site and meet the CLUS target. In this case both a zoning and lot size map amendment is considered appropriate and necessary to achieve the desired housing opportunities required.

A review of the land use table for the R5 Large Lot Residential zone has not revealed any potential land uses that would be rendered '*permitted with consent*' as a result of the proposal that would be envisaged to cause any conflict with adjoining rural and residential uses. Both the RU1 (current zone) and R5 (proposed zone) zones are open zones for the purposes of permitted land uses.

SECTION B - Relationship to the strategic planning framework

Q3: Is the planning proposal consistent with the objectives and actions of the applicable regional or sub-regional strategy?

Answer: YES



Mid-Western Regional Council sits within the 'Central West and Orana Region' and has therefore been included in the *Central West and Orana Regional Plan 2036*.

The plan broadly identifies areas for more economical expansion and associated housing opportunities throughout the region, including the Mid-Western Regional LGA. In particular, Goal 4 - Dynamic, vibrant and healthy communities, discusses various actions for more housing variety including Direction 28 'Manage rural residential development'.

Direction 28 aims to promote a consistent approach to identifying new areas for rural residential development. Whilst the site has already been identified within the CLUS as potential future rural residential land, the actions detailed in Direction 28 below are still considered relevant in supporting this planning proposal.

The actions are as follows:

ACTION 28.1 Locate new rural residential areas:

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

Comment: The site is located in very close proximity to Rylstone and therefore benefits from good connections and access to all the necessary services on offer and required for the low-density housing envisaged.

As detailed throughout this proposal there are no significant conflicts with the land and other surrounding uses and minimal constraints with regards to natural hazards or environmental considerations.

ACTION 28.2 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

Comment: The CLUS has already identified the particular site as suitable for future rural residential expansion to support a variety of housing types in association with the village of Rylstone.



ACTION 28.3 Manage land use conflict that can result from cumulative impacts of successive development decisions.

Comment: No significant compatibility issues have been identified with the proposal with the additional housing opportunity seen as a logical development decision for Rylstone and the immediate surrounding area.

Q4: Is the planning proposal consistent with a council’s local strategy or other local strategic plan?

Answer: YES

The CLUS prepared on behalf of MWRC provides the most relevant guidance for planning proposal decision making at present. Sitting within the CLUS is

the Rylstone Town Structure Plan (Figure 3-3), which details opportunities for further housing and further housing variety within the village and the immediate surrounding area.

Whilst the CLUS identifies some areas for residential expansion within the existing village with access to water and sewer services, it also identifies the need for larger lot residential development on the fringe to accompany this expansion, with the subject site noted as being within the area identified as ‘*Large Lot Residential - North West*’.

Table 3-6 discusses the potential for the release of lots in this area, totalling 11 new possible lots with a short-term priority allocated to encourage the appropriate actions to commence the development of the site. Lot 97 and Lot 94 DP755426 have existing dwellings and shedding.

The Mid-Western Regional Local Strategic Planning Statement (LSPS) has also been reviewed. The planning proposal supports the provision of a variety in housing choices- planning priority 2 - i.e.

Make available diverse, sustainable, adaptable and affordable housing options through effective land use planning.

The proposed change in the LEP will provide a supply of large lot opportunity close to Rylstone and support the variety in housing options close to the Village. The planning proposal supports the implementation of the *Mid-Western Regional LSPS* and *Central West and Orana Regional Plan 2036*.





Planning Proposal – Calderwood Road

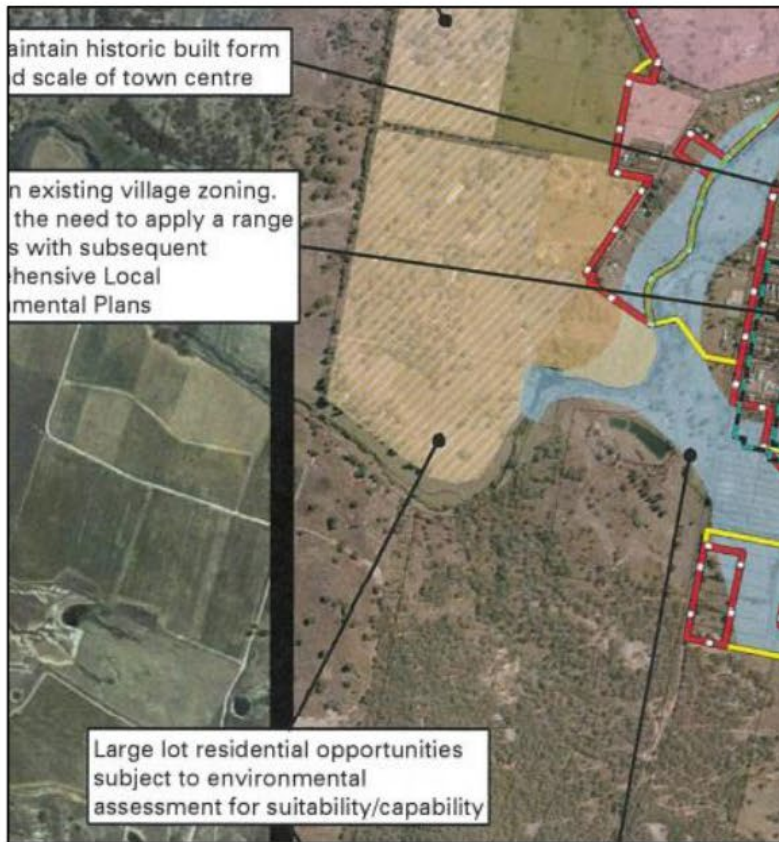
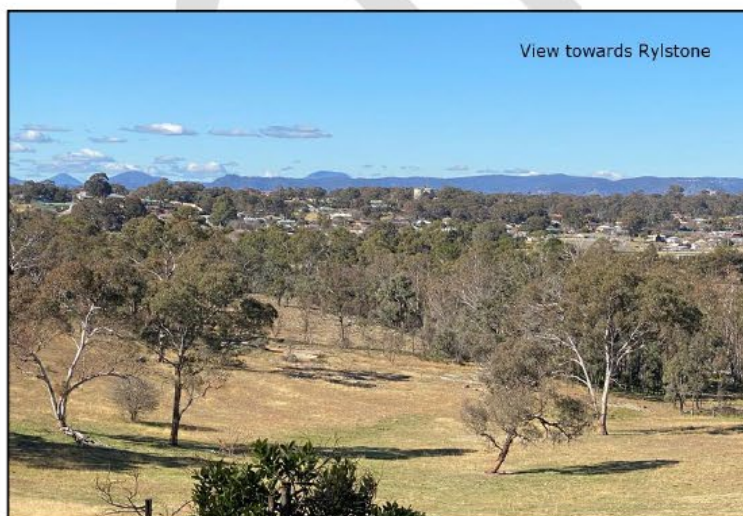


Figure 2: Extract from the CLUS indicating the opportunity for the subject site

(MWR CLUS: Parsons Brinckerhoff)

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

Answer: YES



The following SEPP's are considered relevant to the planning proposal.

State Environmental Planning Policy No 55 - Remediation of Land

SEPP 55 sets out requirements and procedures for the remediation of contaminated land during the development process. The SEPP would need to be considered by MWRC whilst assessing a development



application for the site, which would likely be a development application for subdivision/boundary adjustment.

At present there does not appear to be any potentially contaminating activities occurring on site or any evidence of past activities. Whilst further consideration of the SEPP is not warranted until the lodgement of a development application, there does not appear to be any initial concerns that would arise from the site and further residential development.

State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017

As the planning proposal is aiming to amend the zoning of the land from RU1 Primary Production to R5 Large Lot Residential, any future development and associated tree removal may require consideration under the Vegetation SEPP.

The concept plan that has been prepared for the site demonstrates that further subdivision and development on the site can be undertaken with limited vegetation clearing and would not likely trigger any further consideration at subdivision stage under the SEPP or the *Biodiversity Conservation Act 2016*.

| <i>SEPP</i> | <i>Applicable/Consistency</i> |
|--|--|
| Aboriginal Land (2009) | Not relevant to the planning proposal. |
| Activation Precincts (2020) | Not relevant to the planning proposal. |
| Affordable Rental Housing (2009) | Not relevant to the planning proposal. To be considered at the development application stage should a proposal for affordable housing be forthcoming. |
| Building Sustainability Index: BASIX (2004) | Not relevant to the planning proposal. |
| Coastal Management (2018) | Not relevant to the planning proposal. |
| Concurrences and Consents (2018) | Not relevant to the planning proposal. |
| Educational Establishments and Child Care Facilities (2017) | Not relevant to the planning proposal. |
| Exempt and Complying Development Codes (2008) | Not relevant to the planning proposal. |
| Gosford City Centre (2018) | Not relevant to the planning proposal. |
| Housing for Seniors or People with a Disability (2004) | Not relevant to the planning proposal. To be considered at development application stage should a proposal for seniors living be forthcoming |
| Infrastructure (2007) | Not relevant to the planning proposal. |
| Koala Habitat Protection (2019) | This SEPP may require consideration at the development application stage should significant vegetation clearing be proposed. However, the proposal has demonstrated that the expected development of the site can occur without any significant vegetation clearing. |
| Kosciuszko National Park - Alpine Resorts (2007) | Not relevant to the planning proposal. |
| Kurnell Peninsula (1989) | Not relevant to the planning proposal. |
| Major Infrastructure Corridors (2020) | Not relevant to the planning proposal. |
| Mining, Petroleum Production and Extractive Industries (2007) | Not relevant to the planning proposal. |
| 19 - Bushland in Urban Areas | Not relevant to the planning proposal. |
| 21 - Caravan Parks | Not relevant to the planning proposal. |
| 33 - Hazardous and Offensive Development | Not relevant to the planning proposal. |



Planning Proposal – Calderwood Road

| | |
|---|---|
| 36 - Manufactured Home Estates | Not relevant to the planning proposal. |
| 47 - Moore Park Showground | Not relevant to the planning proposal. |
| 50 - Canal Estate Development | Not relevant to the planning proposal. |
| 55 - Remediation of Land | Refer to report. This SEPP would require consideration at the development application stage, however no potentially contaminating activities exist/or have likely existed on the property and it is not expected any further consideration of this SEPP would be required. |
| 64 - Advertising and Signage | Not relevant to the planning proposal. |
| 65 - Design Quality of Residential Apartment Development | Not relevant to the planning proposal. |
| 70 - Affordable Housing (Revised Schemes) | Not relevant to the planning proposal. |
| Penrith Lakes Scheme (1989) | Not relevant to the planning proposal. |
| Primary Production and Rural Development (2019) | Not relevant to the planning proposal. |
| State and Regional Development (2011) | Not relevant to the planning proposal. |
| State Significant Precincts (2005) | Not relevant to the planning proposal. |
| Sydney Drinking Water Catchment (2011) | Not relevant to the planning proposal. |
| Sydney Region Growth Centres (2006) | Not relevant to the planning proposal. |
| Three Ports (2013) | Not relevant to the planning proposal. |
| Urban Renewal (2010) | Not relevant to the planning proposal. |
| Vegetation in Non-Rural Areas (2017) | Refer to report. This SEPP would be considered at the development application stage should vegetation clearing be proposed. However, the concept subdivision plan demonstrates that the proposal can be undertaken without any significant clearing of vegetation. |
| Western Sydney Aerotropolis (2020) | Not relevant to the planning proposal. |
| Western Sydney Employment Area (2009) | Not relevant to the planning proposal. |
| Western Sydney Parklands (2009) | Not relevant to the planning proposal. |

Q6: Is the proposal consistent with applicable Ministerial Directions (9.1 Directions)?

Answer: YES

The following Ministerial Directions are considered of relevance to the proposal.

1.2 Rural Zones

The Ministerial Direction essentially directs Council not to undertake a planning proposal to rezone land from a rural zone to a residential zone unless they are justified by a relevant study or strategy applicable to the site and circumstances.

As discussed elsewhere the site has already been included in the CLUS as suitable for future rural residential use and is therefore considered to satisfy section (5) of this direction.



1.5 Rural Lands

The Ministerial Direction aims to protect the agricultural production value of rural lands, ensure land use conflicts are minimised to facilitate ongoing agricultural uses and ensure several other broad planning principles are addressed during the planning proposal process.

The list of considerations contained within this direction have been addressed in various parts of this report. The proposal is considered minor in nature given the land size of approximately 42ha (split between 5 properties) and relatively few constraints to further development.

The closest prime agricultural land to the site lies to the west and south-west, which is currently being utilised for the purpose of pasture and a vineyard (*De Beaurepaire Wines*). There is not expected to be any significant impact with regards to the ongoing operations of these sites given the separation and potential lot layout. The existing well for future opportunity as a shared water source is located in vicinity to the photo above.

2.3 Heritage Conservation

The Ministerial Direction aims to protect places or Aboriginal and European heritage during the planning proposal process. No items of environmental heritage have been identified and a AHIMS has been undertaken (**Appendix B**) as a preliminary measure.

Appropriate mechanisms will be available through any future subdivision process to protect any items that are discovered during construction.

4.4 Planning for Bushfire Protection

The Ministerial Direction aims to ensure the relevant bushfire protection measures identified in the document *Planning for Bushfire Protection 2006* are applied to the proposal.



The site is marginally identified on Council's bushfire prone land mapping as being bushfire prone. There is not considered to be any impediment to complying with the more recent provisions of *Planning for Bushfire Protection 2019*, which are expected to be adequately addressed through the development application stage for subdivision in the future.

5.10 Implementation of Regional Plans

The Ministerial Direction aims to ensure any planning proposal is consistent with the relevant regional plan. This issue has been addressed elsewhere in this report and the planning proposal is considered consistent with the *Central West and Orana Regional Plan 2036*.

6.1 Approval and Referral Requirements

The Ministerial Direction aims to ensure that LEP provisions encourage the appropriate and efficient assessment of development. The planning proposal does not include LEP provisions that require further consultation or concurrence with other Departments.

No other Ministerial Directions are considered of relevance to the proposal.

Q7: Is there any likelihood that Critical Habitat or threatened species, populations or ecological communities, or their habitats, will be adversely affected as a result of the proposal?

The property has some minor stands of vegetation identified on Council's LEP mapping of being of high biodiversity significance (refer to figure below).

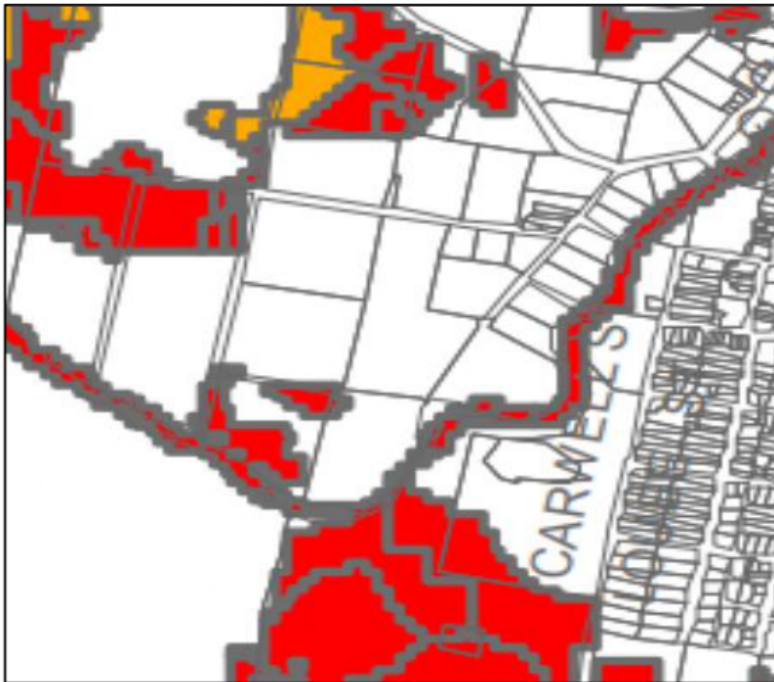


Figure 3: Biodiversity mapping

(MWRLEP 2012)



However, the concept subdivision plan has been carefully prepared to show that the vegetation on site can readily be retained taking into consideration future boundary and dwelling sites.

The rest of the site has been historically cleared with only a scattering of individual trees present across the site. It is expected that these trees can generally remain on site without being impacted by future lot boundaries and dwelling sites. Further specific assessment can be undertaken at subdivision stage in accordance with the various relevant legislation.

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

An initial assessment of the site and expected future development as a result of the intended outcomes has not revealed any significant environmental constraints

or predicted effects. Vegetation on site is expected to be retained and other constraints including environmental heritage, groundwater vulnerability and noise/air quality issues are expected to have negligible impact.



Planning Proposal – Calderwood Road

There are no issues expected, such as effluent disposal and the like, that cannot be addressed and mitigated at the subdivision stage for the proposal.

Q9: How has the planning proposal adequately addressed any social and economic effects?

The proposal will contribute to additional housing choice in the village of Rylstone and assist in luring new residents to the area seeking the rural/residential style of housing and lifestyle. The proposal will undoubtedly contribute positively to social and economic outcomes in Rylstone and the greater region.

Q10: Is there adequate public infrastructure for the planning proposal?

Answer: YES

The site currently has electricity and telecommunications infrastructure that will be assessed for further extension at subdivision stage. The necessary consultation with those authorities will be undertaken, however this is not considered to be a hindrance to further development of the site.



Water

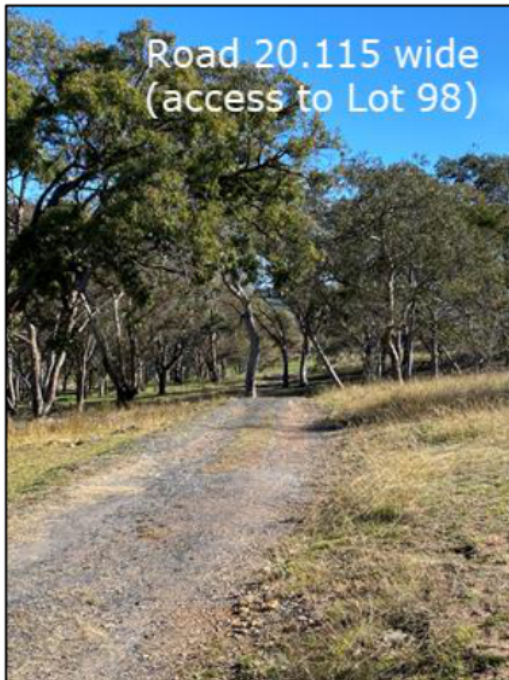
The proposal for 5ha lots will not result in the need to connect to a reticulated water supply with rainwater harvesting considered the most effective means of supplying water to each dwelling.

It should be noted that lot 1 currently has reticulated water available at the road frontage and lot 97 benefits from an existing well to supplement and rainwater harvesting.

It is expected that should the site be allocated a 2ha minimum lot size then the reticulated water supply will be investigated for extension to service the increased dwelling density in the area. This is to ensure that Council is not exposed with the costs of extending the reticulated water supply in the future, should the need arise. Additionally, a reticulated community bore scheme could also be investigated as a suitable means of water supply as catered for in MWRDCP 2013.

Roads

Minor increases in traffic will be expected from the proposal. The existing road and future road infrastructure can be upgraded in accordance with the requirements of the *Mid-Western Regional Development Control Plan 2013* and further considered at subdivision stage. An initial review of the MWRDCP 2013 has not revealed any significant limitations or requirements for a subdivision in the R5 Large Lot Residential zone.



Sewer

There is not considered a need to extend any sewer infrastructure to service the expected development density for the site and the MWRDCP 2013 does not require this level of servicing for lots in the R5 Large Lot Residential zone.

The lots are expected to be of a sufficient size to cater for any on-site effluent disposal systems that would be required for each new dwelling.

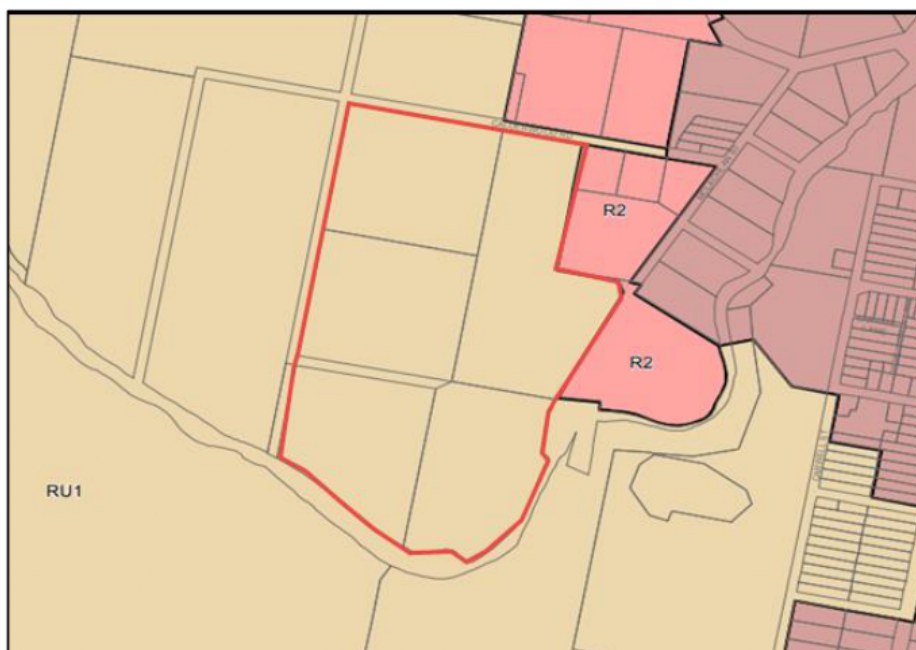
Q11: What are the views of State and Commonwealth Public Authorities consulted in accordance with the gateway determination, and have they resulted in any variations to the planning proposal?

It is expected that MWRC will consult with the relevant Public Authorities and consideration of their views will be included.



4 MAPPING

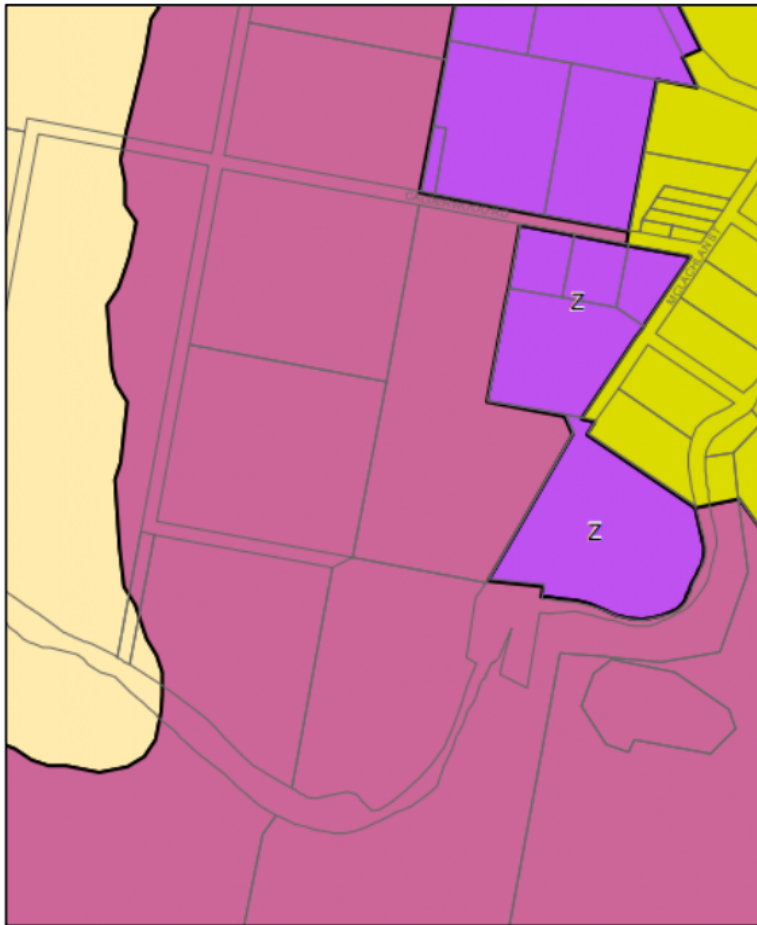
MWRC has a Standard Instrument LEP in force and new mapping should be carried out consistent with the requirements of the standard technical requirements for LEP maps. The land subject of the planning proposal is included within Land Zoning Map LZN_009A as shown below. The mapping will be required to be amended to reflect the new R5 Large Lot Residential zoning for the site.



**Figure 4: Extract
of LZN_009A**

(MWRLEP 2012)

The corresponding lot size map will also require amending to reflect the new minimum lot size of 5ha. The site is located within Lot Size Map LSZ_009A as shown below.



**Figure 5: Extract of
LSZ_009A**

(MWRLEP 2012)

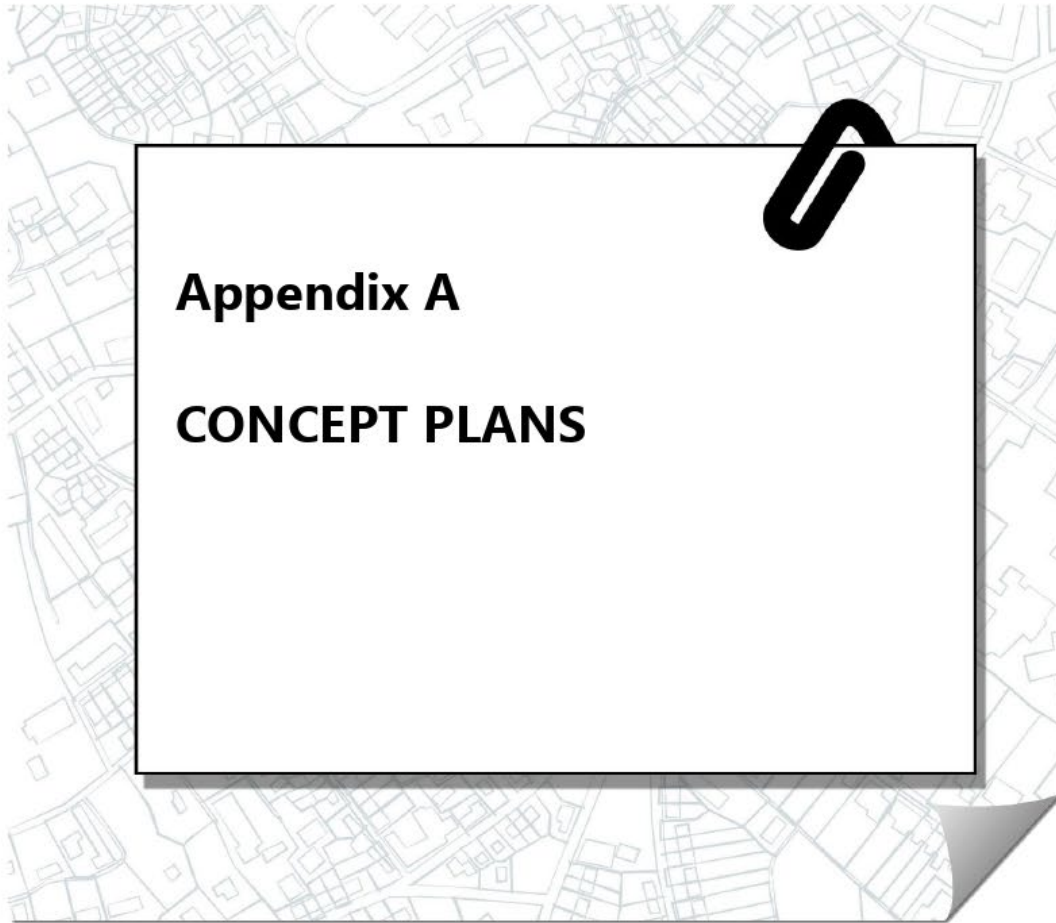
5 COMMUNITY CONSULTATION

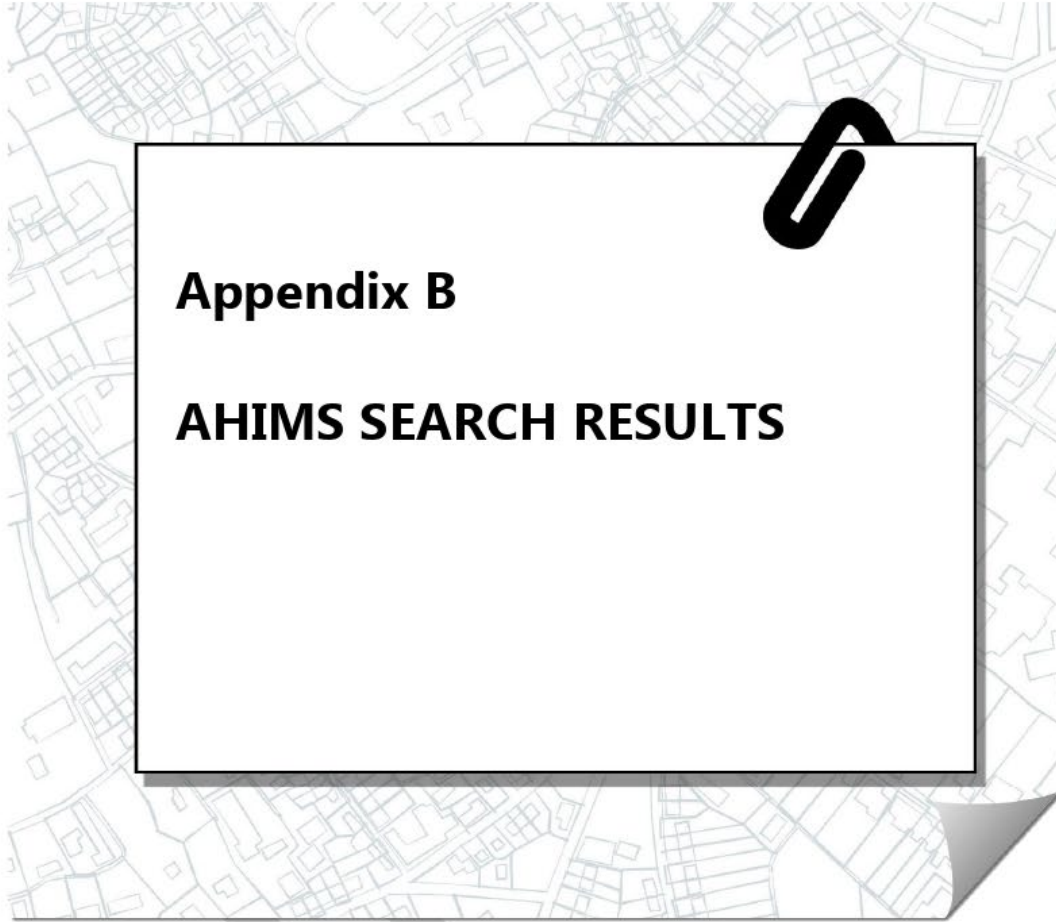
Community consultation for the planning proposal is expected to be undertaken in accordance with the requirements set out in A guide to Preparing Planning Proposals (DoPE 2018).

It is expected MWRC will undertake the necessary consultations with the NSW Government as directed throughout the planning proposal process.

6 PROJECT TIMELINE

This will be prepared with MWRC, however there appears to be limited requirements moving forward to enact on the planning proposal outcomes.





Appendix B

AHIMS SEARCH RESULTS



Planning Proposal – Calderwood Road



AHIMS Web Services (AWS) Search Result

Purchase Order/Reference : A146

Client Service ID : 540199

Atlas Environment & Planning
46 Market Street
Mudgee New South Wales 2850
Attention: Emma Yule
Email: yule.atlas@gmail.com

Date: 04 October 2020

Dear Sir or Madam:

AHIMS Web Service search for the following area at Lot : 93, DP:755426 with a Buffer of 200 meters, conducted by Emma Yule on 04 October 2020.

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of the Office of the Environment and Heritage AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

| | |
|---|--|
| 0 | Aboriginal sites are recorded in or near the above location. |
| 0 | Aboriginal places have been declared in or near the above location.* |



AHIMS Web Services (AWS) Search Result

Purchase Order/Reference : A146

Client Service ID : 540198

Atlas Environment & Planning
46 Market Street
Mudgee New South Wales 2850
Attention: Emma Yule
Email: yule.atlas@gmail.com

Date: 04 October 2020

Dear Sir or Madam:

AHIMS Web Service search for the following area at Lot : 94, DP:755426 with a Buffer of 200 meters, conducted by Emma Yule on 04 October 2020.

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of the Office of the Environment and Heritage AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

| | |
|----------|--|
| 0 | Aboriginal sites are recorded in or near the above location. |
| 0 | Aboriginal places have been declared in or near the above location. * |



AHIMS Web Services (AWS) Search Result

Purchase Order/Reference : A146

Client Service ID : 540196

Atlas Environment & Planning
46 Market Street
Mudgee New South Wales 2850
Attention: Emma Yule
Email: yule.atlas@gmail.com

Date: 04 October 2020

Dear Sir or Madam:

AHIMS Web Service search for the following area at Lot : 97, DP:755426 with a Buffer of 200 meters, conducted by Emma Yule on 04 October 2020.

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of the Office of the Environment and Heritage AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

| |
|--|
| 0 Aboriginal sites are recorded in or near the above location. |
| 0 Aboriginal places have been declared in or near the above location. * |



AHIMS Web Services (AWS) Search Result

Purchase Order/Reference : A146

Client Service ID : 540197

Atlas Environment & Planning
46 Market Street
Mudgee New South Wales 2850
Attention: Emma Yule
Email: yule.atlas@gmail.com

Date: 04 October 2020

Dear Sir or Madam:

AHIMS Web Service search for the following area at Lot: 1, DP:712926 with a Buffer of 200 meters, conducted by Emma Yule on 04 October 2020.

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of the Office of the Environment and Heritage AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

| | |
|---|---|
| 0 | Aboriginal sites are recorded in or near the above location. |
| 0 | Aboriginal places have been declared in or near the above location. * |



Planning Proposal – Calderwood Road



Office of
Environment
& Heritage

AHIMS Web Services (AWS) Search Result

Purchase Order/Reference : A146

Client Service ID : 540195

Atlas Environment & Planning
46 Market Street
Mudgee New South Wales 2850
Attention: Emma Yule
Email: yule.atlas@gmail.com

Date: 04 October 2020

Dear Sir or Madam:

AHIMS Web Service search for the following area at Lot: 98, DP:755426 with a Buffer of 200 meters, conducted by Emma Yule on 04 October 2020.

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of the Office of the Environment and Heritage AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

| |
|--|
| 0 Aboriginal sites are recorded in or near the above location. |
| 0 Aboriginal places have been declared in or near the above location. * |



If your search shows Aboriginal sites or places what should you do?

- You must do an extensive search if AHIMS has shown that there are Aboriginal sites or places recorded in the search area.
- If you are checking AHIMS as a part of your due diligence, refer to the next steps of the Due Diligence Code of practice.
- You can get further information about Aboriginal places by looking at the gazettal notice that declared it. Aboriginal places gazetted after 2001 are available on the [NSW Government Gazette](http://www.nsw.gov.au/gazette) (<http://www.nsw.gov.au/gazette>) website. Gazettal notices published prior to 2001 can be obtained from Office of Environment and Heritage's Aboriginal Heritage Information Unit upon request

Important information about your AHIMS search

- The information derived from the AHIMS search is only to be used for the purpose for which it was requested. It is not to be made available to the public.
- AHIMS records information about Aboriginal sites that have been provided to Office of Environment and Heritage and Aboriginal places that have been declared by the Minister;
- Information recorded on AHIMS may vary in its accuracy and may not be up to date. Location details are recorded as grid references and it is important to note that there may be errors or omissions in these recordings,
- Some parts of New South Wales have not been investigated in detail and there may be fewer records of Aboriginal sites in those areas. These areas may contain Aboriginal sites which are not recorded on AHIMS.
- Aboriginal objects are protected under the National Parks and Wildlife Act 1974 even if they are not recorded as a site on AHIMS.
- This search can form part of your due diligence and remains valid for 12 months.



Planning Proposal Report

Rezoning and Reduction in
Minimum Lot Size
313 Magpie Lane
Galambine


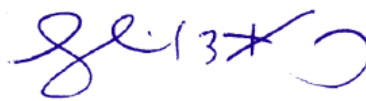
(Our Reference: 27447-PR01_A)
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Disclaimer

This report has been prepared solely for GH Mudgee Pty Limited (the client) in accordance with the scope provided by the client and for the purpose(s) as outlined throughout this report. Barnson Pty Ltd accepts no liability or responsibility for or in respect of any use or reliance upon this report and its supporting material by anyone other than the client.

| | |
|-------------------------|---|
| Report Title: | Planning Proposal Report |
| Project Name: | Rezoning and Reduction in Minimum Lot Size – 313 Magpie Lane, Galambine |
| Client: | GH Mudgee Pty Limited |
| Project No. | 27447 |
| Report Reference | 27447-PR01_A |
| Date: | 7/10/20 |

| | |
|--|--|
| Prepared by: | Reviewed by: |
|  |  |
| Jack Massey B. Urb & Reg. Planning Senior Town Planner | Jim Sarantzouklis B. Arts, Grad. Dip. Urb. Reg. Plan, Dip. EH&B Surveying, MAIBS MEHA RPIA Director |



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1 INTRODUCTION

1.1 Planning Proposal

Barnson Pty Ltd has been engaged by GH Mudgee Pty Limited to prepare a Planning Proposal (PP) that seeks to amend the *Mid-Western Regional Local Environmental Plan 2012* (Mid-Western LEP) by rezoning Lot 1 DP 174385 and Lot 1 DP 1003242 from RU4 Primary Production Small Lots to R5 Large Lot Residential and reducing the minimum lot size from 20 hectares to 2 hectares.

The PP will amend both the LEP and associated LEP mapping. Plans associated with the PP are provided in **Appendix A** of this report.

The subject site for this PP is Lot 1 DP 174385 and Lot 1 DP 1003242, known as 313 Magpie Lane, Galambine.

Consistent with the NSW Government Planning & Environment's *Planning Proposals: A guide to preparing planning proposals* (the Guide), this PP has been prepared in the following format:

- Part 1 – Objectives or intended outcomes
- Part 2 – Explanation of Provisions
- Part 3 – Justification
- Part 4 – Mapping
- Part 5 – Community Consultation
- Part 6 – Project Timeline

The completed Information Checklist provided in Attachment 1 of the Guide is provided in **Appendix B** of this report.

1.2 Proponent

The proponent for this PP is GH Mudgee Pty Limited.

1.3 Consultant

Barnson Pty Ltd

Jack Massey

Suite 8 / 11 White Street

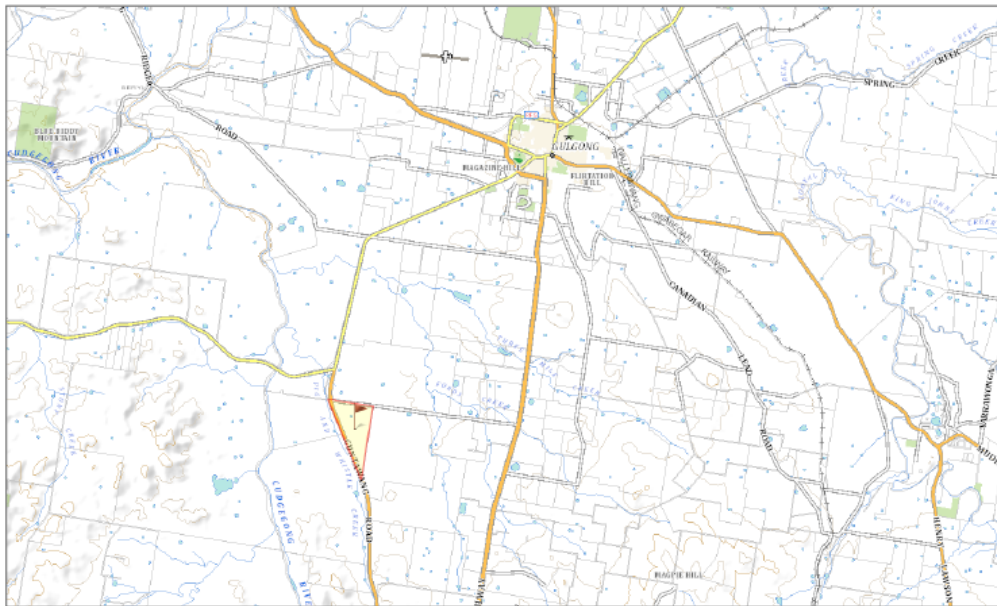
Tamworth NSW 2340



2 PLANNING PROPOSAL SITE

2.1 Location and Title

The subject site of this PP is Lot 1 DP 174385 and Lot 1 DP 1003242, known as 313 Magpie Lane, Galambine. The site is located in the Galambine area, approximately 10km south west of Gulugong as shown in **Figure 1** below.



Source: (NSW Government Spatial Services, 2020)

Figure 1 – Site Location

The site has an overall area of approximately 76 hectares and is predominantly used for agricultural purposes. The Certificate of Title and Deposited Plan for the property is provided in **Appendix C** of this report. Refer to **Figure 2** and **Plate 1** for photos of the site subject to this proposal.



Source: (Google Earth, 2020)

Figure 2 – Site Aerial

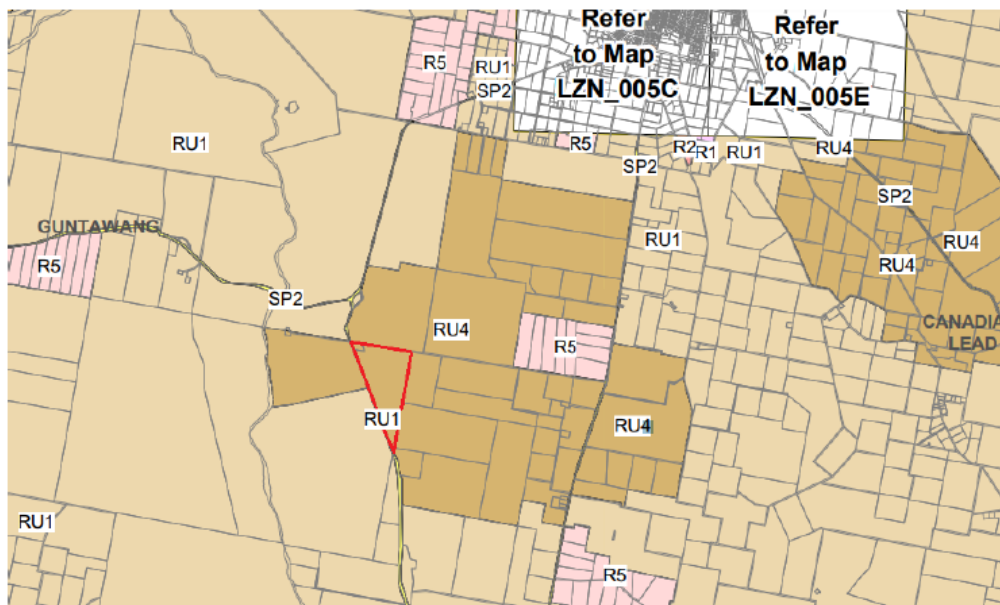


Plate 1 – View of the subject site from Magpie Lane



2.2 Land Use

The site is located in an area characterised by primary production and scattered rural-residential dwellings. The site has been used for primary production purposes, predominately grazing and cropping, for an extended period of time. The area is zoned RU4 Primary Production Small Lots and RU1 Primary Production, with small pockets of R5 Large Lot Residential within proximity, as shown in **Figure 3** below.



Source: (NSW Planning & Environment, 2020)

Figure 3 – Zoning Map

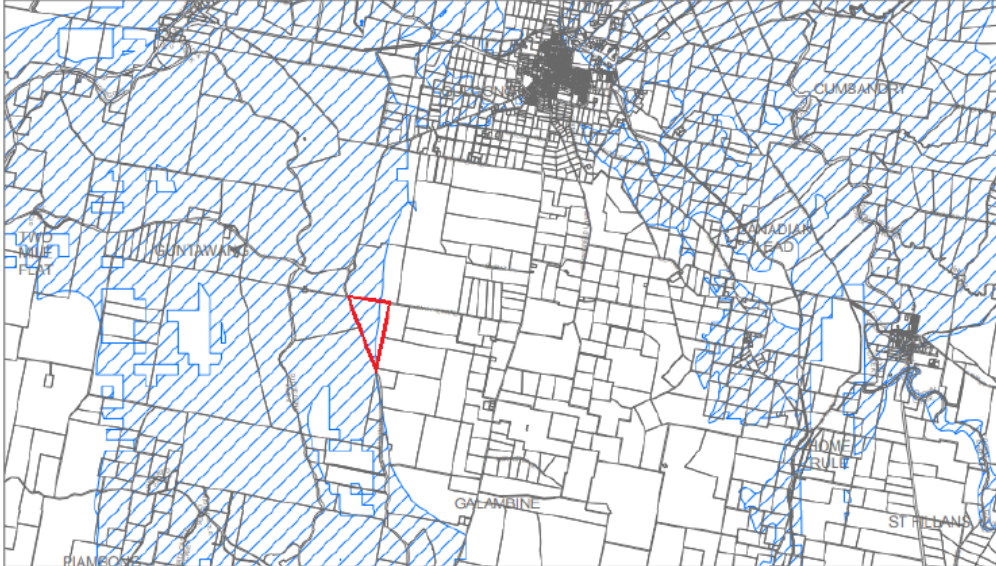
2.3 Topography and Soils

The site slopes generally from the east to west.

The site is within the Macquarie-Dubbo Soil Landscape as mapped by the *Soil Landscapes of the Dubbo 1:250 000 sheet*, which is found on the alluvial plains and terraces of the Macquarie and Talbragar Rivers. It is characterised by low fertility; seasonal waterlogging; sodic subsoils on lower slopes; high erosion hazard under cultivation; acidic surface soils; salinity common on lower slopes and low permeability.

2.4 Groundwater

The site is mapped under the LEP as having groundwater vulnerability (refer to **Figure 4**).



Source: (NSW Planning & Environment, 2020)

Figure 4 – Groundwater Vulnerability Map

There are no recorded groundwater bores located on the site or within 500m of the site. Details of four of the closest bores located to the east of the site and two of the closest bores located to the west were obtained and have been provided below.

- GW800644 – Test Bore (intended purpose), work status “filled”, drilled to a final depth of 106.7m. No standing water level was recorded on the GW summary;
- GW800643 – Test Bore (intended purpose), work status “filled”, drilled to a final depth of 121.9m. No standing water level was recorded on the GW summary;
- GW801349 – Irrigation Bore (intended purpose), work status “supply obtained”, drilled to a final depth of 106.7m. Standing water level of 27.2m;
- GW800636 – Domestic Bore (intended purpose), work status “supply obtained”, drilled to a final depth of 93m. No standing water level was recorded on the GW summary. Salinity indicated as “good”;
- GW014906 – Irrigation Bore (intended purpose), work status “abandoned”, drilled to a final depth of 14.3m. No standing water level was recorded on the GW summary; and
- GW028222 – Irrigation Bore (authorised purpose) drilled to a final depth of 106.6m. No standing water level was recorded on the GW summary.

These Groundwater Works summaries have been provided in **Appendix D** of this report.

An Effluent assessment has been prepared by Eastwest Consulting to determine the current site characteristics and future potential development, refer to **Appendix E** of this report.



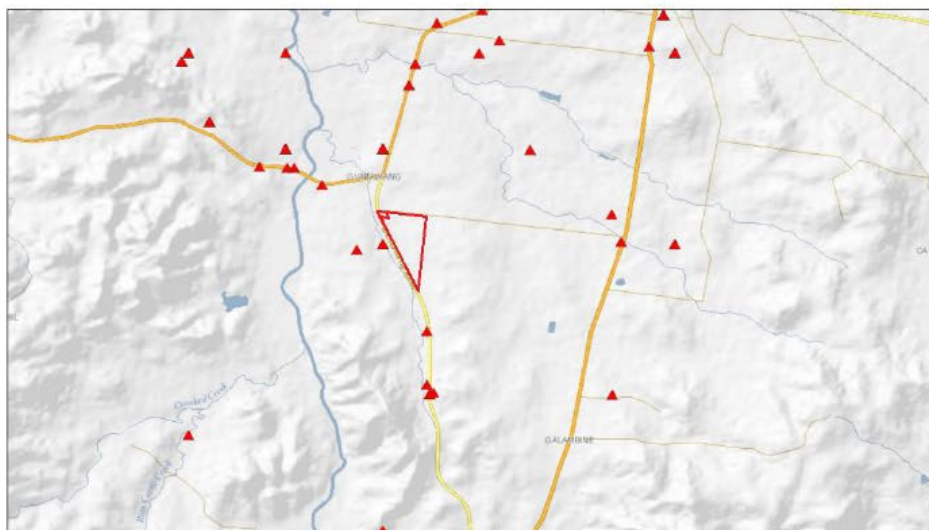
2.5 Flora and Fauna

The site contains minimal Plant Community Types (PCTs) as shown in **Figure 5** below. The site is heavily disturbed as a result of previous activities on the site. It is predominately grassland with scattered trees throughout. The grassland is frequently mown/slashed and well managed. No threatened species have been recorded on the site as shown in **Figure 6**.



Source: (NSW Office of Environment & Heritage, 2020)

Figure 5 - PCT Mapping



Source: (NSW Office of Environment & Heritage, 2020)

Figure 6 - BioNet Atlas Search

2.6 Noise Environment

A noise assessment has not been undertaken as part of this planning proposal. The site is located within an area characterised by primary production and scattered residential activities. Noise levels are consistent with these land uses.

2.7 Natural Hazards

The site is not mapped as being bushfire prone or within a Flood Planning Area under the *Mid-Western Regional Local Environmental Plan 2012*, NSW Planning Portal or the RFS' Online Mapping Tool.

2.8 Contamination

The site is not known to have previously contained any of the land uses listed in Table 1 of the *Contaminated Land Planning Guidelines* that are likely to cause contamination.

2.9 Services

The site has electricity and telecommunications available within proximity. There are no other services such as reticulated water, sewer or gas located within the vicinity.

The proposed rezoning of the site to lot sizes of 2 hectares is premised upon incorporating on-site rainwater harvesting, on-site effluent disposal and a central bore/water scheme for non-potable water. Given the location of the site, it is considered that connection to water and sewer mains is unnecessary for this site and adequate land shall be provided for each lot to be fully serviced by onsite supply and management systems. Furthermore, best practice stormwater management features will be incorporated for suitable management and use of future residential development.

2.10 Access and Traffic

The site has frontage to Guntawang Road and Magpie Lane, which are both bitumen sealed roads. Vehicular access is gained off both road networks via rural gates/access crossings.

As part of any future development on the site, in particular for subdivision, a new internal road will form part of the subdivision which will require provision of intersections. A concept subdivision plan has been provided on the plans in **Appendix A** of this report.

2.11 Heritage

A search of the State Heritage Inventory, *Mid-Western Regional Local Environmental Plan 2012* and Aboriginal Heritage Information Management System (AHIMS) was undertaken for the site and immediate surrounds. There are no known items or places of European or Aboriginal cultural heritage significance that have been identified as being recorded on or within the vicinity of the site. Refer to AHIMS Search provided in **Appendix F** of this report.



An Aboriginal Cultural Heritage Report was previously prepared for a development on the site and has been provided in **Appendix G** of this report.

2.12 Background to Planning Proposal

The site has been vacant for an extended period of time. Consent was granted on the site for a large tourist facility among other developments for the site. The proponent now intends to establish 2 hectare residential lots for the region, which has been based on a lack of supply in the Mid-Western Local Government Area. As such, this PP intends to rezone the land from RU4 Primary Production Small Lots to R5 Large Lot Residential with a minimum lot size of 2 hectares.

3 PLANNING PROPOSAL PARTICULARS

3.1 General

The PP seeks Mid-Western Regional Council's support to rezone approximately 76 hectares of land from RU4 Primary Production Small Lots to R5 Large Lot Residential, with a corresponding reduction to the minimum lot size from 20 hectares to 2 hectares.

The intention of rezoning the land is to permit the future subdivision of the site and its development for rural residential purposes consistent with the objectives of the R5 Large Lot Residential zone.

3.2 The Need for the Rezoning

The need for the rezoning has resulted from a change in economic conditions which favour a more diverse housing market, particularly large lot residential blocks. As detailed throughout this report, the site conditions support small scale agriculture, but given its size, does not support intensive or large scale agricultural or industries. As such, large lot residential development is considered more appropriate and a better use of the site.

3.3 Lot Yield

The subject land comprises two lots with a total area of approximately 76 hectares. Under the current RU4 Primary Production Small Lots zoning, the minimum lots size is 20 hectares, whereby a compliant subdivision would allow for 3 lots. The *Mid-Western Regional Comprehensive Land Use Strategy* identifies the site as suitable for cropping and livestock grazing. If the site as it stands was subdivided into 20 hectare lots in separate ownership, such activities would not likely be viable given the insufficient area.

The land is cleared and vacant with sealed main road frontage and is therefore well placed to support a new subdivision and future rural residential development extended to the south of Gulgong (north of Mudgee). The proposal is consistent with Mid-Western's Strategy as the rezoning and future subdivision of the site will provide an additional residential opportunity area that will add diversity to the market and facilitate the delivery of new lots.

The proposed minimum lots size of 2 hectares is consistent with the recommendations of Council's Strategies. Based on the 2 hectare minimum lot size, the potential lot yield has been shown on the Planning Proposal Plans in **Appendix A** of this report. A maximum of 31 lots is achievable on the site with a 2 hectare minimum lot size, which includes consideration for internal roads and associated infrastructure.

3.4 Water Supply and Effluent Disposal

The *Mudgee and Gulgong Urban Release Strategy 2014* recommends that Council undertake further analysis into costs of providing reticulated water and sewer to service future subdivision in the LGA.



Given the semi-rural location of the site and high costs that would be involved with reticulating this area, it is considered that enforcing this infrastructure would be uneconomic and would not achieve a reasonable return on the costs of installation. Accordingly, it is proposed to provide onsite effluent disposal and water supply, as follows.

3.4.1 Sewerage Disposal

Onsite effluent systems shall be installed for new lots established on the site and would be subject to assessment as part of the subdivision stage. For sites that may be subject to groundwater vulnerability, alternative systems such as aerated wastewater systems shall be considered. As part of the future subdivision application, a Water Cycle Management Report shall be prepared for each lot within the subdivision to determine that there is suitable area capable of the disposal of onsite wastewater.

A 4,000m² lot is widely cited throughout Australia as a minimum lot size for unsewered residential properties (i.e. dwellings), which can adequately manage effluent with appropriate setback buffers. With a lot size of 20,000m² (2 hectares), it is considered that each new lot would have adequate area to manage effluent. Nevertheless, an Effluent Assessment for the site has been provided in **Appendix E** of this report confirming the suitability of onsite systems.

3.4.2 Water Supply

Onsite rainwater collection tanks will be established as part of future residential development to service each dwelling on the 2 hectare allotments. Based on data from the Bureau of Meteorology, Gulgong has a recorded mean average of 692mm a year. The highest month for rainfall is January at an average of 86mm and the lowest is in June at an average of 44mm. The amount of rainfall collected would depend on the roof catchment area of dwellings and outbuildings on the future lots. The rainwater harvesting requirements for each household would be dependent on occupancy capacity. Sufficient rainwater would also need to be provided for landscaping and general maintenance.

Given the yearly variation of rainfall in this area, it is recommended that water tanks be specified for future dwellings with a capacity to support those dwellings. The size of collection tanks would be subject to development assessment as part of future applications on the site.

In addition to collection tanks, a bore shall be established with associated water scheme for non-potable water for each block (landscaping, land management etc). As assessment of the groundwater availability shall be undertaken prior and as part of the subdivision to determine the adequacy of groundwater and to ensure no valuable resources will be impacted. Each lot would be restricted as required.

4 EXISTING LEGISLATIVE FRAMEWORK

4.1 Introduction

As shown in **Figure 3**, the site is zoned RU4 Primary Production Small Lots under the *Mid-Western Regional Local Environmental Plan 2012*.

4.2 RU4 Primary Production Small Lots Zone

The objectives of the RU4 zone are:

- *To enable sustainable primary industry and other compatible land uses.*
- *To encourage and promote diversity and employment opportunities in relation to primary industry enterprises, particularly those that require smaller lots or that are more intensive in nature.*
- *To minimise conflict between land uses within this zone and land uses within adjoining zones.*
- *To ensure that land is available for intensive plant agriculture.*
- *To encourage diversity and promote employment opportunities related to primary industry enterprises, particularly those that require smaller holdings or are more intensive in nature.*

The land use table for the RU4 zone is as follows:

2 Permitted without consent

Environmental protection works; Extensive agriculture; Home businesses; Home occupations; Intensive plant agriculture; Roads; Water reticulation systems

3 Permitted with consent

Aquaculture; Cellar door premises; Dwelling houses; Farm buildings; Home industries; Plant nurseries; Roadside stalls; Any other development not specified in item 2 or 4

4 Prohibited

Air transport facilities; Amusement centres; Attached dwellings; Backpackers' accommodation; Boarding houses; Boat building and repair facilities; Boat launching ramps; Boat sheds; Car parks; Cemeteries; Charter and tourism boating facilities; Centre-based child care facilities; Commercial premises; Crematoria; Exhibition homes; Exhibition villages; Freight transport facilities; Group homes; Heavy industrial storage establishments; Helipads; Highway service centres; Home occupations (sex services); Hostels; Hotel or motel accommodation; Industrial retail outlets; Industrial training facilities; Industries; Intensive livestock agriculture; Jetties; Livestock processing industries; Marinas; Mooring pens; Moorings; Mortuaries; Multi dwelling housing; Passenger transport facilities; Places of public worship; Public administration buildings; Recreation facilities (indoor); Recreation facilities (major); Recreation facilities (outdoor); Registered clubs; Residential flat buildings; Respite day care centres; Restricted premises; Sawmill or log processing works; Semi-detached dwellings; Seniors housing; Service stations; Sex services premises; Shop top housing; Signage; Stock and sale yards; Storage premises; Transport depots; Vehicle body repair workshops; Vehicle repair stations; Warehouse or distribution centres; Waste disposal facilities; Wholesale supplies



5 PROPOSED LEGISLATIVE FRAMEWORK

5.1 Introduction

It is proposed to rezone the land to R5 Large Lot Residential under the *Mid-Western Regional Local Environmental Plan 2012*.

5.2 R5 Large Lot Residential

The objectives of the R5 zone are:

- *To provide residential housing in a rural setting while preserving, and minimising impacts on, environmentally sensitive locations and scenic quality.*
- *To ensure that large residential lots do not hinder the proper and orderly development of urban areas in the future.*
- *To ensure that development in the area does not unreasonably increase the demand for public services or public facilities.*
- *To minimise conflict between land uses within this zone and land uses within adjoining zones.*

The land use table for the R5 zone is as follows:

2 Permitted without consent

Extensive agriculture; Home-based child care; Home businesses; Home occupations; Roads; Water reticulation systems

3 Permitted with consent

Bed and breakfast accommodation; Cellar door premises; Dual occupancies; Dwelling houses; Garden centres; Home industries; Intensive plant agriculture; Landscaping material supplies; Markets; Neighbourhood shops; Oyster aquaculture; Plant nurseries; Pond-based aquaculture; Roadside stalls; Secondary dwellings; Serviced apartments; Tank-based aquaculture; Waste or resource transfer stations; Water recycling facilities; Any other development not specified in item 2 or 4

4 Prohibited

Advertising structures; Agriculture; Air transport facilities; Airstrips; Amusement centres; Animal boarding or training establishments; Boarding houses; Boat building and repair facilities; Boat launching ramps; Boat sheds; Car parks; Cemeteries; Charter and tourism boating facilities; Commercial premises; Correctional centres; Crematoria; Dairies (pasture-based); Electricity generating works; Entertainment facilities; Environmental facilities; Exhibition homes; Exhibition villages; Forestry; Freight transport facilities; Function centres; Heavy industrial storage establishments; Helipads; Highway service centres; Home occupations (sex services); Industrial retail outlets; Industrial training facilities; Industries; Jetties; Marinas; Mooring pens; Moorings; Mortuaries; Passenger transport facilities; Public administration buildings; Recreation facilities (indoor); Recreation facilities (major); Registered clubs; Research stations; Residential accommodation; Restricted premises; Rural industries; Service stations; Sex services premises; Storage premises; Tourist and visitor accommodation; Transport depots; Truck depots; Vehicle body repair workshops; Vehicle repair stations; Veterinary hospitals; Warehouse or distribution centres; Waste or resource management facilities; Water recreation structures; Water supply systems; Water treatment facilities; Wharf or boating facilities

6 PLANNING PROPOSAL

6.1 Part 1 - Objectives or Intended Outcomes

The *Planning Proposals: A guide to preparing planning proposals* identifies that Part 1 of a PP should consist of:

“...a short, concise statement setting out the objectives or intended outcomes of the planning proposal. It is a statement of what is planned to be achieved, not how it is to be achieved. It should be written in such a way that it can be easily understood by the general community” (NSW Department of Planning & Environment, 2016).

The objective of this PP is to amend the *Mid-Western Regional Local Environmental Plan 2012* to rezone the site from RU4 Primary Production Small Lots to R5 Large Lot Residential and reduce the minimum lot size from 20 hectares to 2 hectares to allow the future development of residential accommodation.

The masterplan provided in **Appendix A** illustrates the intended lot yield subject to subdivision once the planning proposal is endorsed. The intent is to create 2 hectare lots in a rural locality for residential accommodation for the Mudgee/Gulgong area.

The need for the rezoning has resulted from a change in economic conditions which favour larger blocks to be used for residential purposes. As demonstrated throughout this report, the site conditions are conducive for residential land use.

The Australian Bureau of Statistics (ABS) 2016 Census data indicated that Mid-Western Region is experiencing sustained population growth along with growth in the agricultural industry resulting in additional demand for a range of land, housing and employment opportunities.

The rezoning intends to provide residential blocks in a rural setting to help support this ongoing growth and provide residential land within proximity to Mudgee.

6.2 Part 2 - Explanation of Provisions

The *Planning Proposals: A guide to preparing planning proposals* identifies that Part 2 of a PP is to provide:

“... a more detailed statement of how the objectives or intended outcomes are to be achieved by means of amending an existing LEP. ... explanation of provisions to identify what zones or development standards are being proposed” (NSW Department of Planning & Environment, 2016).

The proposed outcome for the PP will be achieved by:

- Amending the Mid-Western Regional LEP Land Zoning (Sheet LZN_005) Map on Lot 1 DP 174385 and Lot 1 DP 1003242 in accordance with the proposed zoning map shown in **Appendix A** of this report; and
- Amending the Mid-Western Regional LEP Minimum Lot Size Map (Sheet LSZ_005) from (AB3) 20 hectares to (Z) 2 hectares on Lot 1 DP 174385 and Lot 1 DP 1003242 in accordance with the proposed zoning map shown in **Appendix A** of this report.



6.3 Part 3 - Justification

The *Planning Proposals: A guide to preparing planning proposals* identifies that Part 3 is to set out the case for the making of the proposed LEP. The following section provides a response to the questions outlined in the guide.

6.3.1 Section A - Need for the Planning Proposals

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

No applicable studies or reports.

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

Other options were considered as potential means for achieving the objective of the planning proposal. These were considered as follows:

- Retaining the RU4 Primary Production Small Lots zoning and reducing the Minimum Lot Size from 20 hectares to 2 hectares. The lot sizes would not be conducive of the RU4 zone objectives, particularly with regard to primary production and agriculture. A lot size of 2 hectares would not generally support an agricultural use, therefore it was determined to rezone the land; and
- Retaining the current zoning and subdividing into 20 hectare lots, which would result in a maximum yield of 3 lots. The site is suitable for agricultural cropping and grazing only. If the site as it stands was subdivided into 20 hectare lots in separate ownership, such activities would not likely be viable given the insufficient area of each lot. Even its current size at 76 hectares is restrictive in terms of potential agricultural activities.

6.3.2 Section B - Relationship to Strategic Planning Framework

Q3. Is the planning proposal consistent with the objectives and actions of the applicable regional, sub-regional or district plan or strategy (including any exhibited draft plans or strategies)?

The following Assessment Criteria have been established by the guide and are considered below in relation to the PP:

a) Does the proposal have strategic merit? Is it:

- Consistent with the relevant regional plan outside of the Greater Sydney Region, the relevant district plan within the Greater Sydney Region, or

corridor/precinct plans applying to the site, including any draft regional, district or corridor/precinct plans released for public comment; or

- Consistent with a relevant local council strategy that has been endorsed by the Department; or
- Responding to a change in circumstances, such as the investment in new infrastructure or changing demographic trends that have not been recognised by existing planning controls.

Response

- The PP is considered to be consistent with the *Central West and Orana Regional Plan 2036* as it will:
 - Provide increased housing choices and short term and long term employment for the local economy. The location the subject of this PP will support agricultural job opportunities being closely located to rural areas (Direction 22);
 - Provide large lot residential housing for the local economy to deal with any unexpected population growth. This will increase the housing diversity and choice for the local area (Direction 25);
 - Provide rural residential lots for future development in a suitable location that is not necessarily considered high productive agricultural land or an area of importance. Rural residential living is becoming exceedingly popular in the area (Direction 28).

b) Does the proposal have site-specific merit, having regard to the following:

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

Response

The site has been subject to a range of approved uses, including; a proposed tourist facility, residential dwelling, 24 unit motel, 100 seat restaurant, wine sales area, managers residence, tennis court and swimming pool. There are no known environmental issues present on the site such as flooding or bushfire, and historically the site has been subject to clearing and animal grazing, reducing the amount of vegetation present.



The PP is considered to have site specific merit given:

- A number of uses have been approved on the site that would create dense built up structures that would not support ongoing agricultural use;
- There are no environmental matters that would hinder on future residential development on the site;
- The site could only be used for agricultural grazing and cropping. The site as it stands would not support a rural business or industry, nor would 20 hectare lots be able to be utilised for such activities;
- Large lot residential blocks are an essential need for Mudgee and the local economies diversity in the housing market; and
- The site is suitably located for rural residential development.

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

The site is covered by the existing local strategies:

- Mid-Western Regional Comprehensive Land Use Strategy (Part C) 2010 (revised February 2017)
- Mudgee and Gulgong Urban Release Strategy 2014

Mid-Western Regional Comprehensive Land Use Strategy (Part C) 2010

The purpose of this Strategy was to identify environmental, social and economic opportunities and constraints and weigh these against land demand and supply pressures for the Mid-Western Regional Local Government Area until 2031. A review has been conducted of this Strategy with commentary on key points provided below.

Section 3.1.3 (page 33-34) of the Strategy states:

"...it is considered necessary to identify additional residential opportunity areas to add diversity to the market and facilitate the delivery of lots.

Comment: The current Mudgee housing market has a lack of diversity in terms of location for rural residential opportunities. The proposed planning proposal intends to provide diversity by providing housing in a different rural area than what is currently provided, thereby being consistent with this part.

Section 4.8 (Page 63) of the Strategy states:

"Evidence suggests that the demand is strong for rural lifestyle lots within close proximity to Mudgee, ideally within a commuting distance of 10-15 minutes from the town centre. The area surrounding Mudgee is picturesque and desirable for those seeking a 'treechange' and proximity to the higher order services of Mudgee. This is consistent with the direction of the Strategy, which focuses future rural lifestyle opportunities around the main settlements in the local government area".

Comment: The subject site is approximately 10 minutes to Gulgong and 20 minutes to the Mudgee CBD. The site is located within a picturesque setting, surrounded by vineyards and small scale rural enterprises. The rural lifestyle potential of this block would be attractive to city dwellers and would accommodate for a range of residential opportunities for the area.

Section 7 of the Strategy provides criteria for the identification of Rural Residential Development with a two hectares MLS within the local government area. An assessment of this criteria is provided in **Table 1** below.

| Table 1 – Land Use Strategy Two Hectare Criteria | |
|---|--|
| Criteria | Comment |
| 1. The land can be managed to avoid land use conflict | The land surrounding the site is predominately used for animal grazing and vineyards. There are no large scale agricultural industries within proximity to the site, nor are there any hazardous or offensive rural industries within proximity. The land uses within proximity to the site and general characteristics of the area provide a sufficient buffer for the site. Dwelling sites located on the outer edge of the proposed rezoning area shall be afforded with fencing, landscaping and/or other attenuative material to effectively separate the site from agricultural land uses within proximity to the site and to avoid any unnecessary land use conflict. |
| 2. Is unconstrained by flooding, as it is above the FPL on the 1 in 100 ARI | The subject site is not located within a Flood Planning Area under the <i>Mid-Western Regional Local Environmental Plan 2012</i> . |
| 3. Can be connected to the existing road network by sealed road access | The site fronts Magpie Lane and Guntawang Road, which are two way bitumen sealed roads. As shown on the plans in Appendix A , specifically the Masterplan sheet P04, the site has the capability of connecting to the sealed road network with sufficient area internally to create roads for future subdivision. |
| 4. Is not visually intrusive | There are no impacts on visual amenity or sensitive corridors located within proximity to the site as defined in the Strategy on the Mudgee Town Structure Plan. |
| 5. Will not undermine future residential land opportunities | The proposed rezoning shall accommodate for a future subdivision that could potentially yield approximately 33 two hectare allotments, each with the opportunity of a single residential dwelling. The general consensus of the Strategy is that the Mid-Western LGA is currently |



| | |
|---|--|
| | <p>experiencing significant growth in the residential sector. Therefore, it is considered that an additional 33 residential lots within the LGA would have a negligible impact on existing residential opportunities. It would rather diversify the residential sector by providing large lot residential lots within a rural and picturesque setting.</p> |
| 6. Will not adversely impact on the groundwater system | <p>The site is mapped as groundwater vulnerable under the <i>Mid-Western Regional Local Environmental Plan 2012</i>. Groundwater extraction will be limited as the dwellings shall be serviced via onsite rainwater collection tanks. Suitable effluent systems shall be established and it is considered that 2 hectare sized lots have sufficient area for onsite disposal.</p> <p>Refer to Effluent Assessment in Appendix E of this report.</p> <p>However, a bore shall be considered with a water sharing scheme for each lot to provide non-potable water for landscaping, land management and the like. An assessment of extraction of such groundwater shall be undertaken as part of the subdivision application, with appropriate mitigation methods endorsed.</p> |
| 7. Can be justified in terms of supply and demand | <p>The general consensus of the Strategy is that the Mid-Western LGA requires additional 2 hectare lots that would create diversity in the housing market. The proposed rezoning is consistent with this approach.</p> |
| 8. Can be managed to reduce bushfire hazard | <p>The subject site is not mapped as bushfire prone under the <i>Mid-Western Regional Local Environmental Plan 2012</i>.</p> |
| 9. Should avoid Biophysical Strategic Agricultural Land | <p>The land is not identified as Biophysical Strategic Agricultural Land. Rather, it has been identified as suitable for cropping and animal grazing. Given the size of the land, intensive agricultural uses are not considered viable. Rather, the site lends itself to rural residential in a suitable location for the rural residential housing market.</p> |
| 10. Has access to a sustainable water supply | <p>Onsite rainwater harvesting is considered appropriate for 2 hectare lot sizes. Each future dwelling shall be provided with suitable onsite rainwater collection tanks for internal and external use. The tank sizing shall be subject to the subdivision and/or application for dwellings on each site.</p> <p>A bore/water sharing scheme shall be established to provide non-potable water, which would be subject to a detailed assessment.</p> |

Mudgee and Gulgong Urban Release Strategy

The *Mudgee and Gulgong Urban Release Strategy 2014* states that strong population growth driven by the expansion of the local coal mining industry and sustained pressure for residential development is placing considerable pressure on the Mid-Western Regional Council. To date the majority of housing growth has occurred in Mudgee however nearby Gulgong has also been impacted in recent years by shifts in the housing market.

The Strategy further indicates that land supply for 2 hectare residential lots would be exhausted after just 9 years (section 6 of the Strategy). The proposed rezoning shall cater for this shortfall by providing additional 2 hectare lots for the Mid-Western Regional Local Government Area. On this basis, it is considered that the proposed rezoning is generally consistent with the principles of the Strategy.

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

A summary assessment of *State Environmental Planning Policies* (SEPPs) is discussed below. The proposal is generally consistent with all relevant SEPPs.

| Table 2 – Application of SEPPs | | |
|--------------------------------|------------|--|
| SEPP | Applicable | Comments |
| No 30 – Intensive Agriculture | No | This Policy does not apply to the Planning Proposal. The SEPP would only apply to a future development application for development specified in the policy. |
| No 44 – Koala Habitat | Yes | SEPP 44 aims to encourage the conservation and management of areas of natural vegetation that provide habitat for koalas by requiring the preparation of plans of management before development consent can be granted in relation to areas of core koala habitat. The subject site is predominately cleared with scattered isolated trees throughout. There are no known feed tree species located on the site. As the PP relates to the rezoning of land, no vegetation removal is proposed. It is considered that future subdivision and development can occur with minimal impact to existing vegetation or potential koala habitat. |
| No 55 – Remediation of Land | Yes | SEPP 55 aims to promote the remediation of contaminated land for the purpose of reducing the risk of harm to human health by specifying certain considerations that are relevant in rezoning land and in determining development applications. The land is not known to: |



| Table 2 – Application of SEPPs | | |
|---|------------|--|
| SEPP | Applicable | Comments |
| | | <ul style="list-style-type: none"> be within an investigation area, or have been used for any purpose referred to in Table 1 of the Contaminated Land Planning Guidelines. <p>As a result, a preliminary investigation is not required in relation to the Planning Proposal.</p> |
| Primary Production and Rural Development 2019 | No | Although this SEPP would not apply to the site once rezoned, the Planning Proposal has been prepared to ensure the rural subdivision principles are considered given the rural context of the area. A concept subdivision layout has been provided on the Planning Proposal Plans in Appendix A of this report. |

Q6. Is the planning proposal consistent with applicable Ministerial Directions (s.9.1 directions)?

The following table provides an assessment of the consistency of the PP with the Section 9.1 Directions issued by the Minister under Section 9.1 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

| Table 3 – Section 9.1 Directions | | |
|--------------------------------------|------------|---|
| Direction | Applicable | Comment |
| 1. Employment & Resources | | |
| 1.1 Business & Industrial Zones | No | Direction not applicable. |
| 1.2 Rural Zones | Yes | It is proposed to rezone the land from RU4 Primary Production Small Lots to R5 Large Lot Residential, which is inconsistent with this Direction. However, the inconsistency is considered to be of minor significance as the proposed area for rezoning has already been subject to previous high density development on the site. The inconsistency is considered of <i>minor significance</i> in accordance with “1.2 Rural Zones – Consistency(5)(d)” of this Direction. Furthermore, the area and site characteristics do not significantly support agricultural production on the land. Therefore, the rezoning would be consistent with similar R5 zoned land located within proximity. |
| 1.3 Mining, Petroleum Production & | No | N/A – no mining, petroleum production or extractive industries proposed or affected. |

| Table 3 – Section 9.1 Directions | | |
|---|-----|--|
| Extractive Industries | | |
| 1.4 Oyster Aquaculture | No | N/A – no oyster aquaculture proposed or affected. |
| 1.5 Rural Lands | Yes | <p>The Planning Proposal is inconsistent with this Direction, however the inconsistency is considered to be of minor significance as the proposed area for rezoning is similar to other land zoned R5 within the LGA. As shown throughout this report, there are many pockets of R5 zoned land in the LGA. As such, the rezoning of this site to R5 is not dissimilar to other R5 zoned land within proximity. The inconsistency is considered of <i>minor significance</i> in accordance with “1.5 Rural Lands – Consistency(6)(b)” of this Direction.</p> <p>It is considered that the Planning Proposal is consistent with the Rural Planning Principles contained within <i>State Environmental Planning Policy (Primary Production and Rural Development) 2019</i>.</p> |
| 2. Environment & Heritage | | |
| 2.1 Environment Protection Zones | No | N/A – the site is not within an environmentally sensitive area. |
| 2.2 Coastal Management | No | N/A – not within the coastal zone. |
| 2.3 Heritage Conservation | Yes | <p>The site is not known to contain any items of Aboriginal or European Heritage significance, refer Section 2.11 and Aboriginal Cultural Heritage Report in Appendix G.</p> <p>No known items of heritage significance would be impacted by the PP.</p> |
| 2.4 Recreation Vehicles Area | No | N/A – The PP is not enabling land to be developed for the purpose of a RV area. |
| 2.5 Application of E2 and E3 zones and Environmental Overlays in Far north Coast LEPs | No | N/A – not within Ballina, Byron, Kyogle, Lismore or Tweed LGAs. |
| 2.6 Remediation of Contaminated Land | No | The site is not known to be contaminated and no contaminating activities have been carried out on the site in the past. |
| 3. Housing, Infrastructure & Urban Development | | |



| Table 3 – Section 9.1 Directions | | |
|--|-----|--|
| 3.1 Residential Zones | Yes | <p>The planning proposal will broaden the choice of building types and locations available in the housing market and make efficient use of onsite infrastructure and services for large lot residential development.</p> <p>The area forming part of the PP shall facilitate future dwellings that will be improved with the following services; onsite effluent systems, underground bore and community reticulation system for non-potable water, onsite rainwater tanks for storage and reuse, telecommunications, electricity and transport network.</p> |
| 3.2 Caravan Parks & Manufactures Home Estates | No | N/A – no caravan parks or manufactures home estates. |
| 3.3 Home Occupations | Yes | The proposed rezoning of the subject site to R5 would continue to support the objective of the Direction and allow 'Home occupations' to be permitted without consent under the <i>Mid-Western Regional Local Environmental Plan 2012</i> . |
| 3.4 Integrating Land Use and Transport | No | The site currently has direct access to the local road network. The proposed rezoning will allow future vehicle access to be provided to and from Magpie Lane with appropriate sight lines. |
| 3.5 Development Near Regulated Airports and Defence Airfields | No | N/A – the site is not in the vicinity of a licensed aerodrome. |
| 3.6 Shooting Ranges | No | N/A – no impact on a shooting range. |
| 3.7 Reduction in non-hosted short term rental accommodation period | No | N/A – not within Byron LGA. |
| 4. Hazard and Risk | | |
| 4.1 Acid Sulfate Soils | No | N/A – the site is not known to contain sulfate soils. |
| 4.2 Mine Subsidence and Unstable Land | No | N/A – the site is not within a Mine Subsidence District or identified as being unstable land. |

| Table 3 – Section 9.1 Directions | | |
|--|---------------------------|---|
| 4.3 Flood Prone Land | No | N/A – the site is not located within a Flood Planning Area (FPA). |
| 4.4 Planning for Bushfire Protection | No | N/A – the site is not mapped as being bushfire prone land. |
| 5. Regional Planning | | |
| 5.1 Implementation of Regional Strategies | (Revoked 17 October 2017) | - |
| 5.2 Sydney Drinking Water Catchments | No | N/A – not within the Sydney drinking water catchment. |
| 5.3 Farmland of State and Regional Significance on the NSW Far North Coast | No | N/A to the site. |
| 5.4 Commercial and Retail Development along the Pacific Highway, North Coast | No | N/A to the site. |
| 5.5 Development in the vicinity of Ellalong, Paxton and Millfield (Cessnock LGA) | (Revoked 18 June 2010) | - |
| 5.6 Sydney to Canberra Corridor | (Revoked 10 July 2008) | - |
| 5.7 Central Coast | (Revoked 10 July 2008) | - |
| 5.8 Second Sydney Airport: Badgerys Creek | (Revoked 20 August 2018) | - |



| Table 3 – Section 9.1 Directions | | |
|--|----------------------------|--|
| 5.9 North West Rail Link Corridor Strategy | No | N/A to the site. |
| 5.10 Implementation of Regional Plans | Yes | The PP is not considered inconsistent with any Regional Plans or Strategies. |
| 5.11 Development of Aboriginal Land Council land | No | N/A – The site is not located within any of the mapped areas under <i>State Environmental Planning Policy (Aboriginal Land) 2019</i> . |
| 6. Local Plan Making | | |
| 6.1 Approval and Referral Requirements | Yes | The PP would not impact on requirements for concurrence, consultation or referral of development applications to a Minister or public authority. The PP is not for designated development. |
| 6.2 Reserving Land for Public Purposes | No | The PP would not impact on any zonings or reservations of land for public purposes. |
| 6.3 Site Specific Provisions | Yes | Mudgee is identified as a major regional city in the <i>Central West and Orana Regional Plan 2036</i> . The plan sets out that major regional cities will provide new options and opportunities for surrounding networks and communities. The proposed rezoning will contribute towards achieving this. |
| 7. Metropolitan Planning | | |
| 7.1 Implementation of A Plan for Growing Sydney | No | N/A – not within the Sydney metropolitan area. |
| 7.2 Implementation of Greater Macarthur Land Release Investigation | (Revoked 18 November 2019) | - |
| 7.3 Parramatta Road Corridor Urban Transformation Strategy | No | N/A – not within applicable LGAs. |
| 7.4 Implementation of North West | No | N/A – not within applicable LGAs. |

| Table 3 – Section 9.1 Directions | | |
|---|----|---------------------------------------|
| Priority Growth Area Land Use and Infrastructure Implementation Plan | | |
| 7.5 Implementation of Greater Parramatta Priority Growth Area Interim Land Use and Infrastructure Implementation Plan | No | N/A – not within applicable LGAs. |
| 7.6 Implementation of Wilton Priority Growth Area Interim Land Use and Infrastructure Implementation Plan | No | N/A – not within applicable LGAs. |
| 7.7 Implementation of Glenfield to Macarthur Urban Renewal Corridor | No | N/A – not within applicable LGAs. |
| 7.8 Implementation of Western Sydney Aerotropolis Interim Land Use and infrastructure Implementation Plan | No | N/A – not within applicable LGAs. |
| 7.9 Implementation of Bayside West Precincts 2036 Plan | No | N/A – not within applicable precinct. |
| 7.10 Implementation of Planning Principles for the Cooks Cove Precinct | No | N/A – not within applicable precinct. |



| Table 3 – Section 9.1 Directions | | |
|---|----|---------------------------------------|
| 7.11 Implementation of St Leonards and Crows Nest 2036 Plan | No | N/A – not within applicable precinct. |
| 7.12 Implementation of Greater Macarthur 2040 | No | N/A – not within applicable precinct. |

6.3.1 Section C - Environmental, Social and Economic Impact

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

As outlined in **Section 2.5** of this report, the site is quite disturbed as a result of previous clearing and land uses. The site contains minimal PCTs and is not known to contain any previously identified threatened species. Given this and the nature of the PP, it is unlikely that critical habitat, threatened species, population or ecological communities or their habitats would be adversely affected as a result of the PP. Further assessment of biodiversity and clearing of vegetation would be required as DA stage for any future subdivision or development.

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

As outlined in **Section 2.7** of this report, the site is not mapped as being within a Flood Planning Area (FPA), nor is it mapped as being bushfire prone land. There are no other known likely environmental effects that would occur as a result of the planning proposal.

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

Whilst most agricultural zoned land surrounding Mudgee and Gulgong has been retained from previous Instruments in terms of zoning and minimum lot size, over the past 8-10 years the local economy has experienced significant growth in housing with limited supply of large lot residential / rural residential land to accommodate future demand.

The current zoning as RU4 Primary Production Small Lots effectively limits the use of land to small scale grazing or cropping. The current zone and corresponding minimum lot size is not considered the highest and best use of the subject site. With a site area of approximately 76 hectares and minimum lot size of 20 hectares, the current potential lot yield would not be considered viable.

As low density housing on lots of 2 hectares, the subdivision density would suitably act to provide a buffer between agricultural enterprises on land within proximity, whilst providing large lot residential blocks in a suitable and visually appealing locality, significantly diversifying the housing market. The Planning Proposal is therefore considered to have positive social and economic effects for the region.

6.3.2 Section D - State and Commonwealth Interests

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

The PP is not expected to result in a noticeable increase in demand for public infrastructure. Existing service infrastructure would be augmented to support future development and onsite management services shall be utilised. No limitations to existing services are known to exist.

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

No preliminary views were sought from any State or Commonwealth agencies as it was deemed to be unnecessary at this time given the scale and scope of the PP.

Pre and post Gateway consultation would be determined through the gateway process.

6.4 Part 4 - Mapping

The plans provided in **Appendix A** clearly outline the PP and associated likely development requirements. The plans include:

- 27447-P00 Cover Sheet and Drawing Schedule;
- 27447-P01 Existing Site Plan;
- 27447-P02 Existing and Proposed Zoning Maps;
- 27447-P03 Existing and Proposed MLS Maps; and
- 27447-P04 Master Plan.

Refer to **Appendix A** of this report.



6.5 Part 5 - Community Consultation

It is expected that the PP would not be a Low Impact Proposal and therefore community consultation would be undertaken in accordance with the requirements set out in *A Guide to Preparing Local Environmental Plans for "all other planning proposals"*.

The consultation would include:

- Notification in a newspaper that circulates in the area affected by the planning proposal;
- Notification on the website of the RPA; and
- Notification in writing to affected and adjoining landowners, unless the planning authority is of the opinion that the number of landowners makes it impractical to notify them.

6.6 Part 6 -Project Timeline

The following indicative project timeline is provided:

| Table 4 – Indicative Project Timing | |
|---|---------------------------------------|
| Stage | Timing |
| Anticipated commencement date (date of Gateway determination) | TBA |
| Anticipated timeframe for the completion of required technical information | 4 weeks |
| Timeframe for government agency consultation (pre and post exhibition as required by Gateway determination) | 4 weeks |
| Commencement and completion dates for public exhibition period | 4 weeks (28 day exhibition period) |
| Dates for public hearing (if required) | N/A |
| Timeframe for consideration of submissions | 4 weeks |
| Timeframe for the consideration of a proposal post exhibition | 4 weeks |
| Date of submission to the Department to finalise the LEP | TBA |
| Anticipated date RPA will make the plan (if delegated) | TBA |
| Anticipated date RPA will forward to the Department for notification. | TBA |

7 CONCLUSION

It is recommended that the planning proposal that intends to amend the *Mid-Western Regional Local Environmental Plan 2012* (Mid-Western LEP) by:

- Rezoning Lot 1 DP 174385 and Lot 1 DP 1003242 from RU4 Primary Production Small Lots to R5 Large Lot Residential and reducing the minimum lot size from 20 hectares to 2 hectares (as shown in the plans in **Appendix A** of this report).

is supported on the following grounds:

- It is consistent with the Central West and Orana Regional Plan;
- It is consistent with the Mid-Western Regional Comprehensive Land Use Strategy and Mudgee and Gulgong Urban Release Strategy;
- It is consistent with the applicable SEPPs;
- It is generally consistent with the Section 9.1 directions;
- It will not have any adverse environmental impacts;
- It is not expected to have any adverse social or economic effects;
- There is adequate infrastructure for the proposal;
- It is a site previously approved for tourist accommodation and the proposal is considered commensurate in terms of density to this use; and
- The PP provides the best way to achieve the intended objective.

It is therefore requested that the PP be forwarded for Gateway Determination.



8 REFERENCES

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Appendix A - Planning Proposal Plans

ALMARTO PTY LTD

CIVIL CONSTRUCTION DOCUMENTATION FOR PROPOSED RESIDENTIAL SUBDIVISION

313 MAGPIE LANE GULGONG 2852

SCHEDULE OF DRAWINGS

| SHEET No. | DESCRIPTION |
|-----------|----------------------------------|
| 27447 C00 | COVER SHEET AND DRAWING SCHEDULE |
| 27447 C01 | EXISTING SITE PLAN |
| 27447 C02 | PROPOSED SITE PLAN |



LOCALITY PLAN
 NOT TO REDUCTION RATIO

ISSUED FOR AUTHORITY APPROVAL



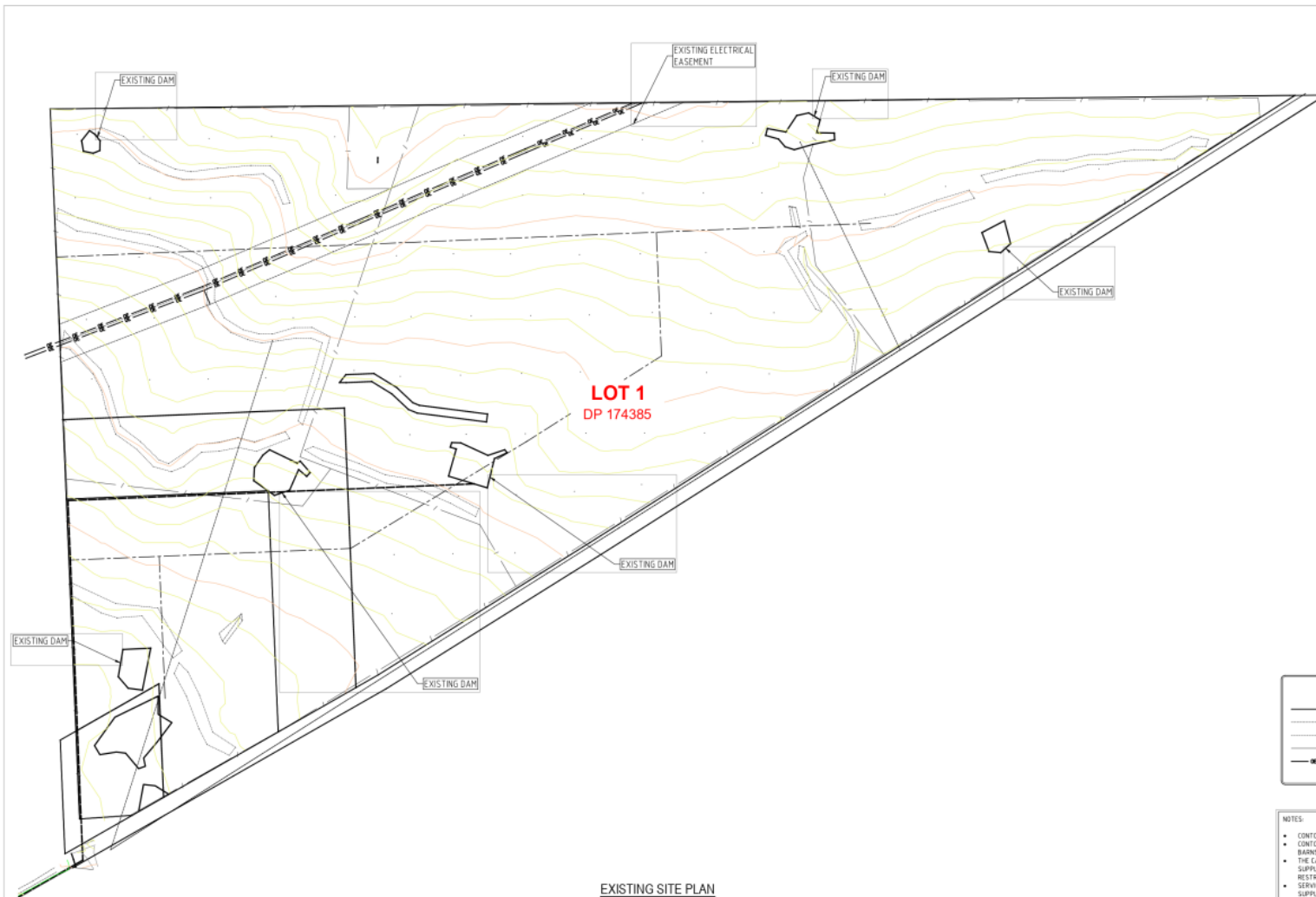
BARNSON PTY LTD
 1 1300 BARNSON (1300 227 676)
 • generalenquiry@barnson.com.au
 • www.barnson.com.au
 Bathurst | Dubbo | Mudgee | Sydney | Tamworth

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH GENERAL BUILDING DRAWINGS, SPECIFICATIONS & OTHER CONSULTANTS DRAWINGS APPLICABLE TO THIS PROJECT. ALL DIMENSIONS IN MILLIMETRES. DO NOT SCALE DIMENSIONS TO BE CHECKED ON SITE BEFORE COMMENCEMENT OF WORK. REPORT DISCREPANCIES TO BARNSON PTY LTD. NO PART OF THIS DRAWING MAY BE REPRODUCED IN ANY WAY WITHOUT THE WRITTEN PERMISSION OF BARNSON PTY LTD.

Client: **ALMARTO PTY LTD**
 Project: **RESIDENTIAL SUBDIVISION**
313 MAGPIE LANE GULGONG 2852
 Drawing Title: **COVER SHEET AND DRAWING SCHEDULE**

| Rev | Date | Amendment |
|-----|------------|--------------------|
| A | 05.12.2019 | PRELIMINARY |
| B | 08.10.2020 | AUTHORITY APPROVAL |

| Design | EG | Certification |
|--------------------------|----|--------------------|
| Drawn | EG | |
| Check | LM | Drawing Number |
| Original Sheet Size = A1 | | 27447 - C00 |
| | | Revision |
| | | B |



LOT 1
DP 174385

| LEGEND (EXISTING) | |
|-------------------|-------------------------------------|
| | EXISTING SUBJECT CADASTRAL BOUNDARY |
| | EXISTING EASEMENT BOUNDARY |
| | CHANGE OF GRADE |
| | EXISTING FENCE |
| | EXISTING OVERHEAD POWER LINE |

- NOTES:**
- CONTOUR INTERVAL = 30
 - CONTOURS AND LEVELS SHOWN ARE FROM EXTERNALLY SUPPLIED CAD DATA. BARNSON TAKES NO RESPONSIBILITY FOR THE ACCURACY OF THIS DATA.
 - THE CADASTRAL BOUNDARIES AS SHOWN HEREON ARE FROM EXTERNALLY SUPPLIED CAD DATA. NO CADASTRAL BOUNDARIES, EASEMENTS, RESTRICTIONS OR ENCUMBRANCES HAVE BEEN INVESTIGATED BY BARNSON. SERVICE LOCATIONS AND DEPTHS SHOWN HEREON ARE FROM EXTERNALLY SUPPLIED CAD DATA. BARNSON TAKES NO RESPONSIBILITY FOR THE ACCURACY OF THIS DATA. THE LOCATION OF AND DEPTHS OF ALL SERVICES SHOULD BE OBTAINED FROM SERVICE PROVIDERS, LOCATED AND VERIFIED ON SITE PRIOR TO ANY DEPLETION, EXCAVATION OR CONSTRUCTION.
 - UNDERGROUND SERVICES MAY EXIST WHICH HAVE NOT BEEN SHOWN ON THIS PLAN.

EXISTING SITE PLAN
REDUCTION RATIO 1:250 @ A1
1:500 @ A3

ISSUED FOR AUTHORITY APPROVAL



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Client: **ALMARTO PTY LTD**
Project: **RESIDENTIAL SUBDIVISION**
313 MAGPIE LANE GULGONG 2852

Drawing Title: **EXISTING SITE PLAN**

| Rev | Date | Amendment |
|-----|------------|--------------------|
| A | 05.12.2019 | PRELIMINARY |
| B | 08.10.2020 | AUTHORITY APPROVAL |

Design: **EG** Certification

Drawn: **EG**

Check: **LM** Drawing Number

Original Sheet Size = A1 **27447 - C01**

Revision

B



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 Bathurst | Dubbo | Mudgee | Sydney | Tamworth

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH GENERAL BUILDING DRAWINGS, SPECIFICATIONS & OTHER CONSULTANTS DRAWINGS APPLICABLE TO THIS PROJECT. ALL DIMENSIONS IN MILLIMETRES. DO NOT SCALE DIMENSIONS TO BE CHECKED ON SITE BEFORE COMMENCEMENT OF WORK. REPORT DISCREPANCIES TO BARNSON PTY LTD. NO PART OF THIS DRAWING MAY BE REPRODUCED IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF BARNSON PTY LTD.

Client: **ALMARTO PTY LTD**
 Project: **RESIDENTIAL SUBDIVISION**
313 MAGPIE LANE GULGONG 2852
 Drawing Title: **PROPOSED SITE PLAN**

Rev | Date | Amendment
 A | 05.12.2019 | PRELIMINARY
 B | 08.10.2020 | AUTHORITY APPROVAL

Design: **EG** Certification
 Drawn: **EG**
 Check: **LM** Drawing Number
 Original Sheet Size = A1 **27447 - C02** Revision **B**



Appendix B - Planning Proposal Checklist

STEP 1: REQUIRED FOR ALL PROPOSALS
(under s3.33(2)(a-e) of the EP&A Act)

- | | |
|--|--|
| <ul style="list-style-type: none"> Objectives and intended outcome Mapping (including current and proposed zones) Community consultation (agencies to be consulted) | <ul style="list-style-type: none"> Explanation of provisions Justification and process for implementation (including compliance assessment against relevant section 9.1 direction/s) |
|--|--|

STEP 2: MATTERS – CONSIDERED ON A CASE BY CASE BASIS
(Depending on complexity of planning proposal and nature of issues)

| Planning Matters or Issues | to be considered | N/A | | to be considered | N/A | | |
|--|-------------------------------------|-------------------------------------|--|-------------------------------------|-------------------------------------|--------------------------|-------------------------------------|
| Strategic Planning Context | | | Environmental Considerations | | | | |
| Consistent with the relevant regional, district or corridor/precinct plans applying to the site, including any draft regional/district or corridor/precinct plans released or public comment; or | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Flooding | <input type="checkbox"/> | <input checked="" type="checkbox"/> | | |
| Consistent with a relevant local council strategy that has been endorsed by the Department; or | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Land/site contamination (SEPP55) | <input type="checkbox"/> | <input checked="" type="checkbox"/> | | |
| Responding to a change in circumstances, such as the investment in new infrastructure or changing demographic trends that have not been recognised by existing planning controls; or | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Resources (including drinking water, minerals, oysters, agricultural lands, fisheries, mining) | <input type="checkbox"/> | <input checked="" type="checkbox"/> | | |
| Seeking to update the current planning controls if they have not been amended in the last 5 years | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Sea level rise | <input type="checkbox"/> | <input checked="" type="checkbox"/> | | |
| Site Description / Context | | | Urban design Considerations | | | | |
| Aerial photographs | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Existing site plan (buildings, vegetation, roads, etc) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | | |
| Site photos / photomontage | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Building mass/block diagram study (changes in building height and FSR) | <input type="checkbox"/> | <input checked="" type="checkbox"/> | | |
| Traffic and Transport Considerations | | | Economic Considerations | | | | |
| Local traffic and transport | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Economic impact assessment | <input type="checkbox"/> | <input checked="" type="checkbox"/> | | |
| TMAP | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Retail centres hierarchy | <input type="checkbox"/> | <input checked="" type="checkbox"/> | | |
| Public transport | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Employment land | <input type="checkbox"/> | <input checked="" type="checkbox"/> | | |
| Cycle and pedestrian movement | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Social and Cultural Considerations | | | | |
| Environmental Considerations | | | Heritage impact | | | | |
| Bushfire Hazard | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Heritage impact | <input checked="" type="checkbox"/> | <input type="checkbox"/> | | |
| Acid sulphate Soil | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Aboriginal archaeology | <input checked="" type="checkbox"/> | <input type="checkbox"/> | | |
| Noise impact | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Open space management | <input type="checkbox"/> | <input checked="" type="checkbox"/> | | |
| Flora and/or fauna | <input checked="" type="checkbox"/> | <input type="checkbox"/> | European archaeology | <input checked="" type="checkbox"/> | <input type="checkbox"/> | | |
| Soil stability, erosion, sediment, landslip assessment and subsidence | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Social and cultural impacts | <input type="checkbox"/> | <input checked="" type="checkbox"/> | | |
| Water quality | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Stakeholder engagement | <input type="checkbox"/> | <input checked="" type="checkbox"/> | | |
| Stormwater management | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Infrastructure Considerations | | | | |
| | | | Infrastructure servicing and potential funding arrangements | | | | |
| | | | Infrastructure servicing and potential funding arrangements | | | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | | | Miscellaneous / Additional Considerations | | | | |
| | | | List any additional studies that should be undertaken post Gateway determination | | | <input type="checkbox"/> | <input checked="" type="checkbox"/> |



Appendix C - Title & Deposited Plan

Req:R554902 /Doc:DP 0174385 P /Rev:15-Mar-2019 /NSW LRS /Prt:30-Jan-2020 14:49 /Seq:1 of 2
© Office of the Registrar-General /Src:URBISPRO /Ref:Barnson Pty Ltd (Mudgee)

A982913
Plan Form No. 6 (for transfers, leases, etc).

Municipality of
Shire of Wyaldra.



PLAN F.P.174385

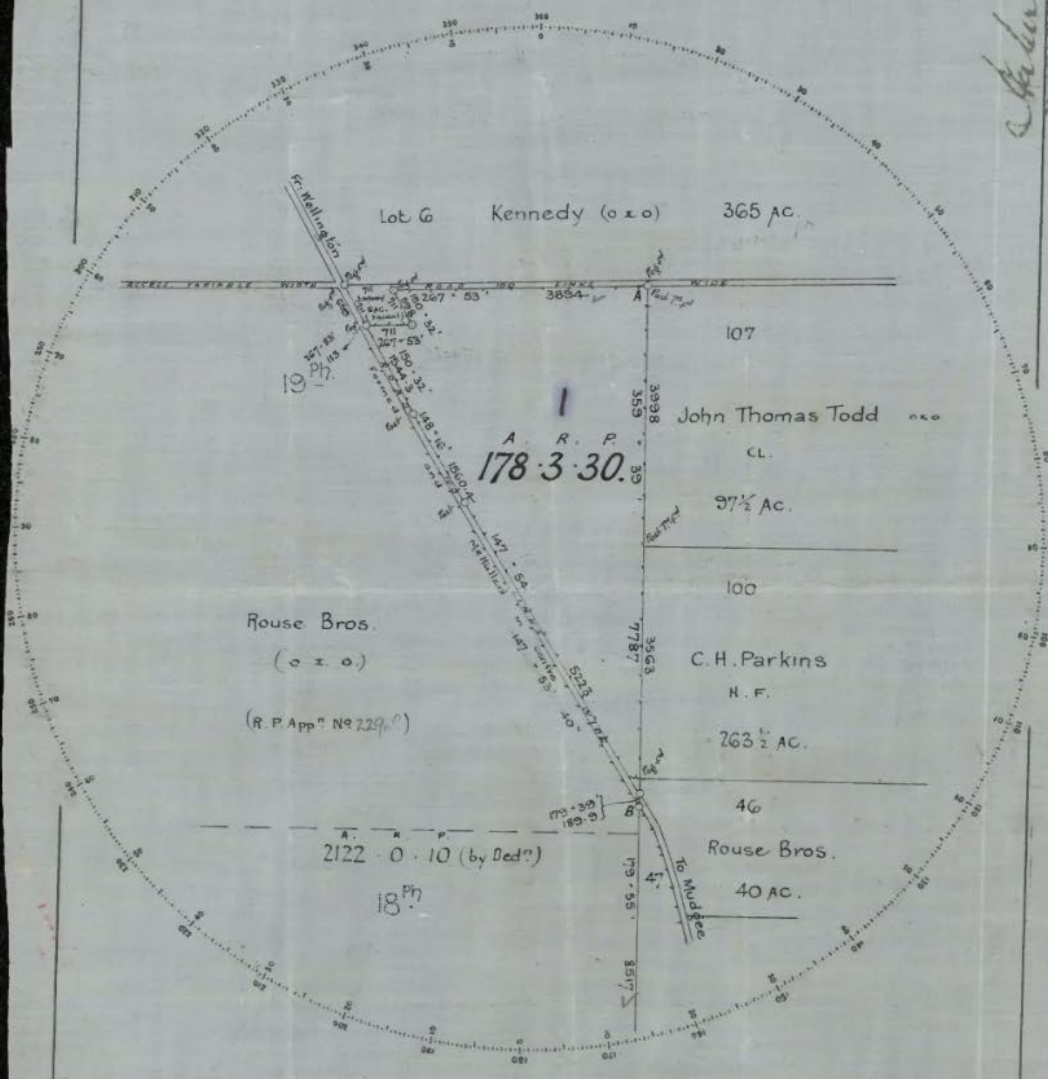
of part of original Portion 19, of 784 Acres.
Parish of Galambine, County of Phillip.

Scale: 20 Chains to an Inch.

A982913

Arthur H. L. Lacey
Leslie G. Lacey

Signatures of parties to be made in this margin.



This is the plan marked "E" referred to in Transfer for H.C. Rouse to L.G. Rouse
Dated 14th August 1923

M. G. P. 60
23/6/20
20/6/23

I, William Abernethy of Mudgee N.S.W. Licensed Surveyor, specially Licensed under the Real Property Act, do hereby solemnly and sincerely declare that the boundaries and measurements shown in this plan are correct for the purposes of the said Act, and that the survey of the land to which the plan relates has been made by me, and I make this solemn declaration conscientiously believing the same to be true, and by virtue of the provisions of the Oaths Act, 1900.

Subscribed and declared before me at Mudgee this 23rd day of June, A.D. 1920

William Abernethy
Licensed Surveyor.

Datum line of Azimuth A.B.

Date of Survey 24th June 1920

* Here add by me or under my immediate supervision as the case may be



CONVERSION TABLE ADDED IN
DEPARTMENT OF LANDS

DP 174385

| LINKS | METRES |
|--------|----------|
| 100 | 20.117 |
| 113 | 22.732 |
| 189.9 | 38.202 |
| 598 | 120.298 |
| 659 | 132.570 |
| 699 | 140.616 |
| 711 | 143.030 |
| 1544.3 | 310.664 |
| 1560.4 | 313.903 |
| 3563 | 716.762 |
| 3894 | 783.348 |
| 3998 | 804.270 |
| 5223 | 1050.700 |
| 7787 | 1566.495 |
| 8517 | 1713.348 |

| AC | RD | P | HA |
|------|----|----|-------|
| 5 | - | - | 2.023 |
| 40 | - | - | 16.19 |
| 97 | 2 | - | 39.46 |
| 178 | 3 | 30 | 72.41 |
| 263 | 2 | - | 106.6 |
| 365 | - | - | 147.7 |
| 2122 | - | 10 | 858.8 |



Appendix D - Groundwater Works Summaries

WaterNSW

Work Summary

GW800644

Licence:

Licence Status:

Authorised Purpose(s):
Intended Purpose(s): TEST BORE

Work Type: Bore

Work Status: Filled

Construct.Method: Rotary Air

Owner Type: Private

Commenced Date:
Completion Date: 14/05/1998

Final Depth: 106.70 m
Drilled Depth:

Contractor Name: Dalton Water Drilling Services PTY LTD

Driller: John Micheal Dalton

Assistant Driller:

Property:

Standing Water Level
(m):

GWMA:

Salinity Description:

GW Zone:

Yield (L/s):

Site Details

Site Chosen By:

Form A: PHILLIP
Licensed:

County:

Parish: GALAMBINE

Cadastre:

Region: 80 - Macquarie-Western

CMA Map: 8833-S

River Basin: 421 - MACQUARIE RIVER
Area/District:

Grid Zone:

Scale:

Elevation: 0.00 m (A.H.D.)
Elevation Source: Unknown

Northing: 6409434.000
Easting: 735413.000

Latitude: 32°25'38.5"S
Longitude: 149°30'13.2"E

GS Map: -

MGA Zone: 55

Coordinate Source: Map Interpre

Construction

Negative depths indicate Above Ground Level; C-Cemented; SL-Slot Length; A-Aperture; GS-Grain Size; Q-Quantity; PL-Placement of Gravel Pack; PC-Pressure Cemented; S-Sump; CE-Centralisers

| Hole | Pipe | Component | Type | From (m) | To (m) | Outside Diameter (mm) | Inside Diameter (mm) | Interval | Details |
|------|------|-----------|------|----------|--------|-----------------------|----------------------|----------|------------|
| 1 | | Hole | Hole | 0.00 | 106.70 | 200 | | | Rotary Air |

Remarks

14/05/1998: Form A Remarks:
Hole abandoned - backfilled

*** End of GW800644 ***

09/03/2020 https://realtime.data.watersw.com.au/wgen/users/80eefb4879ac4a3c9e3412318a265fc2/gw800643.agagpf_org.wsr.htm?1583727...

WaterNSW Work Summary

GW800643

Licence:

Licence Status:

Authorised Purpose(s):
Intended Purpose(s): TEST BORE

Work Type: Bore

Work Status: Filled

Construct.Method: Rotary Air

Owner Type: Private

Commenced Date:
Completion Date: 14/05/1998

Final Depth: 121.90 m
Drilled Depth:

Contractor Name: Dalton Water Drilling Services PTY LTD

Driller: John Micheal Dalton

Assistant Driller:

Property:

Standing Water Level (m):

GWMA:

Salinity Description:

GW Zone:

Yield (L/s):

Site Details

Site Chosen By:

Form A: PHILLIP
Licensed:

County: PHILLIP
Parish: GALAMBINE

Cadastre:

Region: 80 - Macquarie-Western

CMA Map: 8833-S

River Basin: 421 - MACQUARIE RIVER
Area/District:

Grid Zone:

Scale:

Elevation: 0.00 m (A.H.D.)
Elevation Source: Unknown

Northing: 6409609.000
Easting: 735938.000

Latitude: 32°25'32.4"S
Longitude: 149°30'33.1"E

GS Map: -

MGA Zone: 55

Coordinate Source: Map Interpre

Construction

Negative depths indicate Above Ground Level; C-Cemented; SL-Slot Length; A-Aperture; GS-Grain Size; Q-Quantity; PL-Placement of Gravel Pack; PC-Pressure Cemented; S-Sump; CE-Centralisers

| Hole | Pipe | Component | Type | From (m) | To (m) | Outside Diameter (mm) | Inside Diameter (mm) | Interval | Details |
|------|------|-----------|----------|----------|--------|-----------------------|----------------------|----------|------------|
| 1 | | Hole | Hole | 0.00 | 121.90 | 200 | | | Rotary Air |
| 1 | | Backfill | Backfill | 0.00 | 121.90 | | | | |

Remarks

14/05/1998: Form A Remarks:
HOLE ABANDONED - BACKFILLED

*** End of GW800643 ***

WaterNSW

Work Summary

GW801349

Licence:

Licence Status:

Authorised Purpose(s):

Intended Purpose(s): IRRIGATION

Work Type: Bore

Work Status: Supply Obtained

Construct.Method:

Owner Type: Private

Commenced Date:

Completion Date: 14/05/1998

Final Depth:

Drilled Depth: 106.70 m

Contractor Name: Dalton Water Drilling Services PTY LTD

Driller: John Micheal Dalton

Assistant Driller:

Property:

Standing Water Level 27.400

(m):

GWMA:

Salinity Description:

GW Zone:

Yield (L/s):

Site Details

Site Chosen By:

Form A: PHILLIP
Licensed:

County

Parish

GALAMBINE

Cadastre

LOT 101 DP755431

Region: 80 - Macquarie-Western

CMA Map: 8833-3S

River Basin: 421 - MACQUARIE RIVER
Area/District:

Grid Zone:

Scale:

Elevation: 0.00 m (A.H.D.)

Elevation Source: Unknown

Northing: 6410064.000

Easting: 736282.000

Latitude: 32°25'17.4"S

Longitude: 149°30'45.9"E

GS Map: -

MGA Zone: 55

Coordinate Source: Map Interpre

Construction

Negative depths indicate Above Ground Level; C-Cemented; SL-Slot Length; A-Aperture; GS-Grain Size; Q-Quantity; PL-Placement of Gravel Pack; PC-Pressure Cemented; S-Sump; CE-Centralisers

| Hole | Pipe | Component | Type | From (m) | To (m) | Outside Diameter (mm) | Inside Diameter (mm) | Interval | Details |
|------|------|-----------|-------|----------|--------|-----------------------|----------------------|----------|---------|
| 1 | | Hole | Hole | 0.00 | 106.70 | 254 | | | Other |
| 1 | 1 | Casing | | -0.50 | 84.80 | 203 | | | |
| 1 | 1 | Opening | Slots | 45.70 | 79.20 | 203 | | 0 | |

Water Bearing Zones

| From (m) | To (m) | Thickness (m) | WBZ Type | S.W.L. (m) | D.D.L. (m) | Yield (L/s) | Hole Depth (m) | Duration (hr) | Salinity (mg/L) |
|----------|--------|---------------|----------|------------|------------|-------------|----------------|---------------|-----------------|
| 48.70 | 64.70 | 16.00 | Unknown | 27.40 | | 2.52 | | | |
| 64.00 | 65.50 | 1.50 | Unknown | 27.40 | | 6.30 | | | |
| 75.60 | 77.10 | 1.50 | Unknown | 27.40 | | 2.52 | | | |

Drillers Log

| From (m) | To (m) | Thickness (m) | Drillers Description | Geological Material | Comments |
|----------|--------|---------------|----------------------|---------------------|----------|
| 0.00 | 1.20 | 1.20 | Topsoil | Topsoil | |
| 1.20 | 5.80 | 4.60 | Clay, brown | Clay | |
| 5.80 | 85.30 | 79.50 | Shale, decomposed | Shale | |

09/03/2020 https://realtime.data.watersw.com.au/wgen/users/80eefb4879ac4a3c9e3412318a265fc2/gw800636.agagpf_org.wsr.htm?1583727...

WaterNSW Work Summary

GW800636

| | |
|--|---|
| Licence: | Licence Status: |
| | Authorised Purpose(s): Intended Purpose(s): DOMESTIC |
| | |
| Work Type: Bore | |
| Work Status: Supply Obtained | |
| Construct.Method: Rotary Air | |
| Owner Type: Private | |
| | |
| Commenced Date: | Final Depth: 93.00 m |
| Completion Date: 05/06/1997 | Drilled Depth: 93.00 m |
| | |
| Contractor Name: Dalton Water Drilling Services PTY LTD | |
| Driller: John Micheal Dalton | |
| Assistant Driller: | |
| | |
| Property: | Standing Water Level (m): |
| GWMA: | Salinity Description: Good |
| GW Zone: | Yield (L/s): |

Site Details

Site Chosen By:

| | | |
|---|------------------------------|--|
| Form A: PHILLIP | County: PHILLIP | Parish: GALAMBINE |
| Licensed: | | Cadastre: LOT 45 |
| | | |
| Region: 80 - Macquarie-Western | CMA Map: 8833-S | |
| River Basin: 421 - MACQUARIE RIVER | Grid Zone: | Scale: |
| Area/District: | | |
| | | |
| Elevation: 0.00 m (A.H.D.) | Northing: 6410684.000 | Latitude: 32°24'56.9"S |
| Elevation Source: Unknown | Easting: 736813.000 | Longitude: 149°31'05.6"E |
| | | |
| GS Map: - | MGA Zone: 55 | Coordinate Source: Map Interpre |

Construction

Negative depths indicate Above Ground Level; C-Cemented; SL-Slot Length; A-Aperture; GS-Grain Size; Q-Quantity; PL-Placement of Gravel Pack; PC-Pressure Cemented; S-Sump; CE-Centralisers

| Hole | Pipe | Component | Type | From (m) | To (m) | Outside Diameter (mm) | Inside Diameter (mm) | Interval | Details |
|------|------|-----------|------|----------|--------|-----------------------|----------------------|----------|------------|
| 1 | | Hole | Hole | 0.00 | 93.00 | 165 | | | Rotary Air |
| 1 | 1 | Casing | Abs | -0.45 | 12.20 | 165 | | | Welded |

Water Bearing Zones

| From (m) | To (m) | Thickness (m) | WBZ Type | S.W.L. (m) | D.D.L. (m) | Yield (L/s) | Hole Depth (m) | Duration (hr) | Salinity (mg/L) |
|----------|--------|---------------|----------|------------|------------|-------------|----------------|---------------|-----------------|
| 44.20 | 44.50 | 0.30 | Unknown | 21.30 | | 0.15 | 46.00 | | |
| 62.50 | 62.80 | 0.30 | Unknown | 21.30 | | 1.02 | 93.00 | | |

Drillers Log

| From (m) | To (m) | Thickness (m) | Drillers Description | Geological Material | Comments |
|----------|--------|---------------|----------------------|---------------------|----------|
| 0.00 | 0.90 | 0.90 | Topsoil | Topsoil | |
| 0.90 | 3.60 | 2.70 | Clay | Clay | |
| 3.60 | 10.60 | 7.00 | Shale, soft | Shale | |
| 10.60 | 93.00 | 82.40 | Tuff and Shale | Tuff | |

WaterNSW

Work Summary

GW014906

Licence:

Licence Status:

Authorised Purpose(s):

Intended Purpose(s): IRRIGATION

Work Type: Bore

Work Status: Abandoned

Construct.Method: Cable Tool

Owner Type: Private

Commenced Date:

Completion Date: 01/06/1963

Final Depth: 14.30 m

Drilled Depth: 14.30 m

Contractor Name: (None)

Driller:

Assistant Driller:

Property:

Standing Water Level

(m):

GWMA:

Salinity Description: 0-500 ppm

GW Zone:

Yield (L/s):

Site Details

Site Chosen By:

County
Form A: WELLINGTON
Licensed:Parish
BIRAGANBICadastr
22

Region: 80 - Macquarie-Western

River Basin: 421 - MACQUARIE RIVER
Area/District:

CMA Map: 8733-S

Grid Zone:

Scale:

Elevation: 0.00 m (A.H.D.)
Elevation Source: (Unknown)Northing: 6411579.000
Easting: 732143.000Latitude: 32°24'31.4"S
Longitude: 149°28'06.2"E

GS Map: -

MGA Zone: 55

Coordinate Source: GD.,ACC.MAP

Construction

Negative depths indicate Above Ground Level; C-Cemented; SL-Slot Length; A-Aperture; GS-Grain Size; Q-Quantity; PL-Placement of Gravel Pack; PC-Pressure Cemented; S-Sump; CE-Centralisers

| Hole | Pipe | Component | Type | From (m) | To (m) | Outside Diameter (mm) | Inside Diameter (mm) | Interval | Details |
|------|------|-----------|-----------|----------|--------|-----------------------|----------------------|----------|---------|
| 1 | 1 | Casing | Withdrawn | 0.00 | 0.00 | 203 | | | |

Water Bearing Zones

| From (m) | To (m) | Thickness (m) | WBZ Type | S.W.L. (m) | D.D.L. (m) | Yield (L/s) | Hole Depth (m) | Duration (hr) | Salinity (mg/L) |
|----------|--------|---------------|----------------|------------|------------|-------------|----------------|---------------|-----------------|
| 4.20 | 4.20 | 0.00 | Unconsolidated | 3.00 | | | | | |

Drillers Log

| From (m) | To (m) | Thickness (m) | Drillers Description | Geological Material | Comments |
|----------|--------|---------------|--------------------------|---------------------|----------|
| 0.00 | 3.05 | 3.05 | Clay | Clay | |
| 3.05 | 5.18 | 2.13 | Clay Gravel Water Supply | Clay | |
| 5.18 | 8.23 | 3.05 | Clay Sandy | Clay | |
| 8.23 | 11.58 | 3.35 | Sandstone Hard | Sandstone | |
| 11.58 | 14.33 | 2.75 | Shale Black | Shale | |

09/03/2020 https://realtime.data.waternsw.com.au/wgen/users/80eefb4879ac4a3c9e3412318a265fc2/gw028222.agagpf_org.wsr.htm?1583728...

WaterNSW Work Summary

GW028222

Licence: 80WA709524

Licence Status: CURRENT

Authorised Purpose(s): IRRIGATION
Intended Purpose(s): IRRIGATION

Work Type: Bore
Work Status:
Construct.Method: Rotary
Owner Type: Private

Commenced Date:
Completion Date: 01/06/1966

Final Depth: 106.60 m
Drilled Depth: 106.70 m

Contractor Name: (None)

Driller:
Assistant Driller:

Property: BIRAGANBIL NSW
GWMA: 010 - CUDGEGONG VALLEY
GW Zone: -

Standing Water Level (m):
Salinity Description:
Yield (L/s):

Site Details

Site Chosen By:

| | | |
|-----------------------------|---------------|---------------------|
| County | Parish | Cadastre |
| Form A: WELLINGTON | BIRAGANBI | 22 |
| Licensed: WELLINGTON | BIRAGANBIL | Whole Lot 12/880851 |

Region: 80 - Macquarie-Western
River Basin: 421 - MACQUARIE RIVER
Area/District:

CMA Map: 8733-S
Grid Zone:

Scale:

Elevation: 0.00 m (A.H.D.)
Elevation Source: (Unknown)

Northing: 6410319.000
Easting: 732009.000

Latitude: 32°25'12.4"S
Longitude: 149°28'02.2"E

GS Map: -

MGA Zone: 55

Coordinate Source: GD,ACC,MAP

Drillers Log

| From (m) | To (m) | Thickness (m) | Drillers Description | Geological Material | Comments |
|----------|--------|---------------|------------------------|---------------------|----------|
| 0.00 | 1.83 | 1.83 | Topsoil | Topsoil | |
| 1.83 | 11.58 | 9.75 | Sand River Gravel | Sand | |
| 11.58 | 73.15 | 61.57 | Shale Grey | Shale | |
| 73.15 | 76.81 | 3.66 | Sandstone | Sandstone | |
| 76.81 | 79.55 | 2.74 | Sandstone Hard | Sandstone | |
| 79.55 | 89.92 | 10.37 | Shale Grey | Shale | |
| 89.92 | 100.58 | 10.66 | Sandstone Water Supply | Sandstone | |
| 100.58 | 106.68 | 6.10 | Shale Grey | Shale | |

*** End of GW028222 ***

Warning To Clients: This raw data has been supplied to the WaterNSW by drillers, licensees and other sources. WaterNSW does not verify the accuracy of this data. The data is

https://realtime.data.waternsw.com.au/wgen/users/80eefb4879ac4a3c9e3412318a265fc2/gw028222.agagpf_org.wsr.htm?1583728211959&15837... 1/2



Appendix E - Effluent Assessment

On-site effluent management study

313 Magpie Lane, Galambine NSW 2850

Ref: R11872e

Date: 17 April 2020

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Environmental
Geotechnical
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Services



Client: Bamson
6/11 White Street
Tamworth NSW 2340

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Environmental Scientist

Checked by: Andrew Ruming BSc
Senior Environmental Scientist

Interested authorities: Mid-Western Regional Council

Report number: R11872e

Date: 17 April 2020

Summary

Proposed development and situation

A rural residential development consisting of 33 lots is proposed for Lot 1 DP174385 and Lot 1 DP1003242, 313 Magpie Lane, Galambine NSW. An existing dwelling is located on the site and is expected to be serviced by an existing septic tank and absorption trench. The development is unlikely to be connected to municipal sewer. An on-site effluent management system is required for each dwelling on the site.

This report describes the assessment and recommends a suitable effluent treatment and application system on a generic basis.

Objective

Undertake site assessment using the Australian Standard 1547, On-site domestic wastewater management and the Environment and Health Protection Guidelines, On-site sewage management for single households (1998), Department of Urban Affairs and Planning, as guidelines. Site limitations were identified and suitable wastewater application systems and sizing are recommended on a generic basis.

Investigation

A site assessment was undertaken on 1 April 2020. Soil data from boreholes previously undertaken on the site (7 September 2001 and 24 April 2003) were used. A desktop study was conducted using expected wastewater flows and collection of available site information.

Site and soil assessment

The historical land-use of the site is grazing of livestock. The terrain is undulating rolling hills. Drainage lines and dams are located across the site. The surface water from the site discharges into Pig and Whistle Creek and eventually into Cudgegong Creek.

Vegetation on the site consists of pasture species and broadleaved weeds.

The previous soil investigations identified topsoil consisting of clay loams to sandy loams to a depth between 150 and 300mm. Subsoils consisted of clay loams, light clays and medium clays to the drilling depth of 1100mm. Grey mottles were identified in the soil profile from a depth of 420mm and indicate moderate drainage. The soil samples collected were moderately to highly dispersive.

Limitations to the application of effluent were identified and include topography, rock outcrops, soil type, soil dispersiveness and landscape features.

System recommendation

Based on the site and soil limitations, practicality and cost considerations the following recommendations are made for the treatment and application of effluent for each lot.

The recommended effluent system for each lot based on available information and assumptions is expected to be:

- **Surface irrigation area of 488m²** with a secondary treatment system accredited by NSW Health

The recommendations are made using the available data and should be considered as being generalised for the site as a whole. Assumptions have been made in the soil description and a

specific site and soil assessment is required to make recommendations of locations and suitable systems for individual lots.

All lots are expected to have sufficient areas for application systems after allowance for buffer distances to boundaries, buildings, drainage lines and bores.

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1. Introduction

A rural residential development consisting of 33 lots is proposed for Lot 1 DP174385 and Lot 1 DP1003242, 313 Magpie Lane, Galambine NSW. An existing dwelling is located on the site and is expected to be serviced by an existing septic tank and absorption trench. The development is unlikely to be connected to municipal sewer. An on-site effluent management system is required for each dwelling on the site.

The site has a total area of approximately 75 hectares. The proposed lot sizes range from 1.43 to 4.28 hectares and currently consist primarily of pasture crops. The historical land-use for the property is pasture for livestock grazing.

2. Scope of work

A site assessment and soil assessment was undertaken using the Australian Standard 1547, On-site domestic wastewater management, Sydney Catchment Authority guidelines, Designing and Installing On-site Wastewater Systems (2012) and the Environment and Health Protection Guidelines, On-site sewage management for single households (1998), Department of Urban Affairs and Planning, as guidelines. Site limitations were identified and suitable wastewater application systems and sizing are recommended on a generic basis.

3. Site identification

3.1 Location

The site is bordered by Guntawang Road and Magpie Lane (Figure 1). The site is described as Lot 1 DP DP174385 and Lot 1 DP1003242, 313 Magpie Lane, Galambine NSW.

3.2 Council area

Mid-Western Regional Council

3.3 Owner/Developer

Barnson
6/11 White Street
Tamworth NSW 2340

3.4 Development

The proposed subdivision will create 33 lots, Lots 1 to 33. Lots range in size from 1.43ha to 4.28ha (Figure 2). The development will involve the construction of roads and access driveways.

3.5 Area and lot sizes

The total area of the site is 75 hectares from which 33 lots are proposed. Individual sizes are presented in Figure 2. Building envelopes have not been identified for each lot. The whole site was assessed for on-site effluent suitability. Photographs of the site are presented in Figure 3.

3.6 Current land use

The current land-use is crop and grazing of stock.

3.7 Local experience of on-site management systems

Effluent systems work satisfactorily in locality when they have been adequately designed

4. Site condition and surrounding environment

An assessment of the site was made from a desktop study and field visit. Information for the desktop study was obtained from topographic maps, aerial photographs and database searches.

A site inspection was undertaken on 1 April 2020. The site was described and soil sample collected for laboratory analysis. Previous boreholes undertaken on the site were obtained for information on the soil profile.

At the time of the investigation surrounding land-use consisted of stock grazing.

4.1 Topography

The topography of the site is undulating rolling hills with slopes ranging from 1 to 5%. Slopes are gentler in the southern section of the site. The site is located on a lower slope. Elevation ranges from 425 to 445 metres. Aspect varies over the site.

The lots predominately have a high exposure and flood hazard across the site is low. The subsoil has a low to moderate erodibility and erosion hazard. The erosion hazard is reduced by maintenance of adequate vegetation cover.

4.2 Climate

Summers are warm to hot and winters are cold with little or no effective evaporation. The occurrence of rainfall is slightly higher in summer. Average annual rainfall is 647 mm and annual evaporation is 1335mm.

4.3 Hydrogeology

4.3.1 Surface Water

No permanent streams are located on the site. Two drainage lines are located on the site, one traversing from the east to the north west and another from the east to the west. Surface water across the site predominately flows north west and south. Surface water flows along intermittent drainage lines and eventually into Pig and Whistle Creek approximately 100m west and 750m north from the site. Pig and Whistle Creek discharges into the Cudgegong River 1.5km east of the site.

Six dams are located on the site. The dams are expected to be used for stock watering.

The proximity of drainage lines and dams is a limitation to the application of effluent. Application areas need to be a minimum of 40m from drainage lines and dams.

4.3.2 Groundwater

No bores are located on the site or within 500m. The site is located in a groundwater vulnerable area identified on the Mid-Western Council Local Environmental Plan 2012. Local groundwater has very high salinity.

4.4 Vegetation

The site has been predominately cleared of native vegetation and is dominated by pasture species and broadleaved weeds.

No bare areas or areas indicating salinity were identified on the site.

4.5 Soil type and geology

The site is within the Mullion Creek Soil Landscape (Kovac *et al.* 1990).

The soils are derived from Chesleigh Formation, Cookman Formation, Undifferentiated, Cunningham Formation, Dunmoogin Formation, Lana Formation and Guroba Formation. Soils on the site include red podzolic soils on crests and upper slopes and yellow soloths and yellow solodic soils on mid to lower slopes and in drainage lines.

5. Investigation methods

A site inspection was undertaken on 1 April 2020. The site and surface conditions on the site were described.

Boreholes were previously undertaken on the site and the soil profile was described and samples were collected from boreholes at representative depths for the determination of physical and chemical properties. Soil physical and chemical properties measurements undertaken included: dispersion, texture, colour, pH and electrical conductivity (salinity). The tests were conducted by Envirowest Testing Services.

Soil electrical conductivity (EC) results of the 1:5 (soil:water suspension) were converted to saturated extracts (ECe). EC values are converted to ECe by using a multiplier factor (Hazelton and Murphy 1992), which is dependent on the soil texture (Table 1). Saline soils are defined as those with an electrical conductivity (ECe) greater than 4 dS/m (Charman and Murphy 2001). Soil salinity ratings and effects on plant growth are presented in Table 2.

Table 1. ECe texture based conversion factors (Charman and Murphy 2001)

| Soil texture | Conversion factor |
|--|-------------------|
| Loamy sand, clayey sand, sand | 23 |
| Sandy loam, fine sandy loam, light sandy clay loam | 14 |
| Loam, loam fine sandy, silt loam, sandy clay loam | 9.5 |
| Clay loam, silty clay loam, fine sandy clay loam | 8.6 |
| Sandy clay, silty clay, light clay | 7.5 |
| Light medium clay, medium clay, heavy clay | 5.8 |

Table 2. Soil salinity ratings based on ECe readings

| Salinity rating | ECe (dS/m)* | Effects on Plants |
|------------------------|-------------|---|
| Non saline (NS) | 0-2 | Salinity effects negligible |
| Slightly saline (SS) | 2-4 | Very salt sensitive plant growth restricted |
| Moderately saline (MS) | 4-8 | Salt sensitive plant growth restricted |
| Highly saline (HS) | 8-16 | Only salt tolerant plants unaffected |
| Extremely saline (ES) | >16 | Only extremely tolerant plants unaffected |

*ECe - Electrical conductivity of a saturated extract

Soil with ECe below 2 dS/m will have negligible effects on plant growth and soil stability. Soil with ECe of between 2 and 4 dS/m may restrict very salt sensitive plant growth. Soil with ECe between 4 and 8 dS/m will restrict the growth of salt sensitive plants.

Samples collected were analysed for dispersion using the Emerson aggregate test. Table 3 details the Emerson dispersion classes.

Table 3. Emerson dispersion classes

| Class | Description |
|--------------|---|
| 1 | Highly dispersive (slakes, complete dispersion) |
| 2 | Moderately dispersive, slakes, some dispersion |
| 3 | Slightly dispersive, slakes, some dispersion after remoulding |
| 4 | Non-dispersive, slakes, carbonate or gypsum present |
| 5 | Non-dispersive, slakes, dispersion in shaken suspension |
| 6 | Non-dispersive, slakes, flocculates in shaken suspension |
| 7 | Non-dispersive, no slaking, swells in water |
| 8 | Non-dispersive, no slaking, does not swell in water |

6. Results

6.1 Soils

Soil was previously assessed on the site on 7 September 2001 and 24 April 2003 by drilling 7 boreholes to 1.1 metres or drill refusal due to rock.

The soil profile was described and representative sample collected for the determination of physical and chemical properties. Soil physical properties measurements undertaken included: dispersion, texture, colour, pH, and salinity. The laboratory tests for physical properties were undertaken by Envirowest Testing Services and presented with the borelogs in Appendix 1.

6.1.1 Soil profile

The previous soil investigations identified topsoil consisting of clay loams to sandy loams to a depth between 150 and 300mm. Subsoils consisted of clay loams, light clays and medium clays to the drilling depth of 1100mm. Grey mottles were identified in the soil profile from a depth of 420mm and indicate moderate drainage. The soil samples collected were moderately to highly dispersive.

6.1.2 Depth to bedrock

Soil depth was previously identified between 600 to greater than 1100mm. This depth is expected to decrease on the upper slopes of the site. The depth to rock is expected to be a site limitation on these upper slopes to the application of effluent.

6.1.3 Surface rocks, rock outcrops

Rock outcrops were observed on the site. These rock outcrops will be a limitation to the application of effluent in specific areas. Rock outcrops are indicated in Figure 2.

6.1.4 Depth to groundwater

Seasonally elevated groundwater was previously identified between 600 and 1000mm as indicated by the presence of grey mottles and ironstone gravel.

6.1.5 Coarse fragments

Gravel and sand were previously identified in the borehole profiles. The gravel is not a limitation to the application of effluent. Some areas contain cobbles on the surface and in the profile.

6.1.6 Bulk density

Bulk density was estimated to be moderate from field assessment and the land-use history. Bulk density will not limit plant growth.

6.1.7 pH

Soils on the site were previously measured to be neutral. The levels present will significantly affect the growth of most species.

6.1.8 Salinity

No salt tolerant vegetation was observed. The electrical conductivity of all soil samples tested was non-saline. Results were less than 4 mS/cm which is considered the saline threshold. Saline soils are known to occur in the locality.

The site is located in the Dunedoo hydrogeological landscape. The salinity occurrence is localised and salt store high. Strata contains high salt load which is readily mobilised from concentrations in impermeable layers with fractured beds. Groundwater was very high salinity.

6.1.8.1 Indicators of salinity

Bare soil

No bare soils were present on the site at the time of inspection.

Salt crystals

No salt crystals were present on site at the time of inspection. Saline areas are known to occur upslope in the sub-catchment.

Vegetation indicators

No highly salt tolerant plant species are present on site. No patchiness or reduced vigour in any area of the pasture was observed.

Die back

No die back was observed on or surrounding the site.

Effects on buildings

No staining, corrosion or rising damp observed.

6.1.9 Phosphorus sorption

Estimated to be low to moderate for the site (6,500mg/kg).

Phosphorous sorption of the soil is a minor limitation. The effluent system will be designed to contain phosphorus within the application area.

6.1.10 Nutrient balance

Nitrogen will be utilised by plant growth and denitrified or absorbed in the soil. The soil has capacity to support active vegetation which will contain nitrogen in the application area.

6.1.11 Cation exchange capacity (CEC)

The CEC is estimated to be low to moderate from the soil texture. The application of nutrient in the effluent will provide nutrients for plant growth that are naturally deficient in the soil. The soil will provide adequate retention of nutrients for plant growth.

6.1.12 Dispersiveness

Moderately to highly dispersive soils have been previously identified on the site. An adequately designed effluent system with the maintenance of vegetation on the application area and the regular

application of gypsum will prevent any reduction in infiltration or erosion problems associated with the dispersive soils.

6.1.13 Soil structure

The soils were assessed to have a moderate soil structure.

7. On-site effluent management

7.1 Slope

Slope is a limitation to application of wastewater. Steep slopes can cause greater run-off during wet weather. The application of wastewater from absorption trench systems is limited to slopes of 15% or less and for sub-surface irrigation systems of 30% or less. Application area location and system selection prevent slope from limiting the application of effluent on the site. Slopes within the recommended application area are 3% to 5%.

7.2 Buffers and available area

Sufficient buffer distances to drainage lines and dams are available in all lots and this can be additionally confirmed at the time of construction. Recommended buffer distances to streams, bores, dwellings, rock outcrops and boundaries are presented in Appendix 2. Areas of established trees should be protected by exclusion of application areas within the canopy drip zone.

7.2.1 Permanent waters, streams, lakes, rivers.

No streams are located on the site. Pig and Whistle Creek is a permanent stream located within 100m east of the site. Cudgegong River is located approximately 500m east of the site.

7.2.2 Other waters, intermittent waterways

A drainage line is located from the east to the north west of the site and one drainage line is located from the east to the west in the southern section of the site. Six dams are located on the site. The dams are expected to be used for stock watering. A 40m buffer distances is required to the dams and drainage lines.

7.2.3 Domestic groundwater wells

No groundwater bores are located on the site or within 500m. No impact on groundwater is expected from the application of effluent.

7.2.4 Boundary premises

A buffer of 12m from the boundaries in each lot is required.

7.2.5 Available area and reserve area

Typical application areas are 488m² and therefore sufficient area is available in each lot for effluent application.

7.3 Dispersive soil

Moderately to highly dispersive soil has been identified on the site and within the locality. Soil dispersion can result in soil crushing. The maintenance of vegetation on the application area and the regular application of gypsum will prevent any reduction in infiltration or erosion problems associated with the slightly to highly dispersive soils. The periodic application of gypsum is recommended.

7.4 Environmental concerns

The site is not located in a sensitive biodiversity area (Mid-western local environmental plan 2012).

Nil

Native Plants

Nil

High water table

None nearby

Community water storage

None nearby

Waterway/wetland

7.7 Suitability of application systems

| Application system | Treatment system | Site limitations of the application system | Modifications to mitigate constraints | Suitability |
|--------------------------------------|------------------|---|---|-------------|
| Absorption system | Septic tank | Moderately to highly dispersive subsoil Saline soils in locality Rocky outcrops on site | Nil Nil Nil | No |
| Evapotranspiration absorption system | Septic tank | Moderately to highly dispersive subsoil Saline soils in locality Rocky outcrops on site | Nil Nil Nil | No |
| Surface irrigation | Secondary | Moderately dispersive topsoils Rocky outcrops on site Saline subsoils | Regular application of gypsum Avoid irrigating in rocky areas Adequate sizing of application area, offset planting of trees, upslope surface diversion drains, detailed assessments to avoid saline surface areas for effluent applications, protect established vegetation | Yes |
| Sub-surface irrigation | Secondary | Moderately to highly dispersive subsoil Saline soils in locality Rocky outcrops on site | Nil Nil Nil | No |

8. Effluent design

8.1 Estimated flows

Typical effluent flow designs allowances in households with standard water fixtures is 120 litres/person/day where the water source is on-site tank supply (AS1547). Assuming the occupancy of the dwelling is 5 people (four bedrooms) the design flow rate for the dwelling is 600 litres/day.

Flows are based on the use of water saving devices such as dual flush toilets (6/3 litre water closets), water reduction cycles on dishwashers, aerator faucets fitted to taps and water reducing shower heads.

8.2 Hydraulic balance calculations and nutrient balance

The interactions between soil, climate, topography and the hydraulic and nutrient loadings were modelled based on the design in DUAP (1998). The model provides estimates consistent with more complex models and meets environmental performance objectives.

The parameters used in the model were as follows:

- effluent flow of 600 litres/day
- estimated absorption rate of expected soils on site for irrigation systems of 3mm/day. Trench systems are not suitable due to moderately to highly dispersive soils and saline soils in the locality.
- estimated phosphorus sorption of 6,500kg/ha for expected soils
- Climate data for Gulgong

The estimated area required is presented in appendix 3.

8.3 System recommendation

Based on the site and soil limitations, practicality and cost considerations the following recommendations are made for the treatment and application of effluent.

The recommended effluent system for each lot based on available information and assumptions is expected to be:

- **Surface irrigation area of 488m²** with a secondary treatment system accredited by NSW Health. Surface irrigation is suitable depending on site limitations.

The recommendations are made using the available data and should be considered as being generalised for the site as a whole. Assumptions have been made in the soil description and more detailed assessment is required to make recommendations of locations and suitable systems for individual lots.

The main limitation is subsurface salinity and management is required to prevent deep recharge and mobilisation or stored salts. The following mitigation measures should enable a sustainable development to be undertaken

- Adequate sizing of application area
- offset planting of trees
- upslope surface diversion drains
- detailed assessments to avoid saline surface areas for effluent applications
- protect established vegetation
- Dams on site should be filled to prevent recharge

Construction of the treatment and application systems should be according to AS1547.

Surface diversion drains are recommended upslope of the application area and should be maintained.

Gypsum should be applied to the application area during construction and every two years to maintain permeability.

Secondary treatment systems require regular maintenance to ensure effective operation. Maintenance scheduling should be undertaken in accordance with manufacturers and NSW Health guidelines.

The water balance is calculated using full water saving devices, including dual flush toilets (6/3 litre water closets) and aerator faucets fitted to taps, handbasins, showers and a kitchen.

9. System management

Wastewater should be evenly applied over the application area.

The application area should be restricted access to people and stock as recommended in AS1547 and summarised in Appendix 2.

The topsoil on the site is capable of supporting plant growth that will optimise evapotranspiration and wastewater usage. A grass sward should be maintained in the application area. Annual assessment of the vegetation and soil areas should be undertaken and mitigation measure undertaken to maintaining vegetation growth and soil health.

Appendix 2 is a checklist of do's and don'ts to ensure correct operation of the wastewater system. Periodic application of gypsum is recommended.

10. Report limitations and intellectual property

This report has been prepared for the use of the client to achieve the objectives given the clients requirements. The Australian Standard 1547, On-site domestic wastewater management, and the Environment and Health Protection Guidelines, On-site sewage management for single households (1998) Department of Urban Affairs and Planning, have been used as guidelines in this report. Where system limitations or uncertainties are known, they are identified in the report. No liability can be accepted for failure to identify conditions or issues which arise in the future and which could not reasonably have been predicted using the scope of the investigation and the information obtained. No guarantee can be made that the wastewater system will achieve all performance criteria because of operational factors and the inherent variable and unpredictable nature of the soil. All components of the wastewater system have a limited life.

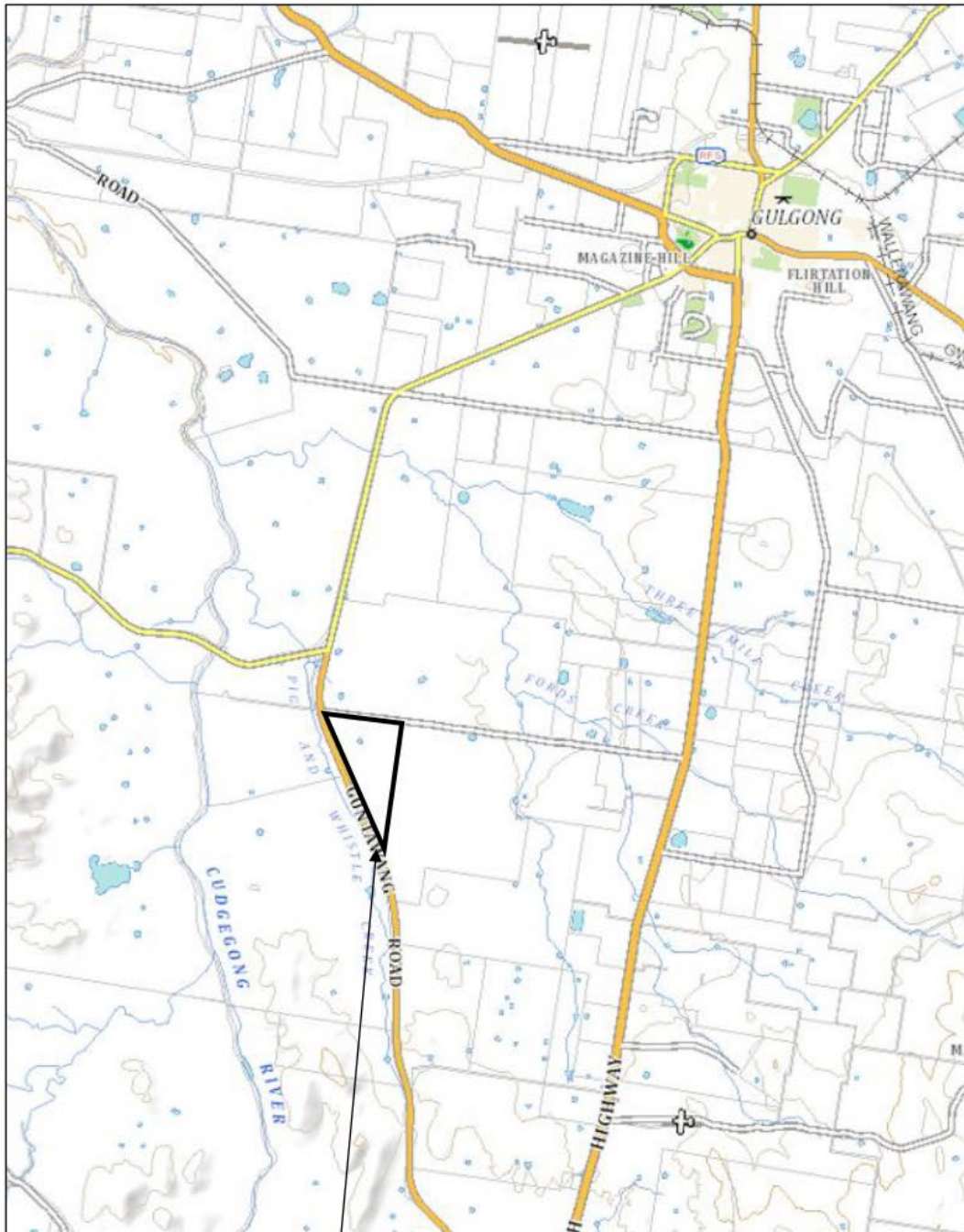
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Figures

Figure 1. Locality map

Figure 2. Site plan with recommended buffer distances

Figure 3. Representative photographs of the site taken on 1 April 2020



Investigation area

Figure 1. Locality plan

313 Magpie Lane, Galambine NSW



Envirowest Consulting Pty Ltd

Job - R11872e

Drawn by: AA

Date: 7/4/2020



Legend

- Lot Boundary
- Dams
- Drainage lines
- Unsuitable areas for application area
- - - Buffer distance to waterways
- Rock outcrops/ exclusion areas

Approximate Scale 1: 6,000
 0 60 120 240m

| | | |
|--|-------------------------------|----------------|
| Figure 2. Site plan with recommended buffer distances | | |
| 313 Magpie Lane, Galambine NSW | | |
| | Envirowest Consulting Pty Ltd | |
| Job – R11872e | Drawn by: AA | Date: 7/4/2020 |

Figure 3. Representative photographs of the site



Looking west across the northern section of the site



Looking south across the northern section of the site



Looking west across the site



Looking south west across the site



Looking north east across the site



Looking west across the site

Appendices

Appendix 1. Bore logs and laboratory results from previous investigations on 7/9/2001 and 24/4/2003

| Depth (mm) | Description | Sampled (X) | Texture group | Moisture | Emerson aggregate test* | pH (1:5 water) | ECe dS/m |
|--------------------|---|-------------|---------------|----------|-------------------------|----------------|----------|
| Test hole 1 | | | | | | | |
| 0-150 | Dark brown sandy loam | X | SL | M | 3 | 6.5 | 0.66 |
| 150-450 | Light brown sandy clay loam | X | SCL | M | 1 | 6.9 | 0.70 |
| 450-7500 | Red brown light clay | X | LC | M | 2 | 7.3 | 0.63 |
| 750-760 | Red clayey sand | | CS | M | | | |
| 1500 | End of hole, refusal on rock | | | | | | |
| Test hole 2 | | | | | | | |
| 0-380 | Dark brown light clay | X | LC | M | 1 | 6.8 | 0.45 |
| 380-700 | Yellow brown medium clay | X | MC | M | 4 | 8.2 | 0.28 |
| 700-1000 | Dull yellow brown medium clay | X | MC | M | 4 | 8.0 | 0.49 |
| 1000 | End of hole, refusal on rock | | | | | | |
| Test hole 3 | | | | | | | |
| 0-150 | Dark brown clay loam | X | CL | M | 5 | 6.7 | 0.54 |
| 150-420 | Light brown clay loam | X | CL | M | 3 | 6.7 | 0.54 |
| 420-750 | Yellow brown medium clay with grey and red mottles and some medium sized gravel | X | MC | M | 2 | 6.7 | 0.42 |
| 750 | End of hole, refusal on rock | | | | | | |
| Test hole 4 | | | | | | | |
| 0-150 | Dark brown clay loam | X | CL | M | 5 | 6.8 | 0.45 |
| 150-300 | Brown clay loam | | CL | M | | | |
| 300-900 | Red brown light clay with red mottles | X | LC | M | 1 | 7.0 | 0.63 |
| 900-1100 | Red brown light clay | X | LC | M | 4 | 8.6 | 0.36 |
| 1100 | End of hole | | | | | | |
| Test hole 5 | | | | | | | |
| 0-150 | Brown sandy loam | X | SL | M | 3 | 7.2 | 0.66 |
| 150-320 | Light brown sandy loam | X | SL | M | 3 | 7.3 | 0.66 |
| 320-600 | Red sandy loam with brown mottles and ironstone | X | SL | M | 1 | 6.9 | 0.60 |
| 600-610 | Clayey sand with siltstone | | CS | M | | | |
| 610 | End of hole, refusal on rock | | | | | | |
| Test hole 6 | | | | | | | |
| 0-300 | Brown loam with gravel | X | CL | M | 2 | 5.8 | 0.40 |
| 300-600 | Brown loamy gravel | X | CL | M | 2 | 6.0 | 0.60 |
| 600-900 | Yellow light clay | X | MC | M | 3 | 5.8 | 1.60 |
| 900 | End of hole, refusal on rock | | | | | | |
| Test hole 7 | | | | | | | |
| 0-200 | Brown sandy loam | X | SL | M | 5 | 6.4 | 0.2 |
| 200-1000 | Yellow brown medium clay | X | MC | M | 4 | 5.5 | 1.9 |
| 1000 | End of hole, refusal on rock | | | | | | |

M=Moist, D=Dry

*1= highly dispersive (slakes, complete dispersion), 2= moderately dispersive (slakes, some dispersion), 3= slightly dispersive (slakes, some dispersion after remoulding), 4= non-dispersive (slakes, carbonate or gypsum present), 5= non-dispersive (slakes, dispersion in shaken suspension) 6= non-dispersive (slakes, flocculates in shaken suspension), 7= non-dispersive (no slaking, swells in water), 8= non-dispersive (no slaking, does not swell in water).

Appendix 2. Recommended buffer distances for on-site systems (*On-site Sewage Management for Single Households* (1998) Dept of Urban Affairs and Planning)

| Feature | System and buffer distance (m) | | | | |
|----------------------------|-----------------------------------|-------|-------------------------------|-------------------------------|--------------------------------|
| | Surface irrigation | spray | Surface drip | Subsurface irrigation | Absorption systems |
| Permanent streams | 100 | | 100 | 100 | 100 |
| Domestic groundwater wells | 250 | | 250 | 250 | 250 |
| Intermittent streams | 40 | | 40 | 40 | 40 |
| Property boundaries | 6 (upslope) 3 (down slope) | | 6 (upslope) 3 (down slope) | 6 (upslope) 3 (down slope) | 12 (upslope) 6 (down slope) |
| Dwelling/ buildings | 15 | | 6 (upslope) 3 (down slope) | 6 (upslope) 3 (down slope) | 6 (upslope) 3 (down slope) |
| Swimming pools | 6 | | 6 (upslope) 3 (down slope) | 6 (upslope) 3 (down slope) | 6 (upslope) 3 (down slope) |
| Paths and walkways | 3 | | - | - | - |
| Driveways, | 6 (upslope) 3 (down slope) | | 6 (upslope) 3 (down slope) | 6 (upslope) 3 (down slope) | 6 (upslope) 3 (down slope) |

Appendix 3a. Monthly water balance determine the wastewater application area required

| | | | | | | | |
|-------------------------|----|----------------|-----|--------------|--------------|---|---------|
| Design wastewater flow | Q | L/day | 480 | 120 | L/person/day | 4 | persons |
| Design percolation rate | R | mm/wk | 21 | 3 | mm/day | | |
| Land area | L | m ² | 100 | | | | |
| Effective precipitation | EP | | 0.9 | (10% runoff) | | | |

| Parameter | Symbol | Formula | Units | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | total |
|-------------------------|--------|------------------|----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| days in month | D | | days | 31 | 28 | 31 | 30 | 31 | 30 | 31 | 31 | 30 | 31 | 30 | 31 | 365 |
| Precipitation | P | | mm/month | 50.7 | 41.8 | 47.2 | 47.2 | 46.9 | 54.5 | 53 | 55.5 | 51.6 | 58.3 | 50.3 | 52.6 | 647 |
| Evaporation | E | | mm/month | 216 | 157 | 137 | 94 | 51 | 41 | 38 | 51 | 81 | 114 | 152 | 203 | 1335 |
| Crop factor | C | | - | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 10.8 |
| Inputs | | | | | | | | | | | | | | | | |
| Effective Precipitation | EP | | mm/month | 45.63 | 37.62 | 42.48 | 42.48 | 42.21 | 49.05 | 47.7 | 49.95 | 46.44 | 52.47 | 45.27 | 47.34 | 549 |
| Effluent irrigation | W | QXD/L | mm/month | 148.8 | 134.4 | 148.8 | 144.0 | 148.8 | 144.0 | 148.8 | 148.8 | 144.0 | 148.8 | 144.0 | 148.8 | 1752 |
| Inputs | | P+W | mm/month | 194.4 | 172.0 | 191.3 | 186.5 | 191.0 | 193.1 | 196.5 | 198.8 | 190.4 | 201.3 | 189.3 | 196.1 | 2301 |
| Outputs | | | | | | | | | | | | | | | | |
| Evapotranspiration | ET | ExC | mm/month | 194.4 | 141.3 | 123.3 | 84.6 | 45.9 | 36.9 | 34.2 | 45.9 | 72.9 | 102.6 | 136.8 | 182.7 | 1202 |
| Percolation | B | R/7xD | mm/month | 93.0 | 84.0 | 93.0 | 90.0 | 93.0 | 90.0 | 93.0 | 93.0 | 90.0 | 93.0 | 90.0 | 93.0 | 1095 |
| Outputs | | ET+B | mm/month | 287.4 | 225.3 | 216.3 | 174.6 | 138.9 | 126.9 | 127.2 | 138.9 | 162.9 | 195.6 | 226.8 | 275.7 | 2297 |
| Storage | S | (EP+W)-(ET+B) | mm/month | -93.0 | -53.3 | -25.0 | 11.9 | 52.1 | 66.2 | 69.3 | 59.9 | 27.5 | 5.7 | -37.5 | -79.6 | |
| Cumulative storage | M | | mm | 0.0 | 0.0 | 0.0 | 11.9 | 64.0 | 130.1 | 199.4 | 259.3 | 286.8 | 292.5 | 255.0 | 175.4 | |
| Storage | | | | | | | | | | | | | | | | |
| | V | largest M | mm | 292.5 | | | | | | | | | | | | |
| | | Soil storage | mm | 372.0 | | | | | | | | | | | | |
| | | Storage required | mm | -79.5 | | | | | | | | | | | | |
| | | VxL/1000 | m ³ | -8.0 | | | | | | | | | | | | |
| Irrigation area | | | m ² | 100 | | | | | | | | | | | | |

| | water holding capacity | depth (mm) | Totals(mm) |
|---------|------------------------|------------|------------|
| Topsoil | 34% | 200 | 68 |
| Subsoil | 38% | 800 | 304 |
| | | | 372 |

Appendix 3b. Estimation area requirement from organic matter and nutrient balances

| | | | |
|-------------------------|-----|-----|-------|
| Estimated effluent flow | (Q) | 600 | L/day |
| Soil depth | | 1 | m |

Organic matter balance

| | | |
|-----------------------------------|------------|------------------------|
| BOD (C) | 20 | mg/L |
| treated wastewater flow rate (Q) | 600 | L/day |
| critical loading rate of BOD (Lx) | 3000 | mg/m ² /day |
| land area required (A) | 4.0 | m² |

Nitrogen balance

| | | |
|-----------------------------------|------------|------------------------|
| nutrient concentration | 37 | mg/L |
| treated wastewater flow rate | 600 | L/day |
| critical loading rate of nutrient | 50 | mg/m ² /day |
| land area required (A) | 444 | m² |

Determination of nitrogen critical loading rate

| | | | | |
|-------------------------------|-------|------------|-------------------|--------------------|
| Nitrogen load (kg/year) | 8.1 | kg/year | | |
| Loss 20% denitrification | 6.5 | kg/year | | |
| Load to soil | 146.0 | kg/ha/year | assumed irr. area | 444 m ² |
| Vegetation usage | 200.0 | kg/ha/year | from table | |
| Residual (potential leaching) | -54.0 | kg/ha/year | | |

Typical nitrogen uptake (Myers et al. 1984)

| | | |
|-----------|----------------|---------------------------|
| Pastures | 300 kg/ha/year | 82 mg/m ² /day |
| Pine | 350 kg/ha/year | 96 mg/m ² /day |
| Eucalypts | 180 kg/ha/year | 49 mg/m ² /day |

Phosphorus balance

| | | |
|--|-------|-------|
| Phosphorus sorption capacity per metre= | 6,500 | kg/ha |
| Phosphorus sorption capacity of profile= | 6,500 | kg/ha |
| Soil factor | 0.33 | |

Critical loading= 3 mg/m²/day

P concentration*= 12 mg/L

P adsorbed= phosphorus sorption capacity x soil factor
2145
0.2145 kg/m²

Puptake= critical loading x year
days/year x 50 s
54750
0.0548 kg/m²

Pgenerated= total phosphorus concentration x wastewater volume in 50 years
131400000

131 kg
Pgenerated / (Padsorbed + Puptake)

Land area required 488.0 m²

Appendix 4. Checklist for effective management of wastewater systems

Domestic wastewater system

DO

Check household products for suitability of use with a septic tank.
Conserve water, prolonged period of high water use can lead to application area failure. For optimum operation, avoid daily and weekly surges in water flows. Spas are not recommended.
Scrape cooking dishes and plates prior to washing to reduce solid load.
Maintain the system with regular servicing as per the manufacturers instructions.

DON'T

Dispose excessive solid material, fats, lint or large water volumes into drains.

Land application area

DO

Construct and maintain diversion drains around the top-side of the application area to divert surface water.
The application area should be a grassed area, which is maintained at 10-30cm height.
The area around the perimeter can be planted with small shrubs to aid transpiration of the wastewater.
Ensure run-off from the roof or driveway are directed away from the application area.
Periodic application of gypsum may be necessary to maintain the absorptive capacity of the soil.

DON'T

Don't erect any structures or paths on the land application area.
Don't graze animals on the land application area.
Don't drive over the land application area.
Don't plant large trees that shade the land application area thereby reducing transpiration of water.
Don't let children or pets play on the land application area.
Don't extract untreated groundwater for potable use.



Appendix F - AHIMS Search



AHIMS Web Services (AWS) Search Result

Purchase Order/Reference : Magpie Lane

Client Service ID : 479591

Barnson

Date: 24 January 2020

Suite 6 11 White Street
Tamworth New South Wales 2340

Attention: Jack Massey

Email: jmassey@barnson.com.au

Dear Sir or Madam:

AHIMS Web Service search for the following area at Lot : 1, DP:DP174385 with a Buffer of 200 meters, conducted by Jack Massey on 24 January 2020.

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of the Office of the Environment and Heritage AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

| | |
|----------|--|
| 0 | Aboriginal sites are recorded in or near the above location. |
| 0 | Aboriginal places have been declared in or near the above location. * |

If your search shows Aboriginal sites or places what should you do?

- You must do an extensive search if AHIMS has shown that there are Aboriginal sites or places recorded in the search area.
- If you are checking AHIMS as a part of your due diligence, refer to the next steps of the Due Diligence Code of practice.
- You can get further information about Aboriginal places by looking at the gazettal notice that declared it. Aboriginal places gazetted after 2001 are available on the [NSW Government Gazette](http://www.nsw.gov.au/gazette) (<http://www.nsw.gov.au/gazette>) website. Gazettal notices published prior to 2001 can be obtained from Office of Environment and Heritage's Aboriginal Heritage Information Unit upon request

Important information about your AHIMS search

- The information derived from the AHIMS search is only to be used for the purpose for which it was requested. It is not be made available to the public.
- AHIMS records information about Aboriginal sites that have been provided to Office of Environment and Heritage and Aboriginal places that have been declared by the Minister;
- Information recorded on AHIMS may vary in its accuracy and may not be up to date .Location details are recorded as grid references and it is important to note that there may be errors or omissions in these recordings,
- Some parts of New South Wales have not been investigated in detail and there may be fewer records of Aboriginal sites in those areas. These areas may contain Aboriginal sites which are not recorded on AHIMS.
- Aboriginal objects are protected under the National Parks and Wildlife Act 1974 even if they are not recorded as a site on AHIMS.
- This search can form part of your due diligence and remains valid for 12 months.



Appendix G - Aboriginal Cultural Heritage Report

**MUDGEE LOCAL ABORIGINAL LAND
COUNCIL**

**PO BOX 1098
MUDGEE NSW 2850
0263723511 / FAX 0263723522**

**PREPARED
FOR MR LES SMEATON
NSW**



**BY
DAVID MAYNARD**

**MUDGEE LOCAL ABORIGINAL LAND COUNCIL
PO.BOX 1098
MUDGEE NSW 2850
SEP 2011**

**INFORMATION RELATING TO ABORIGINAL SITES CONTAINED IN THIS REPORT
IS OF A SENSITIVE NATURE AND SHOULD NOT BE MADE PUBLIC WITHOUT
PRIOR PERMISSION BY MUDGEE LOCAL ABORIGINAL LAND COUNCIL**

MUDGEE LOCAL ABORIGINAL LAND COUNCIL

**PO BOX 1098
MUDGEE NSW 2850
0263723511 / FAX 0263723522**

RE/ ABORIGINAL CULTURAL HERITAGE SURVEY FOR PROPOSED WATER PIPE LINE FROM THE WESTERN END OF MAGPIE LANE TO GULGONG WATER SUPPLY

Date 11/10/11

INTRODUCTION

PURPOSE FOR THE INVESTIGATION

This document are the results of an Aboriginal Cultural Heritage assessment of 3.8 klms of the Magpie Lane and 4.5 klms of the Castlereagh Hyw to Gulgong. The purpose for the investigation is to pump water from Gulgong water Supply to a proposed development Motel Complex area on the corner of Magpie Lane and Guntawang road Gulgong. The proposed investigation was to inspect the route for any possible Cultural Heritage material that maybe impacted by the proposed development during the excavation stage during the project.

LOCATION OF DEVELOPMENT

The study area is identified in the western Region of the Great Dividing Range on the western edge of the Sydney Basin. The proposed development is located in the Parish of Guntawang 6 klms south of Gulgong and 25 klms north west of Mudgee. Another report was furnished to the developer dated the 18th of August 2003 for a proposed pipeline to the Cudgegong River but did not eventuate.

QUALIFICATIONS RELEVANT LEGISLATION

Mudgee Local Aboriginal Land Council works in accordance with requirements of the National Parks and Wildlife Service and DECCW Guidelines. All works carried out by Mudgee Local Aboriginal Land Council Representatives meet the requirements both of the National Parks and Wildlife Act and the Department of Environmental and Conservation including other State and Federal Heritage Legislation's. Mudgee Local Aboriginal Land Council as the Local Custodians of the Mudgee area of Wiradjuri country has the predominate aim in the Protection and Management relating to Aboriginal Cultural Heritage, conservation issues and working with relevant agencies. David Maynard is one of the Local Aborigina Heritage Officers for MLALC and has been for an extended period of time and

has been carrying out Cultural Heritage assessments for MLALC in the surrounding district. All relevant reports are taken back to a Meeting of MLALC for their comments and recommendations.

CONSULTATION

David Maynard was notified by Mr H. J. Fiander (Toby) from Toby Fiander and Associates on Friday the 7th of October 2011 to perform a proposed survey the following day. David was unable to accommodate Mr Fiander over the weekend but recommended to meet at MLALC Office on Monday the 10th of October to talk of the proposal before going on site. As a result the assessment was conducted on site the same day. David Maynard and John // were the Aboriginal reps on site and Toby Fiander and Alex Williams from Toby Fiander & Associates.

DISCRIPTION OF STUDY AREA

The description of the study area is undulating country consisting gentle slopes down to drainage lines along the entire route. Two main creek lines are considered sensitive in terms of open camp sites (1) Fords Creek Magpie Lane and Three Mile Creek on the Castlereagh Hwy. Since European occupation over the study area it is evident such as past clearing, cultivating, planting of extensive vineyards, fencing grazing, dams, roads and tracks. There is advanced salinity and erosion features in some areas in the region.

DISCRIPTION OF IMPACT

Impact to Aboriginal Cultural Heritage sites or objects in the past over the proposed development area would have generally been associated with agricultural activities to a depth of at least 20 to 30 centimeters of top soil disturbance over terrace, crest's, flats, slopes roads and drainage areas. Although most of the proposed development area would had been significantly disturbed by past farming practices. Aboriginal objects that are exposed or under the top soils are still protected under the National Parks Wildlife ACT 1974 and continue to be important to the Mudgee Local Aboriginal Community regardless of the site condition.

The following caution applies. All earth moving contractors and operators and should be instructed in the event of any bone or stone objects or discrete distributions of shell being unearthed during any work activities, work should cease immediately in the effected area Mudgee Local Aboriginal Land Council and officers of DECC must informed of the discovery. Work should not recommence until the materials have been inspected by those officials and permission has been given to proceed. This also applies to any skeletal remains.

METHODOLOGY, PRE FEILDWORK

Local Aboriginal cultural knowledge of the surrounding area regarding site locations are 18 known and recorded sites in the region within a 8 klm radius of the assessment area. The nearest being the Pig and Whistle Creek, Fords Creek, and Three Mile Creek, including the Cudgegong River area. Biraganbil area are also regarded as sacred lands where past Aboriginal Massacres occurred in the past.

AIMS OF SURVEY

MLALC Representative was required to :-

- (1) Identify, Evaluate and document any Aboriginal Heritage Sites of Cultural Significance within the study area.
- (2) Record any Sites found during the investigation that is to be recorded onto the NPWS Sites Data Base for future conservation and reference.
- (3) Submit a report outlining the results that may include recommendations for the conservation and management of identified Aboriginal sites or relics that are of Aboriginal Cultural Heritage Concern.

SURVEY STRATERGY

The main aim of the assessment was to determine the presents of any Aboriginal Cultural Heritage objects or Places that are of Aboriginal Cultural Significance to the Local Wiradjuri people. As the Magpie Lane had never been surveyed before except for a small section at the Guntawang road end of Magpie Lane where the proposed Resort was to be built on the development area. The Magpie Lane will be inspected along both sides of the road easement due to the lack of full visibility of the ground surface because of the vegetation cover all exposures will be investigated to obtain a representative sample of the study area.

Any sites identified during the investigation will be recorded on to the DECCW Site Register. It is important that these areas be recorded so that protection and management of any Cultural resources identified. This information is to be presented before any development works commence. It will be taken into account during the investigation not only features over the landscape in which sites are most likely to be present but also to include the areas where the presents of artifact materials was less likely. The immediate survey area is regarded as a culturally sensitive region due the surrounding sites identified in the area and at drainage lines such as Fords Creek and Three Mile Creek .

FIELDWORK

The assessment along Magpie lane and section of the Castlereagh Hwy was carried out on Monday the 10.10.11. the day was fine and ideal conditions to identify any objects that may be found during the assessment. Mudgee Local Aboriginal Land Council representatives both assisted in the road easement inspection. Extreme heavy grass cover prevented a complete analysis of the ground surface along the road easement that had very little exposures. The grassed area on both sides of the easement seemed to have been mowed some time previously

SURVEY RESULTS

From the areas surveyed no Cultural objects were identified because of the extensive ground cover except at the eastern end of Magpie Lane approximately 100 mtrs from the Castlereagh Hwy where a large Grindstone was found jammed between two trunks of a White Box Tree on the western side of the Magpie Lane road easement. The site and object was recorded with Site name (Isolated Find Magpie Lane 1) (IF ML1).

As much of the Castlereagh Hwy had been previously surveyed in the past during RTA and Vineyard surveys it was recommended that it was unnecessary to survey the road easement again. MLALC. Dave Maynard advised that the Three Mile Creek region along the Hwy was sensitive and will make recommendations of this area later in this report.

Aboriginal Cultural Values

Murong Gialinga ATSIC supports the concept of Environmental Impact Studies that include Aboriginal and Archaeological concerns required for developments that would have an impact on the environment. Aboriginal Sites are of great Cultural importance to the Wiradjuri people. All sites hold special Significance and are a special link to the past not only in terms Archaeological material evidence but also by a Spiritual connection to the land and its people including its associated environments that was part of every day life and Ceremonial activities

These are some of the important aspects for Mudgee Local Aboriginal Land Council to consider when appraising different types of sites or landscapes whether disturbed or undisturbed including natural bush land environments that have been an intimate bond and spiritual meaning to the Wiradjuri People and has been for thousands of years. As with our history the tablet of the lore was the landscape itself explained through the Dreaming of our identity and complex system of family life and unity with the land and its people. It is vital to Endeavour to preserve the environment where ever possible for future generations to come. Any site identified during any investigation are regarded as

5

highly important both in Cultural, Spiritual and educational values to Mudgee Local Aboriginal community.

RECOMMENDATIONS

(1)

MLALC recommends that monitoring 100 MTRS upslope on both sides of the Fords Creek area by a MLALC Representative be present during the excavation phase for the proposed pipeline

(2)

MLALC recommends that monitoring 100 mtrs up slope on both sides of the Three Mile Creek area by a MLALC Representative present during the excavation phase of the proposed pipeline

(3)

It is recommended by MLALC that a permit to relocate out of harms way any objects that maybe brought to the surface during the excavation process

(4)

MLALC recommends that a permit be sought to move the grindstone out of harms way to a safer location as the object is only three mtrs from the edge of the road pavement and is subject to be taken.

MLALC would like to thank the developer Mr Les Smeaton and Toby Fiander and Associates for the opportunity to protect Wiradjuri Cultural Heritage in the Mudgee area

Yours Sincerely.

Tony Lonsdale CEO



David Maynard Aboriginal Cultural Heritage Officer



SITE DISCRIPTION FORM

Date :10 /10/2011

Recorded by: D. Maynard MLALC

Site Name: Magpie Lane IF1

Map: HOME RULE 8833-3-S Scale: 1:25 000 / Goolma Scale 8733-II &III

Grid Reference: GPS. 55 737462 E 646410892 N

Field Code Magpie Lane ML IF1

Land Form:

The landform at the site is undulating. A great number of drainage lines are associated with Magpie Lane flowing from south to north in particular the Fords Creek that crosses Magpie Lane. A drainage line is some 15 mtrs from where the object was identified at this site.

Permanent Water:

The nearest permanent water source is Fords Creek 1.6kims east of the site area. Many of the drainage lines would run and hold water for extended long periods after rain.

Ephemeral Creeks :

As with the landscape such as undulating hilly country many ephemeral creeks are in the area that would only flow during rain periods.

Erosion Features:

Erosion features have impacted along table drains within the confines of the road easement where the possibility of cultural Heritage objects could be in the area.

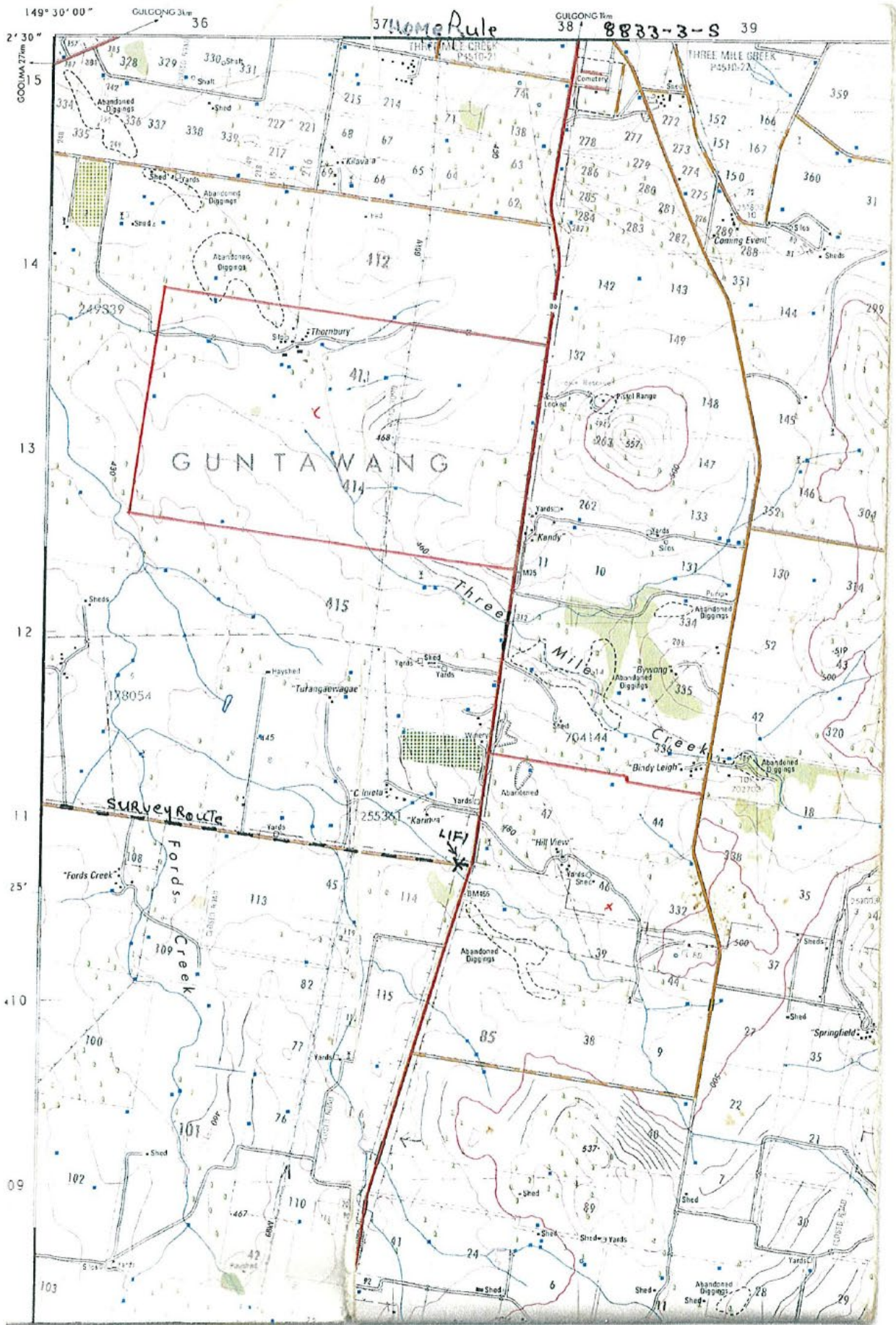
Soil Exposure: Not very much of the survey route had soil exposures due to the resent rains that had caused extensive grass cover approximately 95 %.

Site Description:

Site MLIF1 object was identified between the fork of a white Box tree three near ground level and 3 Mtrs from the edge of the road pavement. There is a high possibility that someone had placed the object between the fork of the tree some time ago maybe before the road bitumen was laid when the road used to be graded. The object is Sandstone material with two groves one on either side. The size of the object is 570mm long x 240mm wide and 75 mm thick. The side with the longest groove is 310 mm x 110 mm wide with a groove depth of 10mm deep. The shortest groove on the opposite side of the stone is 200 mm long x 110 mm wide and 12 mm deep, color is light brown.

Vegetation

Large Yellow Box, White Box, Kurrajong, some introduced species with the main trees being Eucalypt along the entire route.



400/MA 8732-11811

20
19
18
17
16
15
14
13
12
11
10
09
08
07

GUNONG km
GUNONG km
GUNONG km

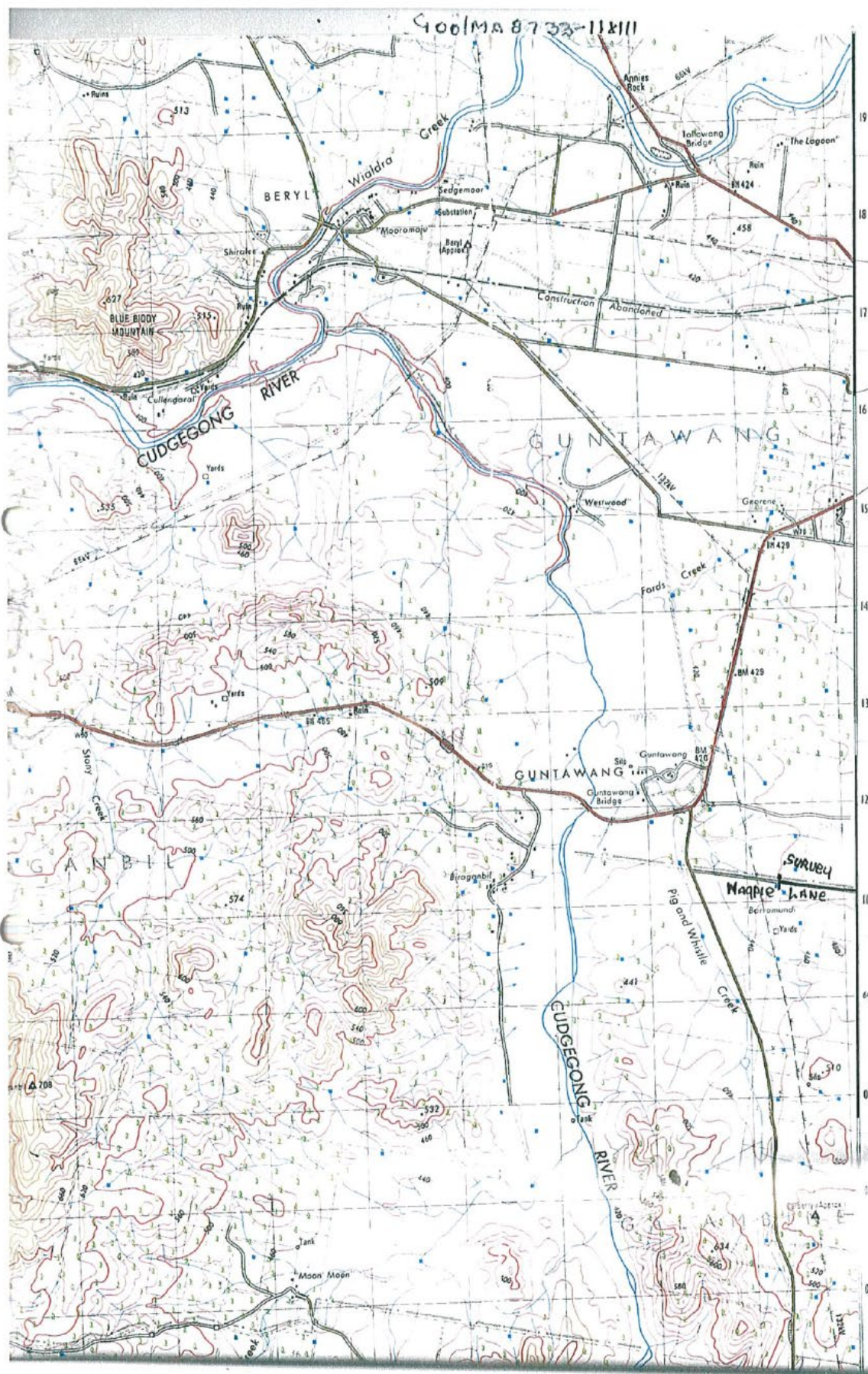




Figure 1. Looking East towards Ford's Creek in the background.



Figure 2. Looking North toward Gulgong at Three Mile Creek.

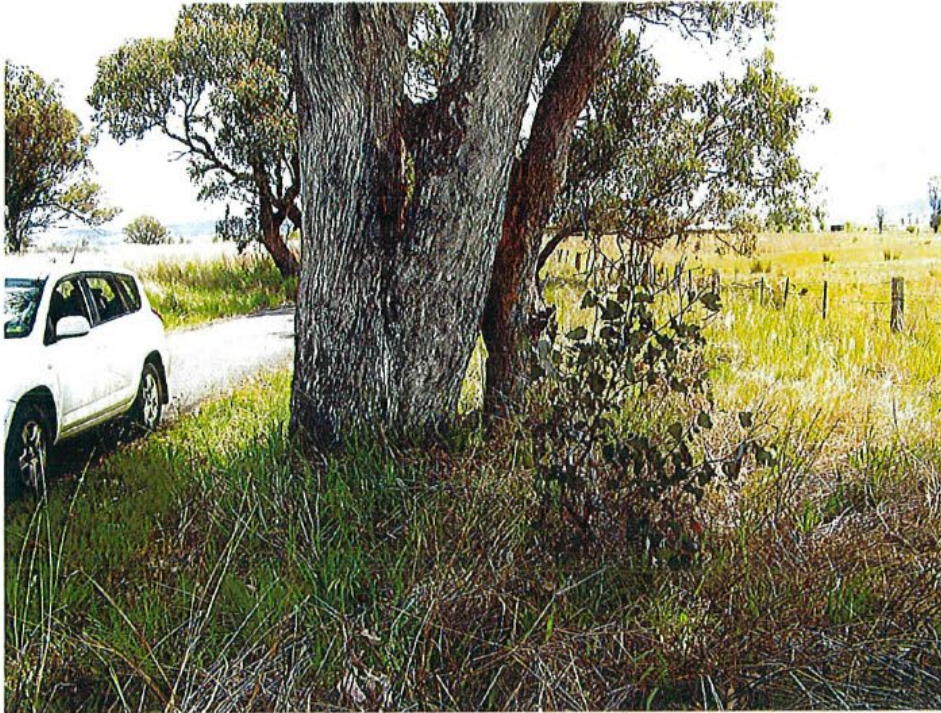


Figure 3. Looking West at tree where the object was identified.



Figure 4. Looking East at location where object was identified.



Figure 5. Photograph of object identified as a grinding stone, approximately 100 metres from the Castlereagh Highway.



MUDGEE HEALTH COUNCIL



Health
Western NSW
Local Health District

Mr Brad Cam
General Manager
Mid-Western Regional Council
PO Box 156 Mudgee NSW 2850



SUBMISSION: MUDGEE HEALTH PRECINCT MASTER PLAN

Dear Mr Cam

Thank you for the opportunity to comment on the Mudgee Health Precinct Master Plan.

Council is to be applauded for its promotion of this concept, and in providing opportunity for community consultation.

Mudgee Health Council, as you know, promotes on the one hand the Mudgee Health Service and on the other provides community feedback to the Health Service on its operations. The Health Council is recognised in the Plan as a stakeholder, and was consulted during its development.

Health Council has considered the Plan and provides the following:

1. The current recreation oval and Crown Land site (Cahill Park) must be quarantined for the intended health precinct purpose. Furthermore, its control must remain in the most appropriate public hands.
2. Aged care provision must be a priority. The Report clarifies demographic trends, and highlights the aging inclination. It notes the age profiles to 2041 for 35years+, and 75 years+ will increase, and the service gap for residential aged care by 2041 in the MWRC will be 116 spaces. Services for aging-in-place, residential infrastructure, and supplementary allied health services in rehabilitation, must be components of the precinct. A location separate from the precinct site for aged residential services may be appropriate.
3. A dedicated hydrotherapy pool is essential for treating multiple conditions, particularly in an aging population, as well as for pre and post rehabilitation. Local doctors also see it an absolute priority, and maintain the pool must be associated physically with the hospital.
4. The Report endorses co-location of services within the hospital precinct. This principle obviously must drive the planning, but it is essential resourcing must complement the hospital itself, and not impinge on the health service's own sources of staff, plant or other resources. In short, the precinct must supplement, not replace, any existing hospital services.

Considering co-location, a mix of public, NGO and fully private health providers must shape and share the facility. Thus the "health node" concept is vital. In-built education and training facilities for medical and allied health must also include a research facility, focused hopefully on rural and regional health inquiry. Thought of relocation of the district ambulance station must again be on the table. Care in planning appropriate parking space for all facilities is fundamental, as is overnight accommodation for visiting health professionals. Both professionals and clients will be attracted to the facility from a much wider area than our region. The health node concept is also a broader regional priority, as it will in turn support further investment in the precinct, and the Mudgee district beyond health.

Western NSW Local Health District
ABN 50 829 556 404

Mudgee Health Service
PO Box 29 Cnr Church & Meares Streetss
Mudgee NSW 2850
Tel (02) 837197007
Website: www.wnswlhd.health.nsw.gov.au

5. Ways to expand the health workforce is a necessary consideration in planning the precinct. The Report's focus on matters of attracting staff, particularly GPs and specialists, senior nurses and allied health professionals mirrors an ongoing rural and regional concern, exacerbated in most smaller communities. Housing and other incentives will be necessary in some areas of need.
6. This community, like many other rural locations, has particular demands for mental health services. Particular consideration must be accorded this issue as a priority.

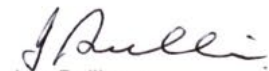
General Comments:

It is of greatest importance that the precinct is built with a clear eye to the future, and has flexible capacity to adapt in scope, service delivery and staffing. In this regard, transport linkages - rail, road and air - must be one of many primary considerations.

Continued opportunity for medicine, academia, local industry and the wider community to contribute during the precinct's development stages is necessary.

Thank you again.

Yours sincerely



Joe Sullivan

Chair

Mudgee Health Council



Judy Blackman

Secretary

Mudgee Health Council

Mid-Western Regional Council
Western NSW Local Health District
University of Wollongong

Mudgee Health Precinct Master Plan Report

Issue: 20 November 2020



Acknowledgements

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Document Control Log

| Document revision | Editor | Date | Changes |
|-------------------|-----------------|-------------------|--|
| 0.1 | Anthony Colwell | 27 February 2020 | Initial draft – early sections |
| 0.2 | Anthony Colwell | 25 March 2020 | Draft report for client review |
| 0.3 | Anthony Colwell | 23 July 2020 | Draft including client inputs (MWRC & UOW) |
| 0.4 | Anthony Colwell | 05 August 2020 | Draft aligning comments |
| 0.5 | Anthony Colwell | 21 September 2020 | Final Draft |
| 0.6 | Anthony Colwell | 12 October 2020 | Final Draft including comments |
| 0.7 | Anthony Colwell | 17 November 2020 | Final Draft including additional MWRC comments |
| 0.8 | Anthony Colwell | 20 November 2020 | Final Draft |

DRAFT

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1. EXECUTIVE SUMMARY

The New South Wales (NSW) Department of Planning, Industry and Environment (DPIE), the Mid-Western Regional Council (MWRC), the Western NSW Local Health District (LHD) and the University of Wollongong (UOW) engaged Destravis to facilitate the Mudgee Health Precinct (the Precinct) Master Plan. The Precinct Master Plan was developed using a collaborative approach, engaging with major entities within the Precinct

The Precinct is primarily located around the Mudgee Hospital, incorporating Council's recreational area known as Cahill Park. The Precinct investigation area is shown below, including identification of surrounding land uses.



Figure 1 – Mudgee Health Precinct Investigation Area

Precinct partners have direct and indirect investments in the precinct, largely focused on health infrastructure/businesses and recreational land. It is noted that UOW does not have any dedicated learning facilities in Mudgee. Students undertake work placements within the Mudgee Hospital or other health facilities, learning on the job with no dedicated supporting spaces elsewhere for additional studies. The Mudgee Hospital is currently undergoing development with a full replacement of the existing facility recently opened, providing infrastructure that meets Mudgee's needs as defined under the Western NSW LHD Clinical Services Plan for Mudgee. New investment for an indoor recreation pool in Mudgee is also flagged to increase recreation and health outcomes. This shows there is growth and continued expectation of additional activity in Mudgee that will benefit from a holistic long-term plan for the future.

The Mid-Western Region face a number of demographic and social challenges that will continue to drive change in the region. Similar to National and State trends, the ageing population will put pressure on the workforce, social structure, public facilities and the health sector into the future. For Mudgee this is more pronounced. The proportion of persons over

65 is close to 20% compared to the Nation and State wide average of 16%. The needs of that ageing cohort will therefore be felt sooner in the Region than they will elsewhere in the country.

The unemployment rate in the region is already low, sustaining pressure on the existing workforce. Attracting workers to the region is a key priority to fill an increasing number of health and other industry roles. As a smaller regional centre, attracting key workers in the health industry (e.g. social support, doctors, senior nurses, allied health specialists) continues to be difficult given the smaller scope of services, housing access and affordability issues and ongoing training and education requirements.

Attracting workers to the area will be a key stepping stone to providing a sustainable workforce. This will rely on a number of approaches to support workers, one of which includes increasing housing choice and affordability for short, medium- and longer-term stays. Mudgee is primarily served by dwellings with 3 or more bedrooms on larger land parcels. This does not provide flexibility for smaller families, single persons, those who are less well-off and for shorter term needs. Improving accommodation options is therefore a priority for attracting workers in the short to long term.

Providing services for the aging population and general residents is also a priority. Not all services will be provided in the Region and connections with larger regional centres, in particular Dubbo, will need improvement. For the required local services, better access to primary and allied health care will need to be fostered along with more regular access to specialists and specialist equipment (e.g. radiology). In addition to this, facilitating increases in aged care and disability care for local residents will be required, both by way of supporting areas for businesses that deliver these services to grow as well as facilitating education and training for existing and new staff who are employed by these businesses.

Significant challenges arise from the ageing population, pressure on workforce and housing listed above. This Precinct Master Plan aims to address these and other priorities.

Through the development of the Precinct Master Plan, consultation took place with 23 organisations who have an interest in health and education services in the Region. This consultation was undertaken both individually (one on one interviews) and collectively (facilitated design charrette). The consultation helped inform the overall precinct planning process including what is required within the Precinct, the specific planning considerations for the Precinct, the Precinct Vision, Principles and actions.

Precinct VISION

To enhance and enable greater access to health and education services for the people of the Mid-Western Region. This will be done by focusing on improving co-located and collaborative health and health education, affordable housing and spaces for community wellbeing.

Precinct PRINCIPLES

Principle 1 – Collaborate

- through the establishment of collaborative education spaces in Mudgee for health students, workers and educators
- through improving networks of care amongst primary, allied health and acute services
- by undertaking collaborative planning for attracting key health workers.

Principle 2– Co-locate

- primary and acute health, and education services
- recreation, aged care services and supporting amenity (e.g. small-scale retail, park)
- an appropriate scale of housing, in close proximity to key health activity centres.

Principle 3 – Plan an Integrated Precinct

- by increasing housing options for health students and key health workers in close proximity to health services
- by increasing affordable housing across Mudgee
- through establishing an accessible and central hub for primary, acute and aged care services in Mudgee
- through allowing targeted supporting amenity, including recreation, park and small-scale retail, to establish with health services
- by establishing improved access for residents, both physical (e.g. road, public transport and active travel) and virtually (e.g. tele-health / online connectivity).

Principle 4 – Enhance Infrastructure

- by improving public and active transport connections through the precinct to better connect users to the CBD
- by advocating for increased regional transport connections, including timing services to ensure patient travel needs to Dubbo, Orange or Bathurst are accommodated in the same day.

Precinct OVERVIEW

The Mudgee Health Precinct aims to facilitate key improvements to the health and health education sectors within Mudgee, specifically centred around the Mudgee Hospital. Potential funding sources need to be investigated within the Precinct, in particular the prospect of a Council led indoor recreation pool and possible additional education facilities. A focus on enabling other health related development and increasing residential density adjacent to the precinct, will serve to increase convenience for residents when accessing health services, while improving housing choice for key workers, students and Mudgee’s residents.

Legend:

| | |
|---|--|
| Precinct | |
| General Parcel Boundaries | |
| Residential – R3 | |
| Business and Retail | |
| Health | |
| Special Purpose Government, Health & Education | |
| Recreation / Park | |
| Parking | |
| Pedestrian / Bike Paths – safe on-road / off-road | |
| New Road | |
| Public Transport | |



Figure 2 - Mudgee Health Precinct Master Plan

Targeted transport and community infrastructure will connect key users and developing areas. In particular, improvements to public and active transport will help facilitate improved access between developing areas, the CBD and the Precinct. These improvements will both improve the amenity of the precinct and reduce the reliance on private motor vehicle transport, further enhancing the amenity and sustainability of the Precinct. Targeted parking improvements are also put forward, with space for a 75 space car park provided within the precinct.

Changes to Council zoning allowances seek to enhance options for increased medium density residential development and to support affordable housing, seniors housing and residential aged care, the latter of which may be positioned over the portion of Cahill Park adjacent to the new indoor recreation pool and multi-functional centre.

The sum of the Precinct changes will provide short-term opportunities for improvements, as well as promoting appropriate development to support the Regions growth in the medium to long term.

Precinct IMPLEMENTATION

To support the development of the Precinct, five key strategies are proposed, along with 20 recommended actions. The five strategies are:

- Strategy 1 – Facilitate collaborative education, key worker attraction and business development between organisations.
- Strategy 2 – Co-locate key health, education and recreation facilities.
- Strategy 3 – Increase housing choice and affordability to improve key worker attraction.
- Strategy 4 – Promote development that supports the health and education focus of the precinct.
- Strategy 5 – Improve transport infrastructure connections and links through the precinct.

A selection of nine key actions for the Precinct are included below:

| Action | Responsible | Key Stakeholders | Priority | Alignment |
|--|-------------------------|--|---------------------------------------|--|
| 1. Undertake an infrastructure analysis to identify whether the precinct can be supported with existing water, sewerage, energy and telecommunications infrastructure. | MWRC | | First 12 Months | N/A |
| 2. Investigate the establishment of a Mudgee education and training network between key education providers (UOW, TAFE), the WNSW LHD and business organisations. The purpose of this is to develop education pathways between providers to enhance the skills of local employees and to attract suitable employees to the region, supported by continuous education opportunities. | WNSW LHD | Mudgee TAFE UOW RDA Orana MWRC | 1-2 Years | N/A |
| 3. Work with RDA Orana to deliver a health workforce recruitment and retention program for Mudgee, and regionally. Consider seeking funding from the Commonwealth Regional Jobs and Investment Packages program, should the program continue with additional funding extended to the NSW Central and Far West areas. | RDA Orana / WNSW LHD | MWRC UOW Mudgee TAFE Mudgee Health Council | First 12 Months | N/A |
| 4. Support programs to attract doctors (including visiting specialists), nurses and allied health workers to the Mid-Western Region. | WNSW LHD | WNSW PHN Local GP Practices Mudgee Health Council Mudgee4Doctors program Western NSW Regional Training Hub | Continue 3 years (new programs) | Mudgee4Doctors program |
| 5. Investigate amendments to the MWRC LEP to facilitate the Health Precinct Master Plan. a) enact the land zoning changes identified in the Precinct map (Figure 28 – page 35) b) remove 'health services facilities' as an allowable use from the R1 General residential zone c) Investigate opportunities to increase dwelling density of attached and detached housing in the R3 Medium-Density Residential Zone, in line with ongoing monitoring of residential land supply within the R3 zone. | MWRC | Local primary and allied health businesses | 1-2 years | N/A |
| 6. Investigate construction of a joint WNSW LHD, UOW shared facility for health and clinical education and training on the Mudgee Hospital site to cater for student and workforce training needs with multi-purpose education and training space. Spaces to include clinical simulation, tutorial, lecture / large group training, student learning and resources hub and ancillary office space. | WNSW LHD | UOW Other interested parties (e.g. other education providers) | 1-2 years | N/A |
| 7. Undertake a business case for a new indoor all-season pool in the area of Cahill Park as noted on the precinct map. The pool is to include supporting retail and commercial amenity, private led health therapy and rehabilitation areas, maximising functionality for all community members. | MWRC | WNSW LHD Other interesting parties (e.g. allied health / retail businesses) | 1-2 years | MWRC Indoor Pool Feasibility Study – Potential site option to investigate |
| 8. Investigate the construction of an accommodation facility for key health workers and students. The facility is to be located on the Mudgee Hospital site and must include a funding model for subsidised student accommodation before it is enacted. | WNSW LHD | Potential other education and health providers with student / key worker accommodation needs | 1-2 years | N/A |
| 9. Consider for inclusion within Council's Pedestrian Access Mobility Plan the establishment of improved pedestrian connections along Church Street between the CBD and Mudgee Hospital, as indicated on the Precinct map (Figure 27, Page 34). These connections are to be for improved pedestrian movement, including widened footpaths, safer road crossings inclusive of signage and pedestrian islands, and a DDA compliant crossing alongside Church Street over the Gwabegar railway line. | MWRC | WNSW LHD Mudgee Medical Centre Transport for NSW | 1-2 years | Partial – Pedestrian Access Mobility Plan. |

The Mudgee Health Precinct Master Plan identifies clear development priorities for the Precinct and the Region. The plan, strategies and actions will help address specific demographic and workforce challenges in the area and will facilitate improved access to health services for residents in the short, medium and long-term. The Precinct Master Plan will help grow health and supporting health education services in Mudgee, harnessing existing investment in health infrastructure around the Mudgee Hospital and supporting Council led infrastructure. This plan will assist in improving the health and wellbeing of the Mid-Western Regional residents, in direct alignment with Government and community priorities.

2. INTRODUCTION

The New South Wales (NSW) Department of Planning, Industry and Environment (DPIE), the Mid-Western Regional Council (MWRC), the Western NSW Local Health District (LHD) and the University of Wollongong (UOW) engaged Destravis to facilitate the Mudgee Health Precinct (the Precinct) Master Plan. The Precinct is focused on the Mudgee Hospital, incorporating Cahill Park to the east of the Hospital.

2.1. Scope of the engagement

The Mudgee Health Precinct Master Plan specifically included:

- 1) Desktop & gap analysis – including a site visit and desktop analysis.
- 2) Opportunities and constraints analysis – visual outputs by overlay / key issue or factor following on from outcomes of desktop and gap analysis.
- 3) Economic growth analysis – opportunities and constraints – identification of key factors for economic and health cluster growth, followed by targeted telephone consultations with key stakeholders involved in the precinct and surrounds to determine opportunities and constraints for precinct growth by stakeholder. Separate economic baseline and opportunities report within input into design charrette and as appendices to this report.
- 4) Design charrette – facilitated workshop with key precinct stakeholders determining precinct principles, discussing opportunities and constraints and developing key strategies and actions to realise the potential of the precinct.
- 5) Draft Precinct Master Plan Report & review presentation – collaborative findings workshop to review and develop the Draft Precinct Master Plan Report, followed by a MWRC briefing and feedback session, leading to the Final Precinct Master Plan Report.
- 6) Community Consultation (by MWRC)
- 7) Final Precinct Master Plan & presentation – client review and finalisation of the Precinct Master Plan Report, and final presentation of Precinct Master Plan.

2.2. Limitations and exclusions

This report has been undertaken using visual surveys, desk top reviews of available documentation and single site inspection noting the following limitations and exclusions:

- provision for a single but comprehensive site visit
- review of information supplied by desk top analysis only
- consultation with key stakeholders limited to the time frames and allowances contractually specified
- no additional technical studies beyond the economic baseline and opportunities study (such as surveys, technical reports) were commissioned for the purpose of this project.

2.3. Project Team

The Client: New South Wales Department of Planning, Industry and Environment, the Western New South Wales Local Health District, University of Wollongong, Mid-Western Regional Council.

The Project Director: Damien Pfeiffer, Director Regions, Western, NSW Department of Planning and Environment.

The Consultant Team: Destravis – Gunther De Graeve, Director; Anthony Colwell, Senior Project Associate; John Williams, Master Plan Architect.

2.4. Stakeholder Engagement

The following organisations and personnel were consulted with throughout the duration of the project:

- University of Wollongong
- Western NSW Local Health District
- Mid-Western Regional Council
- Western NSW Primary Health Network
- Mudgee Medical Centre
- Regional Development Australia - Orana
- DPIE – Regional Development Central West / Orana
- Transport for NSW
- TAFE NSW - Mudgee Campus
- Mudgee Medical Centre
- Mudgee Health Council
- Mudgee Chamber of Commerce
- NSW Ambulance
- South Mudgee Surgery
- Pioneer House (Aged Care)
- Opal Mudgee (Aged Care)
- Mudgee Disability Support
- Mudgee Local Aboriginal Land Council
- Lifeskills Plus
- Peabody Energy, Kepco Australia, Glencore and Bowden Silver – mining organisations

Destravis thanks all stakeholders for their contribution to the project.

3. SITE CONTEXT AND LAND CHARACTERISTICS

3.1. Precinct and surrounds

The Precinct is broadly situated around the Mudgee Hospital, incorporating Cahill Park to the east. Figure 3 identifies the broad precinct investigation area, including significant land parcels and nearby context at the commencement of the study.



Figure 3 – Mudgee Health Precinct Investigation Area

The Mudgee Hospital portion of the Precinct is surrounded by housing with some attached multiple dwellings although the majority is detached low density housing. Business uses largely focused on the health industry are in close proximity to the site but are within low density residential land. Unused recreational land is on the eastern side of the precinct, with the old Mudgee railway station and tracks to the North of the site.

Precinct partners have direct and indirect investments in the precinct, largely focused on health infrastructure/businesses and recreational land. Currently, UOW medical students undertake clinical placements within the Mudgee Hospital and other health facilities including private medical practices, which provide learning spaces to support student learning. The Mudgee Hospital is currently undergoing development with a full replacement of the existing facility to be opened mid-year, providing infrastructure that meets Mudgee’s needs as defined under the Western NSW LHD Clinical Services Plan for Mudgee.

Similar to National, State and regional trends, Mudgee’s population is aging. As of the 2016 census, the proportion of persons aged over 65 is 19.7%, an increase from 16.4% in 2006¹. In addition to this, the proportion of older working aged persons (50-64 years) is 20.3%, indicating there will be an increased in persons leaving the workforce over the coming decade. This will place increasing pressure on the working age population and will drive an increase in the demand for aged care services most likely in Mudgee. With an unemployment rate of 3.4% as of September 2019², there is effectively no spare capacity in the labour market. The low rate of unemployment coupled with increasing numbers of persons leaving the workforce will put pressure on Mudgee’s employment industries. Strategies to attract and retain workers to Mudgee will therefore be required, with the risk that if this does not occur, then industries may decline and elderly people may decide to retire elsewhere. Alternatively, this may drive further population growth in Mudgee as more workers are attracted to the region, which may enhance growth and the vitality of the region’s economy.

Due to this ageing population, catering for the increased need of health care and social assistance services is therefore a priority for the region and is a factor that will drive continued investment in the Precinct. This focus is also specifically reflected in the Central West and Orana Regional Plan’s Direction 5 (Improve access to health and aged care services) and Direction 26 (Increase housing choice for seniors), reflecting government priority in addressing this demographic trend.

The Mid-Western Regional Local Strategic Planning Statement (LSPS) guides strategic planning within the region. The Precinct Plan is aligned with planning priorities 2 (making available affordable housing options through land use planning), Priority 7 (supporting the attraction and retention of business and industry), and Priority 9 (supporting the expansion of essential infrastructure and services in the region).

With respect to other demographic trends, Mudgee’s median age is relatively stable at 38.8 years, lower than the regional average³. Family groupings are generally stable with young people leaving. However, the over 30’s age group is stable, indicating that young people come back, or families are attracted to the region as a place to work and continue their life after living elsewhere in their youth. This is a strength for the region, as it means the working age demographics are stronger than they may otherwise be, supporting employment.

Providing housing to meet the needs of household types and an ageing population is also key focus. Currently Mudgee is primarily served by dwellings with 3 or more bedrooms. These dwellings make up almost 80% of the housing stock, while 1-bedroom dwellings account for 3.6% and 2-bedroom dwellings account for 16% of all dwellings⁴. In addition to this, the majority of new housing stock appears to be geared towards larger lots with larger house options, which will exacerbate this trend. The region is also a key tourism area. Significant pressure is placed on residential accommodation in the Region, with the use of many properties as Airbnb accommodation. This situation contributes to low rental vacancy rates. Both of these matters present an issue for smaller households, visiting workers, students and lower socio-demographic members of society.

There may be opportunity through Precinct planning to address housing matters either through creating space for more medium density housing, or in amending LEP and DCP provisions for residential development. This will be further investigated through Precinct planning and will also require further investigation by MWRC’s Strategic Planning Department.

Significant challenges arise from the ageing population, pressure on workforce and housing listed above. This Precinct Master Plan project provides an opportunity to cater for targeted interventions to manage these challenges.

¹ Census Quick Stats, Mid-Western Regional Council LGA, https://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/LGA15270, accessed March 2019.
² Department of Education, Skills and Employment - Small Area Labour Markets, September Quarter 2019.

³ CDM Smith, Mudgee Health Precinct Master Plan Economic Analysis, March 2020.
⁴ Census Quick Stats, Mid-Western Regional Council LGA, https://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/LGA15270, accessed March 2019.

3.2. Key Organisations

The following list identifies the key organisations (note: not listed in order of importance / priority) present within the Precinct. Consultation with these organisations will be sought to inform the investigations and outcomes of the Precinct Master Plan.

- University of Wollongong
- Western NSW Local Health District
- Mid-Western Regional Council
- Western NSW Primary Health Network
- Mudgee Medical Centre
- Regional Development Australia - Orana

3.3. Key Legislation, Planning Scheme and Policy

Notwithstanding the overarching legislation governing land use planning in NSW (*Environmental Planning and Assessment Act 1979*), the Central West and Orana Regional Plan, the Mid-Western Regional Local Environmental Plan (LEP) 2012 and the Mid-Western Regional Council Development Control Plan (DCP) 2013 are the most relevant documents under which the Precinct will be guided from a planning and development perspective. A summary of the key linkages for the Precinct by document is undertaken below.

Central West and Orana Regional Plan - key directives and actions:

- *Direction 5: Improve access to health and aged care services:*
 - o 5.1 Establish health precincts around hospitals in regional cities and strategic centres.
 - o 5.2 Promote mixed-use facilities and research and accommodation precincts for the health and aged care service sectors.
 - o 5.3 Facilitate the development of multipurpose, flexible and adaptable health and education infrastructure.
 - o 5.4 Minimise the encroachment of inappropriate and incompatible land uses near existing and proposed health facilities.

The Precinct Plan aligns with these actions. In particular, the Precinct Master Plan will deliver upon Action 5.1 and supports Actions 5.2 through 5.4. Given this, the promotion of mixed use facilities, accommodation, aged care, flexible and adaptable infrastructure and minimising encroachment / incompatible land uses near health facilities were key inputs to the Precinct Principles and Opportunities and Constraints analysis.

- *Direction 6: Expand education and training opportunities:*
 - o 6.2 Promote the development of education precincts around universities and other educational facilities to allow people to specialise in rural studies and to cater for international students.
 - o 6.3 Facilitate joint-venture opportunities for shared community and school facilities on school sites, including sporting fields, amenities, parking, community halls, child care, arts and library facilities.

The plan aligns to this action. UOW currently offers student placements with health partners in Mudgee. There is potential to expand health education and training in Mudgee beyond existing placements. Opportunities for shared facilities, either aligned with existing or new facilities, may help enhance health education and training opportunities in Mudgee.

- *Direction 25: Increase housing diversity and choice*
 - o 25.1 Prepare local housing strategies that increase housing choice, including affordable housing options.
 - o 25.2 Increase housing choice in regional cities and strategic centres at locations near or accessible to services and jobs.

As noted in Section 3.1 above, improving housing choice to address the lack of affordable housing, particularly in the rental market, is important for Mudgee. The Precinct has an opportunity to facilitate housing choice and affordability in close proximity to jobs and services and in alignment with potential education and training needs (student housing).

- *Direction 26: Increase housing choice for seniors*
 - o 26.1 Promote ageing-in-place by adopting elements of Livable Housing Australia's Livable Housing Design Guidelines in development controls for housing, where possible.
 - o 26.2 Promote opportunities for retirement villages, nursing homes and other senior's housing in local housing strategies.
 - o 26.3 Remove planning barriers to provide a range of low-care and independent seniors' accommodation options in appropriate locations.
 - o 26.5 Locate new housing for seniors close to existing services and facilities, and on land free from hazards.

Growth in the provision of aged care services alongside a diverse range of seniors housing options are both aspects which could be facilitated within the Precinct, furthering Actions 26.1 to 26.3 and 26.5. This is pertinent as there is a need to grow residential aged care services in Mudgee over time. Seniors housing will be included as key inputs to the Precinct Principles and Opportunities and Constraints analysis.

- *Direction 29: Deliver health built environments and better urban design*
 - o 29.2: Enhance the quality of neighbourhoods by integrating recreational walking and cycling networks.

There is opportunity to make improvements to walking and cycling networks within the Precinct and more generally across Mudgee, furthering Action 29.2.

Mid-Western Regional Local Strategic Planning Statement (LSPS)

The Mid-Western Region Local Strategic Planning Statement (LSPS) was endorsed by Council on 20 May 2020 and is the primary strategic document driving land use planning in the region. It is not a detailed legal framework or development control document (the LEP and DCP take that role). The LSPS drives strategic planning directions, identifying a structure plan for the locality, and identifying key themes and priority areas for action.

The structure plan identifies the area around the Mudgee Hospital as a hospital and residential area. It is noted that a Mudgee Hospital is adjacent to the Mudgee Railway Station with the land the station is located on noted as 'commercial land'. Figure 4 (over page) identifies the structure plan.

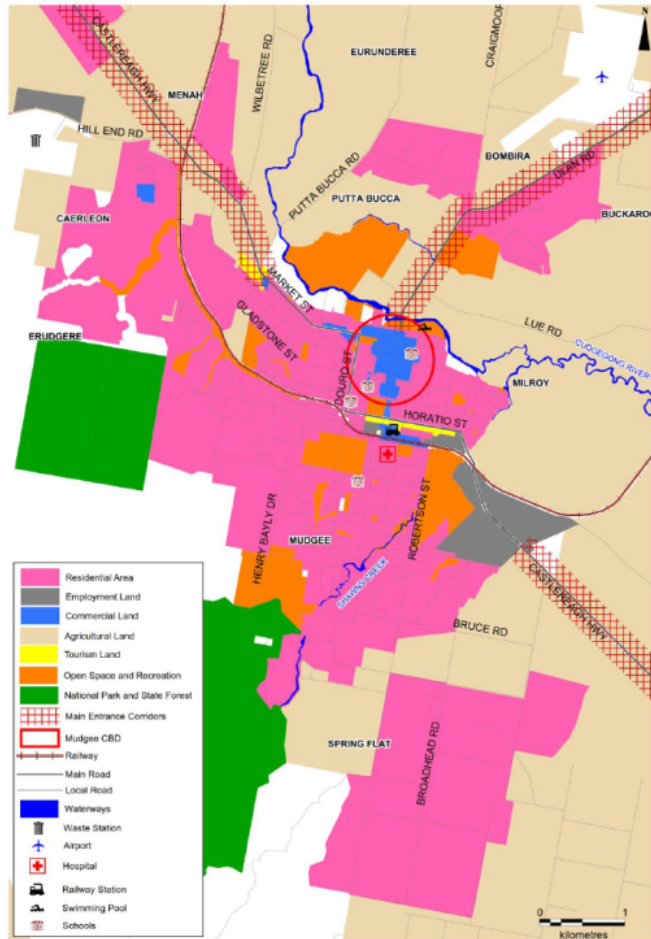


Figure 4 – LSPS Structure Plan

The LSPS has five themes and 12 priorities. Commentary on alignment with these is provided underneath each below.

1) Looking after our community

- Planning Priority 1 – Respect and enhance the historic character of our Region and heritage value of our towns
- Planning Priority 2 – Make available diverse, sustainable, adaptable and affordable housing options through effective land use planning
- Planning Priority 3 – Maintain and promote the aesthetic appeal of the towns and villages within the Region
- Planning Priority 4 – Provide infrastructure and services to cater for the current and future needs of our community

The precinct plan aligns with this theme and priorities. Priority 2 is supported with respect to the promotion of affordable housing options and increased medium density residential housing. Priority 4 is supported, and it is noted that actions to review contributions and infrastructure suitability will require some targeted investigations around the Health Precinct.

2) Protecting our natural environment

- Planning Priority 5 – Ensure land use planning and management enhances and protects biodiversity and natural heritage
- Planning Priority 6 – Minimise the impact of mining and other development on the natural environment.

The precinct plan has limited alignment with these planning priorities; however the precinct plan does support actions with respect to including provisions for water sensitive urban design and increasing urban tree cover.

3) Building a strong local economy

- Planning Priority 7 – Support the attraction and retention of a diverse range of businesses and industries
- Planning Priority 8 – Provide leadership on economic development initiatives and identify resources and infrastructure required to drive investment and economic growth in the Region
- Planning Priority 9 – Support the expansion of essential infrastructure and services to match business and industry development in the Region

The precinct plan aligns with this theme and priorities, supporting the actions through the development of the precinct plan. The plan will assist in the delivery of priority 7, particularly with respect to supporting workforce attraction and retention in the region, supporting business growth. Actions under priority 9 are furthered by this plan, with expanded health and education services a priority of the plan.

4) Connecting our region

- Planning Priority 10 – Develop a regional transport network in partnership with government agencies, that grows with the needs of residents and businesses
- Planning Priority 11 – Develop and enhance walking and cycling networks across the Region

The precinct plan aligns with this theme and priorities. The need to enhance regional transport connections, in particular for better connecting residents with health services, is reflected within this plan. Improving pedestrian and cycling safety and accessibility has been considered in this plan, with the precinct plan recommending enhancements.

5) Good government

- Planning Priority 12 – Improve communications between Council and the community and create awareness of Council's roles and responsibilities

The precinct plan supports good governance and communication actions.

Mid-Western Regional Local Environmental Plan (LEP) 2012

The Mid-Western Regional LEP is the primary legislative document controlling land use planning for Mudgee. The Mid-Western Regional LEP provides the zoning and permitted uses by zone alongside key constraints mapping and controls where relevant. It is noted that provisions such as floor space ratios have not been adopted within the Mid-Western Regional LEP, however maximum buildings heights have.

The key land uses within the Precinct are: R1 (general residential) and RE1 (public recreation). Typical uses and critical information for each zone are noted below:

- R1 (general residential) – typically 600sm lot sizes although varied by the lot size map. Typical range of residential uses with the exception of more dense uses such as multi-unit dwellings, attached dwellings. Some non-residential uses allowed, such as child care, community facilities, neighbourhood shops, respite day care, recreation facilities, health consulting and hospital.
- RE1 (public recreation) – suitable for a range of parkland and recreation uses as well as restaurants and cafes and community facilities.

Overlay mapping is applicable under the Mid-Western Regional LEP, including:

- Height – the hospital and nearby park do not have height restrictions.
- Additional permitted uses – no additional permitted uses apply to land within the precinct area.
- Biodiversity – no land subject to the biodiversity mapping applies to land within the precinct.
- Heritage – the Hospital site is noted as a general conservation area and the adjoining railway station is a State Registered Heritage Place.
- Flooding – site is not subject to flooding under the LEP maps.
- Sewerage treatment buffer – the site is not subject to the sewerage treatment buffer.

The planning framework and key zoning and overlay information noted above framed the analysis contained within this report. The key strategies and actions that result from the analysis and stakeholder consultation undertaken during the development of this Precinct Master Plan have taken into consideration this information.

Mid-Western Regional Council Development Control Plan (DCP) 2013

The Mid-Western Regional Council DCP is the key document under which specific development standards are identified for any assessable development within Mudgee. It sets development standards that are required to be met for development to be allowed. A brief assessment of the key Mid-Western Regional Council DCP requirements for development within the Precinct has been undertaken for health, education, commercial and accommodation related uses. Key information from this assessment is as follows:

- Residential Subdivision: Lot sizes to comply with lot size mapping. Battle-axe and corner subdivisions allowed, with corners to allow for dual occupancy or block split opportunities where services allow.
- Car parking:
 - o Multi-unit dwelling: 1 / 1 bedroom and 2/2+ bedroom, & 1 space for visitors per 5 units (note some relaxations for affordable housing).

- o Tourist accommodation: 1/unit + 2/3 employees
- o Restaurant/café: 1/7sqm GFA / 1/3 seats
- o Shops 1/25sqm GFA
- o Health consulting, medical centre: 3 / consulting room.
- o Education: 1/staff + 1/10 students
- o Child care: 1/4 children
- o Recreation: 3/court or min. 20 + sufficient capacity for seating.
- Site cover / Gross Floor Area (GFA) / Density:
 - o Units - 1/300sqm site area (1-bedroom unit), 1/380sqm site area (2-bedroom unit) and 1/450sqm site area (3-bedroom unit) - note outside conservation area. Inside conservation area these drop to 250/280/310sqm respectively. Site cover max 40%.
 - o Commercial: no reference to GFA / site cover limitations.
- Landscaping / open space:
 - o Multiple dwellings: 40sqm / dwelling and min dimension 5m. 40% site area landscaping.
 - o Commercial: Landscape buffer to residential, landscaping in car parks.
- Set-backs:
 - o Multiple dwelling: 4.5m front, 3m side and rear.
 - o Commercial – 0m front – QDC for side and rear.

Where specific standards have not been noted Building Code of Australia standards generally apply.

The information noted above has framed the types of development that could be achieved throughout the Precinct, both under existing zoning and use rights and through proposed changes. In particular, this information assists in determining yield in sqm or dwellings for land parcels, allowing general yield assumptions for the Precinct to be identified. As with the Mid-Western Regional LEP provisions.

3.4. Mid-Western Regional Council Policies / Strategies

The Mid-Western Regional Council holds a number of key policies and strategies that relate to its management of land and strategic direction that ultimately guides infrastructure investment and service provision for the community of Mudgee. The following key policies and strategies were provided for review by the Mid-Western Regional Council:

- Community Plan
- Recreation Strategy
- Regional Economic Development Strategy 2018-2022
- Orana Joint Organisation Strategic Priorities 2019-2022
- Pedestrian Access Mobility Plan (PAMP)

These policies and strategies have been reviewed to ascertain their level of influence and guidance for the Precinct Master Plan.

Community Plan

The Community Plan seeks to outline the key strategies and actions that the Mid-Western Regional Council will take to meet community needs. The plan has a strong community focus and seeks to:

- Look after our community, creating vibrant towns and villages with a rich history, a safe and healthy community, and a strong sense of community pride – a great place for families.
- Protect our natural environment, conserving and promoting the natural beauty of our region.
- Build a strong local economy, creating a prosperous and diversified economy delivering lifestyle benefits to the community through employment, income and sustainable economic growth.
- Connect our region, linking our town and villages and connection our region to the rest of NSW.
- Provide good Government, creating a strong Council that is representative of our community and effective in meeting the needs of the community.

The plan focuses on these areas, seeking to deliver actions to realise its focus. An analysis of the key actions within the plan was undertaken, seeking to relate these actions back to the Precinct. This analysis shows the Precinct may be able to support or assist in the realisation of the following actions:

Looking after our community

1. A safe and healthy community
 - 1.1 - Maintain the provision of high quality, accessible community services that meet the needs of our community.
 - 1.2 - Work with key partners and the community to lobby for effective health services in our Region.
 - 1.3 - Support networks, program and facilities which promote health and wellbeing and encourage healthy lifestyles.
2. Vibrant towns and villages
 - 2.3 - Make available diverse, sustainable, adaptable and affordable housing options through effective land use planning.
3. Effective and efficient delivery of infrastructure
 - 3.1 - Provide infrastructure and services to cater for the current and future needs of our community.
4. Meet the diverse needs of the community and create a sense of belonging
 - 4.1 - Support programs which strengthen the relationships between the range of community groups.
 - 4.3 - Provide equitable access to a range of places and spaces for all in the community.

Protecting our natural environment

Nil directly relevant.

Build a strong local economy

1. A prosperous and diversified economy
 - 1.1 - Support the attraction and retention of a diverse range of businesses and industries.
 - 1.2 - Encourage the development of a skilled and flexible workforce to satisfy local industry and business requirements
2. An attractive business and economic environment
 - 2.3 - Support the expansion of essential infrastructure and services to match business and industry development in the Region.
3. A range of rewarding and fulfilling career opportunities to attract and retain residents
 - 3.1 - Support projects that create new jobs in the Region and help to build a diverse and multi-skilled workforce.
 - 3.2 - Build strong linkages with institutions providing education, training and employment pathways in the Region.

Connect our region

3. An active travel network within the region
 - 3.1 - Develop and enhance walking and cycling networks across the Region
 - 3.2 - Support viable public transport options across the Region

Good Government

2. Good communications and engagement
 - 2.2 - Encourage community access and participation in Council decision making.

The Mid-Western Region Community Plan has a clear focus on strengthening the attractiveness and function of the area to support community needs. It has a strong focus on the key issues facing the area, many of which relate to the Precinct's scope and direction. Supporting and attracting key workers and people to the area, particularly in the health care industry, is a strong focus of the plan. It supports this with a local focus on training, education and growing local businesses, as well as seeking ways to improve attraction and retention through providing affordable housing and improving the liveability of the area.

The strategic focus noted above will be used to help frame the analysis contained within this report.

Recreation Strategy (2013)

MWRC's Recreation Strategy lays out the current situation and preferred future situation for recreation facilities across the Mid-Western Region. The strategy focuses heavily on the facilities at Glen Willow, given their strong regional focus and ability to meet a broad range of community needs. The strategy identified that there is a deficiency in the following recreational infrastructure:

- walking/running/cycling – billed as the most popular activity by participation and across a range of age cohorts, these activities, although not necessarily needing specific facilities the continued development of shared pathways provide valuable, alternative and safe opportunities for these activities. In addition they provide a form of access and transportation for both young people (local trips or travelling to facilities) and tourists/visitors (e.g. visiting wineries close to towns, cycling as a tourist)
- swimming – upgrades to the three swimming pools should stimulate use, however, given the popularity of swimming pressure for year round access to a swimming pool will remain constant and should continue to be considered
- additional fields/facilities/amenities for sports such as AFL, softball and hockey
- children's Play Equipment – upgrades to selected facilities
- opportunities for recreation on natural areas – particularly close to Mudgee and greater promotion of these areas as providing opportunities for recreation. Support for non-traditional uses such as mountain bikes.

Works have been undertaken to address these gaps in the years since the Strategy was completed, however, it is noted that a year round swimming pool has not yet been provided and is a key issue for investigation under this plan.

Regional Economic Development Strategy 2018-2022

MWRC's Regional Economic Development Strategy identifies the key industries and drivers of growth for the region and lays out five key strategies to build the region's economic opportunities and growth. The five main employment industries are:

- 1) Mining – approximately 1,500 jobs.
- 2) Retail Trade – approximately 1,000 jobs.
- 3) Manufacturing / Trade / Transport – approximately 850 jobs.
- 4) Accommodation and Food Services / Rental and Real Estate – approximately 900 jobs.
- 5) Agriculture, Forestry and Fishing – approximately 850 jobs.

While health care and social assistance is not noted as a main employment industry in the report, it is the third largest employer in the region⁹. While it is excluded from the report, it is noted that the five industries mentioned are all high value add industries that support employment growth amongst other sectors in a very significant manner, meaning they are the most dominant economic industries by way of gross output and further employment growth in the region.

The 5 key strategies for increasing economic opportunity and growth are:

- 6) Develop a mature and diversified tourism sector.
- 7) Grow industry clusters around Mining, Manufacturing and Agriculture.
- 8) Capitalise on existing viticulture strengths.
- 9) Support the attraction and retention of an increased number of diverse businesses and industries while developing a strong entrepreneurial reputation.
- 10) Develop an emerging retiree and aged care sector.

⁹ CDM Smith, Mudgee Health Precinct Master Plan Economic Report, March 2020.

Strategy 5 has a direct correlation to this Precinct Master Plan given it relies on direct services in aged care as well as the related health services growth that will be required to ensure Mudgee is an attractive place to retire.

Key actions that will be further explored through Precinct planning include:

- improve availability of vocational training in aged care
- attract skilled professionals in medicine, law and financial services
- support for the Mudgee Hospital Redevelopment.

The attraction of skilled professional and expanding health care services is a particularly important action to support this goal and this will be considered within the opportunities and Precinct actions of this report.

Orana Joint Organisation Strategic Priorities 2019-2022

The Orana Joint Organisation is made up of six Council's (including MWRC) who's purpose is to work on regional priorities that span Council borders, enhancing collaboration, planning and project delivery for regional scale projects. The organisation has four strategic priorities, listed below.

1) Priority One – A Connected Region

The priority includes actions that broadly seek to improve transport infrastructure, digital connectivity, business growth and tourism growth. The plan aligns with this priority with respect to the connection of residents with health destinations and more broadly to business investment and growth in the region.

2) Priority Two – A Vibrant Region

The priority includes actions that seek to enhance employment skill and opportunities, improve health services, education services and the liveability of the community. The precinct plan strongly aligns to this priority, in particular with respect to improving health and education services in the region. This precinct plan is a key reference of the priority.

3) Priority Three – An Environmentally Sustainable Region

The priority includes actions that improve the environmental sustainability and water security of the region. The precinct plan has limited alignment with this priority

4) Priority Four – A Capable and Collaborative Joint Organisation

The priority includes actions to improve the effectiveness of the organisation. As the priority speaks to the organisation's governance and operation, the precinct plan has no alignment with the priority.

Pedestrian Access Mobility Plan (PAMP)

MWRC's PAMP identifies design standards for improved pedestrian and cycle safety, along with a number of key pedestrian route upgrades across all townships.

Figure 5 – PAMP Pedestrian route upgrades Mudgee



As can be seen from the above, the route along Church Street is considered a primary pedestrian route, connecting the precinct into the CBD. The PAMP also includes priority projects. A scan of the projects within the precinct has been undertaken, with the following projects noted:

- safe pedestrian crossing of Church Street to medical centre
- replace fencing on railway bridge and investigate safer crossing over Church Street for disabled persons
- Church and Meares street intersection upgrades (adjacent to Hospital)
- replacement of poor sections of pathways in specific sections of Church Street
- Robertson, Madeira to Meares Street – new pathway for improved Hospital and CBD access
- Lawson, Meares to Madeira Street – pathway improvements
- Nicholson Street to Church and Douro – improved medical centre access

Note not all projects are shown on the PAMP map, however they are listed as actions within the PAMP. These projects have been considered through precinct planning.

3.5. Western NSW LHD Health Services Plan

The Western NSW LHD has developed a Health Services Plan (HSP) for Mudgee, prior to the finalisation of the design of the new Mudgee Hospital. Figure 6 outlines the following infrastructure need in Mudgee.

Figure 6 – Summary of admitted and ambulatory requirements (Mudgee)

| Service | Current Bed/Chair Numbers | Proposed Bed/Chair Numbers | Supporting Clinical Spaces |
|---------------------------------|---|--|--|
| Emergency Department | 5 treatment bays, including a resuscitation area with CCAS camera Safe assessment room | 5 treatment bays 1 resuscitation area 1 safe assessment room 1 isolation room | triage Waiting rooms including paediatric area |
| General Medical & Surgical Unit | 24 overnight beds open | 26 overnight beds/adults 2 overnight beds/children | Patient area suitable for both adults and children ADL kitchen |
| Peri-Operative Service | 2 operating room 8 chair day surgery area 4 bed recovery area CSSD | 2 operating room 8 chair day surgery area 4 bed recovery area CSSD | Anaesthetic room Preadmission area 1 recovery area sized to accommodate obstetric patients |
| Maternity Unit | 2 birthing rooms 1 assessment room 4 bedded postnatal room 2 double post natal rooms | 2 rooms suitable for birthing and short term accommodation 3 ante and post natal beds 2 chair/bed ambulatory care area for antenatal day only assessments and monitoring | Two neonatal resuscitation/retrieval bays Antenatal Education room Consulting room for antenatal and post natal clinics Overnight staff accommodation Rooms large enough to accommodate partners Lounge |
| Ambulatory Care | 2 chairs | 4 treatment spaces 1 treatment room | Entry, reception |
| Oral Health | 4 chairs | 5 chairs | Dental work lab At least one dental surgery accessible for patient transport bed or wheelchair |
| Renal Dialysis | 2 port/chairs | 8 port/chairs 1 maintenance port | Consult room |
| Chemotherapy | 4 chairs | 4 chairs | Consultation room |

It is understood that the Mudgee Hospital redevelopment will be providing all the spaces as identified within the HSP. Additionally shell space for more radiology equipment is provided, allowing a business case to be put forward in the future about improving diagnostic capabilities in Mudgee, furthering the local health care provided.

The HSP notes that Mudgee will be a hub for local maternity, surgical, renal dialysis and chemotherapy services. Orange and Dubbo will provide cardiac, additional cancer care, specialist surgical, stroke, aged care, rehabilitation, mental health and critical care for maternity services.

The HSP notes that there the health service model in Mudgee will focus more on health prevention activities, particularly aimed at reducing chronic disease through health promotion and early intervention activities. This moves the service

* MWRC Population Projections, sub-set of the NSW Population Projections 2020, <https://www.planning.nsw.gov.au/Research-and-Demography/Population-projections/Projections>

beyond an infrastructure focus, with improvements to relationships and multiple agency service delivery within the community.

3.6. University of Wollongong Strategic Plan 2020-2025

The UOW Strategic Plan recognises the changing world we live in. With the future of healthcare continually evolving and focusing more on interdisciplinary patient centred care, training provided to health care professionals will need to change. Partnerships are a central pillar to providing education for UOW, a pillar that is particularly important in delivering education and training for health care professionals.

The focus on changes in health care education and training translate directly into action with a strategic priority in improving collaborative opportunities, and a focus on health wellbeing through leveraging expertise to address local and global health challenges.

While broad in its focus, the strategic plan is translated directly into action with UOW building a Health and Wellbeing Precinct in Wollongong that embodies this model. The precinct will bring all health and wellbeing services together in the same location. This will help create a focus on patient-centred care coupled with training and research that is directly translated into action. The centre will also have a preventative health focus, and will involve closer collaboration with health providers, both aspects which are sought to be mirrored in regional NSW.

This change in the way education and training is provided will flow into the rural and regional areas of NSW where students undertake placements to learn with active health businesses and hospitals.

UOW has placed medical students in the Mudgee region for over 10 years. This is achieved by placement agreements with health providers. Expanding the focus on interdisciplinary care in Mudgee by adding new health disciplines to placements in Mudgee is a focus for UOW and this will be explored throughout the development of the Precinct.

3.7. Aged Care

Residential aged care and home care services are a growing focal point of the health care industry. As the community ages and more and more people are aged over 70, the need for aged care spaces and home care grows with it. The Federal Government is seeking to provide a total of 125 spaces for aged care for persons aged over 70 by 2021. This is made up of 80 residential aged care spaces and 45 home care packages. Generally speaking, aged care tends to cluster in regional towns for the outlying areas. While some small provision of services (e.g. the Multi-Purpose Health Service (MPHS) model) will occur in smaller towns and rural areas, the majority of aged care clusters in larger towns where the workforce and associated health services are located. Given this, an analysis of the entire MWRC area has been used and is appropriate for determining any infrastructure gap in Mudgee.

The MWRC population projection shows that, by 2041, there will be a total of 5,113 persons aged over 70 years⁶. Using the ratios noted above, this translates into a total need of 409 residential aged care spaces, and 230 home care packages. Current residential aged care infrastructure in the Mid-Western Regional Council supports a total of 293 spaces, including 219 spaces in Mudgee and 74 spaces in surrounding towns. This shows that the service gap for residential aged care in the MWRC is 116 spaces. Please note that a recent development (Oak Tree) is not providing residential aged care and as such its accommodation is not counted in this need.

It is more than likely that the majority of the future need will be clustered in Mudgee for the reasons noted above. While spread over a long period of time, this deficit is significant for a town the size of Mudgee and proactive planning to allow space for such a facility in an ideal location will be required to ensure the infrastructure deficit is able to be met. Please note an analysis of home care packages was not undertaken as this requires detailed data requests with no information publicly available for the number of home care packages to the LGA / SA2 level.

3.8. Movement and Transport Networks

Movement and transport networks at the local level are guided by normal operational considerations of the MWRC. There is no specific transport plan for the Region. However, there are a number of regional transport planning plans and priorities led by Transport for NSW, described under each initiative below.

3.8.1. Movement and Place Framework

The movement and place framework is a guidance and planning document from NSW Transport that seeks to ensure road planning is aligned better for efficient movement of people and goods, and better urban design with respect to the places people interact within. The Framework effectively notes those places with more people are a local street environment with appropriate safety and low speed environments, while those with higher motor vehicle movements are considered movement corridors with a function that is not necessarily conducive to higher pedestrian access without effective safety controls. Consideration of this Framework will be undertaken in planning for the Precinct.

3.8.2. Future of Transport 2056

The Future of Transport 2056 document outlines a vision for regional transport that is "A 'hub and spoke' network of services in regional areas will provide better connections between communities and improved access to regional cities and centres."⁷

This is effectively about providing spoke connection from regional centres to Sydney, and from smaller local communities to regional hubs, being higher order towns. This recognises the fact that many services for smaller towns and regional centres are delivered out of larger centres, making connections between and amongst them critical to delivering services for residents.

The stated customer outcomes for regional NSW are to be⁸:

- Convenient and responsive to customer needs through providing flexible services and services that are adaptive to new technology.
- Sustaining and enhancing liveability of our places through providing the appropriate movement and place function for key roads through regional areas and towns, and through supporting appropriate transport services and infrastructure for place.
- Connecting people and places in the growing city through supporting the land use, population and demand of local centres and enabling economic development.
- Safely, efficiently and reliably moving people and goods through reducing deaths and serious injuries and creating a network that is resilient to significant weather events.
- Accessible for all customers through improving access to employment and community services including health, education and cultural activities.
- Makes the best use of available resources and assets to improve connectivity, integration of services and increased capacity.

For Mudgee, this may impact upon service deliver for local roads and highways, particularly with respect to safety and operation during significant weather events, and with improved regional public transport connections.

⁷ NSW Government, Future of Transport 2056, March 2018, Version 3.1, p 31.

⁸ NSW Government, Future of Transport 2056, March 2018, Version 3.1, pp 32-33

3.8.3. Regional NSW Services and Infrastructure Plan

The Regional NSW Services and Infrastructure Plan builds on the Future of Transport Plan 2056, mirroring the customer outcomes for regional NSW. In terms of initiatives for the Central West and Orana Region, and more specifically as they relate to the Region, the following is noted:

- Investigations into the freight movement improvements on both road and rail, from inland areas to Newcastle, Sydney, Wollongong.
- Improvements to the Castlereagh Highway from Mudgee to Lithgow.

These initiatives have limited impact to direct Precinct planning, with the exception of potential rail movements through Mudgee.

3.8.4. Better Public Transport for isolated communities

Better Public Transport for isolated communities is a state-wide project to introduce better link 44 towns across NSW via 13 new services⁹. Mudgee is a beneficiary of improved connections, with a daily service from Dubbo to be provided. Planning for the Precinct will need to ensure this service is taken into consideration, in particular with reference to key health services that residents of Region are accessing in Dubbo to ensure alignment of operating times and appointment scheduling.

3.8.5. Dubbo to Newcastle rail connection

While the Dubbo to Newcastle railway connection does not traverse Mudgee, the Gwabegar railway line does connect into this line and may potentially be a source of movement for freight. The use of the Gwabegar railway line (which runs to the immediate north of the Mudgee Hospital) for increased freight movement may have an impact on the Precinct planning. This will be taken into consideration through precinct planning activities.

3.8.6. Castlereagh Highway improvement

The Castlereagh Highway (connecting Lithgow to Mudgee and further North) is undergoing sequential improvements to safety to improve the safety outcomes for travellers. This may ultimately lead to an improved road connection to Mudgee, which may assist in increasing tourist access to Mudgee, as well as general safety for residents and workers who are traveling through the region. The Castlereagh highway runs to the North of the Precinct (Horatio Street), connecting into Duoro Street. The status of the Castlereagh Highway will be taken into consideration during Precinct planning.

⁹ <https://www.nswnational.org.au/better-public-transport-for-isolated-communities/>

3.8.7. Mudgee specific analysis

Further to the information above, at the local level MWRC is currently undertaking parking investigations in the CBD area. Early feedback on this plan demonstrates there is significant parking need within the Mudgee CBD, however this is offset by street, Council and private parking, with some localised access issues.

Identification of the existing transport linkages in and around the Precinct is contained within Figure 7 below.

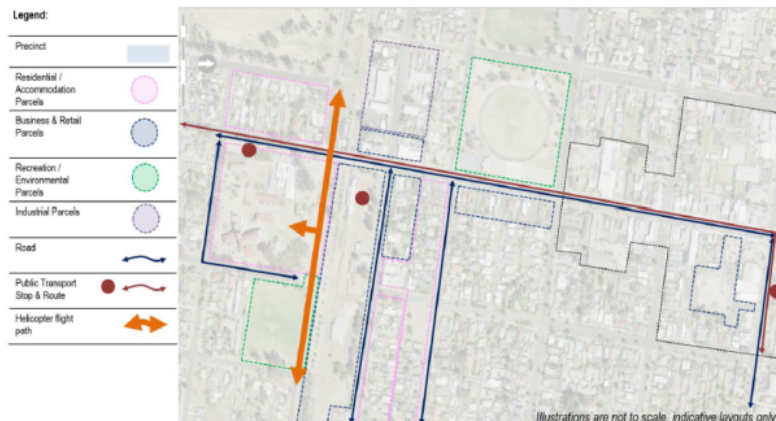


Figure 7 - Existing Transport Network

As can be seen from the information noted above, access between the Precinct and other areas of Mudgee is generally suitable for motor vehicle traffic. Some localised intersection or road traffic safety elements may arise from time to time, although these can be dealt with at a local level. Public transport, however, is fragmented with stops not necessarily connecting to regional nodes or the front entrance of key activity generators. This being said, public transport is connected to the Precinct, other health facilities across town and to the Mudgee CBD. A regional public transport connection is present at the Mudgee Railway station, although it is noted that this is not aligned with local public transport connections. Active transport network in the locality is not specifically present by way of infrastructure or signage. Additionally general footpath and road crossing connections are less than desirable, with a lack of pedestrian safety signage and safe road crossings (e.g. median refuge islands, line marking). This is a key issue for the Precinct.

While connections do lead into the CBD, they are incomplete (e.g. Tony McGrane Place) and include unsafe barriers. The existing movement and active transport networks connections will be further analysed for constraints and opportunities within Section 4 and 5, below.

3.9. Key Investments

There are recent key investments within the boundaries of the Precinct:

- Mudgee Hospital replacement: The Mudgee Hospital is nearing the end of a complete rebuild and expansion, allowing it to meet future demand and change service delivery models. The building will be a 2 storey construction with external patient wellness and rehabilitation areas, along with associated car parking. Finalisation is expected in mid-2020 and the total project investment exceeds \$70M.
- MWRC has flagged a case to construct an indoor all weather recreational pool within Mudgee. This is a priority for enhancing community and recreational facilities in Mudgee.

These investments will be a key consideration in the opportunities and constraints analysis

3.10. Summary

The background information analysis undertaken identifies a number of common themes for the Region, informing Precincts strategic direction. These themes arise from the demographic challenges the Region, and the rest of NSW and Australia, will face into the future from an ageing population, as well as localised employment and industry challenges. The key themes from the background analysis are:

- Support health businesses and services to grow through targeted land use planning controls.
- Increase access to health facilities and improve health services for older persons and residents more generally.
- Increase key worker attraction, particularly in the health industry
- Increase educational opportunities and resources to support student placements and workforce training in Mudgee
- Improve housing diversity through increasing the stock of smaller lots and premises.
- Accommodate an ageing population through providing appropriate housing stock and facilities to accommodate ageing in place, including additional space for residential aged care facilities.
- Improve recreational opportunities, in particular an all season pool option.
- Improve pedestrian and bike path safety in Mudgee
- Improve public transport options and regional connectivity to higher order centres (e.g. Dubbo).

These themes will be carried through to the opportunities and constraints analysis and subsequent strategy and action development, outlined in the following sections.

4. PRECINCT OPPORTUNITIES & CONSTRAINTS

4.1. Economic Baseline and Opportunities

CDM Smith were engaged to undertake an economic baseline and opportunities report to support the Precinct Master Plan. This report outlines the current demographic economic factors across the Region and in Mudgee specifically.

A number of key statistics identified in their complete report (provided in Appendix A) are noted:

- Average weekly rent increasing at 5.1%/year – significant and higher than region
- Average monthly loans near \$2000/month – lower than NSW but higher than region
- Overall growth in employment projected at 1.5%/year, faster than population growth. This will lead to additional workforce pressure over time.
- Healthcare and social assistance workers – 50% with higher qualifications, lower than metro, similar to Dubbo but lower than Orange and Bathurst. However, consistently growing over time.
- Health as a proportion of total employment is in relative decline – other industries are putting on more jobs than healthcare. Still growing (0.5% and third largest employer), but not as fast as other dominant industries (e.g. mining and tourism)
- Compared to other regional towns, Mudgee's health care sector is not as dominant – i.e. does not make up the same proportion of total employment. Orange, Bathurst and Dubbo have health sectors that are much more dominant in terms of local employment industries, with Lithgow stronger and Parkes similar.

Please note that the fact Mudgee's health sector is not as dominant as other towns does not indicate those towns necessarily have the same workforce numbers (e.g. Parkes has fewer workers). It does indicate that other sectors of the economy are more dominant in Mudgee, which is both good as technically there is stronger potential for economic growth, but it is also a potential constraint as these other sectors may attract more employees and require further support from the health care and social assistance industries.

In terms of specific economic constraints for the Mid-West and Mudgee, the following is noted:

- **Relatively few post school training opportunities within Mudgee SA2:** Despite recording a higher incidence of persons aged 0-14 years relative to NSW, there is a lower proportion of persons aged 15-24 years, likely reflective of the fact there are relatively few post school training opportunities in Mudgee SA2. There was no university identified in the Mudgee SA2. The TAFE NSW Mudgee campus offers a range of training opportunities but there are limited opportunities within the health sector, with the only health qualifications offered being a Certificate III in Individual Support (Ageing) and a Certificate II and III in Community Pharmacy.
- **Relative scale of health sector in Mudgee SA2:** The Census data would suggest that the health sector in Mudgee SA2 is less prominent relative to both Lithgow SA2 and Parkes SA2 which have a similar population size to Mudgee SA2, with the health sector recording a lower location quotient relative to both regions as of the 2016 Census. The health sector in Orange SA2 and Bathurst SA2 is more significant relative to Mudgee SA2, likely supported by the presence of a broader range of facilities, including a public hospital, private hospital, TAFE campus and university in each location.
- **Increasing accommodation costs:** Consultation has identified that there is a perceived lack of affordable housing opportunities within Mudgee SA2, with weekend tourism reducing the housing stock available for rent. Data from SQM Research indicates that the vacancy rate in the postcode 2850 has declined steadily in the past year and is currently sitting at 1.3% (a balanced rental market typically has a vacancy rate in the order of 3-4%). Median weekly rents in the postcode 2850 for three bedroom houses have also increased by approximately 25% in the past three years, as compared to declining by 2.4% in Sydney. Therefore, whilst

Mudgee remains affordable relative to the capital city average, the affordability gap has narrowed significantly, hence reducing the relative appeal of Mudgee SA2.

In terms of specific economic opportunities for the Region, the following is noted:

- **Expansion of training opportunities or student support within the Mudgee SA2:** At present, there is a TAFE campus offering limited health training opportunities within Mudgee SA2. There could potentially be the opportunity to either expand the range of courses available at the TAFE in Mudgee or to expand the level of support services to support physical and online learning externally within the health sector (potentially both through TAFE and the university sector). This is likely to assist with student retention within Mudgee SA2 with the potential for these students to consider a career within Mudgee SA2, rather than leaving to study elsewhere and obtaining employment outside of Mudgee SA2.
- **Ageing population:** As previously identified, there is a growing population of persons aged 65 years and over in Mudgee SA2, both in terms of total persons and the share of total persons. There is likely to be a growing need for health services to support an ageing population. These services are likely to include support for ageing-in-place, disability service providers and rehabilitation health providers. There could also be the opportunity to increase aged care beds and the provision of retirement village accommodation within Mudgee SA2; and
- **Co-Location of services within hospital precinct:** Where possible, it is suggested that health services are co-located with the hospital, providing a health node within Mudgee SA2. It is envisaged that locating within the health node would be beneficial for both businesses and patients. The co-location of a student support hub with the hospital would also be desirable, providing linkages between education providers, students and prospective employers.

These economic factors, constraints and opportunities will be taken forward into Precinct planning.

The full report can be found in Appendix A.

4.2. Opportunities & Constraints Visual Analysis

A visual analysis of the opportunities and constraints for the Precinct was undertaken for the following key layers:

- Transport
- Parking
- Environment, Recreation & Active Transport
- Community Facilities, Health & Education
- Economy
- Housing.

Each analysis showed existing characteristics, and key opportunities and constraints derived from the visual analysis and stakeholder consultation. This analysis is shown below by layer, with commentary under each figure.



The existing transport network provides generally good road access across the precinct areas. Public transport routes are available to the precinct and are connected to the CBD. A regional public transport connection is present at the Mudgee Railway Station. A Helicopter flight path is noted within the Precinct, providing emergency access to the Mudgee Hospital. The Helicopter approach / takes off in an East / West direction, before turning to land in a South / North direction in an area clear of obstructions.



Figure 9 - Transport - Constraints

Key constraints are noted by number reference on Figure 9 above.

- 1) Back-up of traffic at the Horatio Street / Church Street intersection – previous crash data
- 2) Informal intersection with safety issues present during peak times (morning and afternoon peak of hospital activity)
- 3) Helicopter Flight Path requires no obstruction. Low non-residential structures may be allowable; however they require the express approval of the LHD and on the advice of an Aeronautical engineer.
- 4) Infrequent regional public transport connections diminish connections with higher order health centres and for residents more generally.



Figure 10 - Transport – Opportunities

Key opportunities are noted by number reference on Figure 10 above.

- 1) Improve local public transport links to the regional public transport stop / provide a more appropriate location for the regional public transport stop that is more accessible.
- 2) Improve *Disability and Discrimination Act 2002* and subordinate Regulation compliance for bus stops and pathways, including an improved accessible pathway to the new hospital entrance.
- 3) Improve traffic safety over the Church Street Bridge – potential for warning lights or similar speed reduction and warning signage.
- 4) Improve the Mears and Church Street intersection for local traffic movement and safety (e.g. improved line marking, signage, right turn bay).

The opportunities focus on making smaller improvements for safety and enhanced public transport accessibility. Both of these measures will assist in generally improving the transport network in Mudgee.



Figure 11 - Parking – Existing, Constraints & Opportunities

Existing parking is provided for all users via formal on-site parking and via on-street parking. At the present time while the new Mudgee Hospital is being built it is acknowledged that parking is a challenge. However, at finalisation of the build a new car park and entrance will be provided. Extensive parallel and angle parking is provided across most of Mudgee's central areas with a significant portion of this line marked. This street parking caters for the majority of older central areas in the CBD that do not have on-site parking, making them reliant on street parking or Council car parks.

Key constraints and opportunities are noted by number reference on Figure 11 above.

- 1) Perception of a lack of parking for the Hospital, with streets parked out on both sides all around the Hospital land.
- 2) Opportunity to establish parking on soon to be un-used recreation land at Cahill Park.

The parking opportunities presented are effectively options for enhancing the use of the sites with other activity, while providing parking to meet those needs and any excess needs of surrounding uses.



Figure 12 - Environment, Recreation & Active Transport – Existing & Constraints

There are no real environmental assets within the land areas noted, with small stands of native vegetation on the Hospital and railways site the only notable environmental assets. Active transport is deficient within the area, with no formal off-road or on-road cycling or pedestrian pathways, beyond standard residential footpaths along Church Street. Significant recreational land is available in Cahill Park (Eastern side of Mudgee Hospital), the Showgrounds (West of the Mudgee Hospital) and Victoria Park (between CBD and Mudgee Hospital). It is noted that Cahill Park will not support sporting activity in the future once this activity is moved to Glen Willow.

Key constraints are noted by number reference on Figure 12 above.

- 1) Cahill Park will be un-used in the future, representing under-utilisation of this recreational asset.
- 2) Unsafe and inadequate cycling and pedestrian crossings, including narrow footpaths, wide road crossings and no one road cycle marking. Particularly an issue for persons with a disability or elderly people.
- 3) The pedestrian bridge crossing the Gwabegar Railway line is not suitable for persons with a disability or the elderly.
- 4) Illegal and unsafe crossing of the railway line is occurring.
- 5) There is a poor connection from the Church Street side of the Mudgee Hospital to the entrance, given this is where the bus stop is, and other primary activity, this is a constraint to good pedestrian connection into the Precinct.



Figure 13 - Environment, Recreation & Active Transport – Opportunities

Key opportunities are noted by number reference on Figure 13 above.

- 1) Future pool, community and business / education opportunities are present on the Lewis Street side of Cahill Park. This type of opportunity would be in keeping with the recreational focus of the land, while expanding to meet Precinct user needs, particularly by way of rehabilitation or therapeutic opportunities, health businesses expansion, supporting amenity and student facilities.
- 2) Significant improvement can be made to widen footpaths, introduce an on-road cycle lane or markings, and improve pedestrian safety of road crossings (e.g. median refuge islands, signs, warnings, street markings) to support better pedestrian connectivity between the Precinct and the CBD.
- 3) The provision of an accessible connection over the Gwabegar Railway line would improve accessibility for residents and would help enhance and extend the Precinct onto railway land.
- 4) Improvements to the pedestrian connection into the Mudgee Hospital.

The opportunities focus on making improvements to the general connectivity of the Precinct with the Mudgee CBD, as well as key land parcels within the Precinct. The most significant opportunity lays in the re-use of the Cahill Park site for an indoor Recreation pool that is extended to be a multi-functional facility for health, business and education uses. The multiple use of this facility will enhance its appeal and use within the Precinct, creating an attractive heart to social and recreational activity in the area.



Figure 14 - Community Facilities, Health & Education – Existing & Constraints

No specific larger local government community facilities are present within the precinct (e.g. library, community centre), however, there is a small hall associated with Cahill Park and the Mudgee Railway Station building (Heritage listed) is being used as a cultural or arts centre.

Health facilities in the area are dominated by the Mudgee Hospital, currently being built as a new facility. One of the two GP practices in Mudgee is located adjacent to the Mudgee Hospital, the Mudgee Medical Centre, with allied health services located across Church Street. Other primary and allied health businesses occupy Church Street and various locations across the Mudgee CBD. Some in-house educational opportunities are present within the Mudgee Hospital and Mudgee Medical Centre. Other centres across town also provide educational placements for students, including the South Mudgee Surgery and allied health businesses.

Key constraints are noted by number reference on Figure 14 above.

- 1) Education is constrained by a lack of formal teaching facilities for students either within the Mudgee Hospital or nearby. Facilities lacking include affordable and appropriate housing to expand opportunities for clinical placements and training, student resource centre and collaboration space.
- 2) Health services are generally spread throughout the CBD and across town. This makes it more difficult for residents to access multiple facilities if needed. It should also be considered as part of any proposal to cluster and enhance collaboration between multidisciplinary health students.



Figure 15 - Community Facilities, Health & Education – Opportunities

Key opportunities are noted by number reference on Figure 15 above.

- 1) Indoor recreation pool doubling as a rehabilitation and therapeutic pool for pre and post Hospital recovery and for local businesses (e.g. aged care, allied health and exercise). The facility can be extended to include space for health and retail amenity as well as student educational support if needed.
- 2) Seniors housing and aged care focus, allowing additional space closer to the CBD and services for retirement living and residential aged care services.
- 3) Potential for zoning modifications to enable a mixed use focus allowing for expansion of health businesses as well as residential intensification.
- 4) Allowance of space for health facility expansion, aligned with further student placements in the workplace.
- 5) Potential education centre location should the location adjacent to the Mudgee Hospital not be preferred.

The opportunities seek an increase in the intensity of health service, both government and non-government, activity in and around the Mudgee Hospital site, and on the adjacent Cahill Park site in association with the Indoor Pool proposal. Associated residential health activity (aged care) is seen as a good option for the site, proving ease of access to health, recreation and retail services for seniors into the future.



Figure 16 - Economy – Existing & Constraints

A small number of commercial entities are located within the precinct. A small café is located across the road from the Mudgee Hospital and a child care centre is also located across the road. A number of mixed businesses are located along Church Street towards the CBD, with motor vehicle repair located along Inglis street and variety of general commercial, retail and health businesses otherwise occupying appropriately zoned land.

Key constraints are noted by number reference on Figure 16 above.

- 1) There is a large zoning allowance, including existing use rights for business uses across Mudgee, in particular within the CBD and mixed use zoning. This has led to businesses spreading out amongst existing properties which has led to a dispersion of services, limiting foot traffic and increasing the reliance on motor vehicle transport. Further to this, the allowance for business and health uses in residential land further exacerbates this challenge, with many businesses located in residential zoning, further spread out from key activity centres.
- 2) There is very limited retail amenity and support for workers within the Mudgee Hospital and nearby businesses. This makes the Mudgee Hospital a less attractive workplace.



Figure 17 - Economy – Opportunities

Key opportunities are noted by number reference on Figure 17 above.

- 1) Small-scale supporting retail and amenity for the hospital and future park land uses.

Enhancing retail amenity within and around the Mudgee Hospital is key to supporting workers, students and future visitors, making the Precinct more attractive as a place to work, study and visit.



Figure 18 - Housing – Existing

Housing within the precinct includes larger block General Residential land to the South of the Gwabegar Railway line and a mix of low density and some medium density (e.g. terraces, units) housing north of the Gwabegar Railway line to the CBD. Housing is generally very low to low density in nature around the centre of Mudgee, with units of varying development eras scattered across town and not present in a significant number to provide housing choice. The CBD zoning does not support housing.

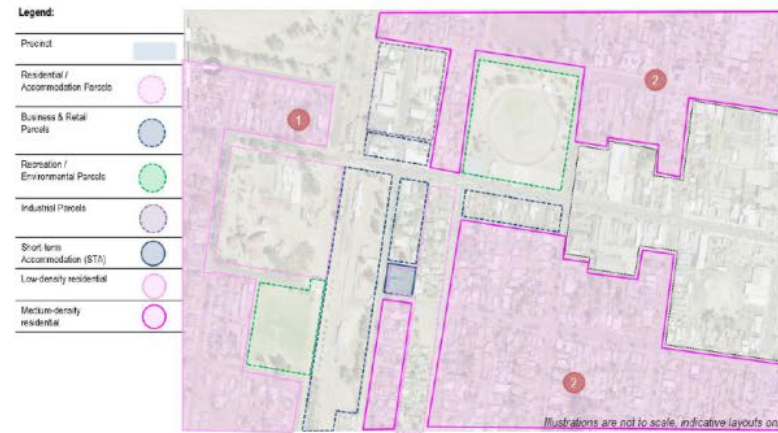


Figure 19 - Housing – Constraints

Key constraints are noted by number reference on Figure 19 above.

- 1) The zoning across Church Street from the Hospital is holding back health related business activity that is already present in this block, and that could be further enhanced.
- 2) The lot size and mix, historical housing footprint and zoning allowances are preventing development from easily and sequentially occurring across within the Medium Density Residential Zone. This is limiting any residential density sought in this area.

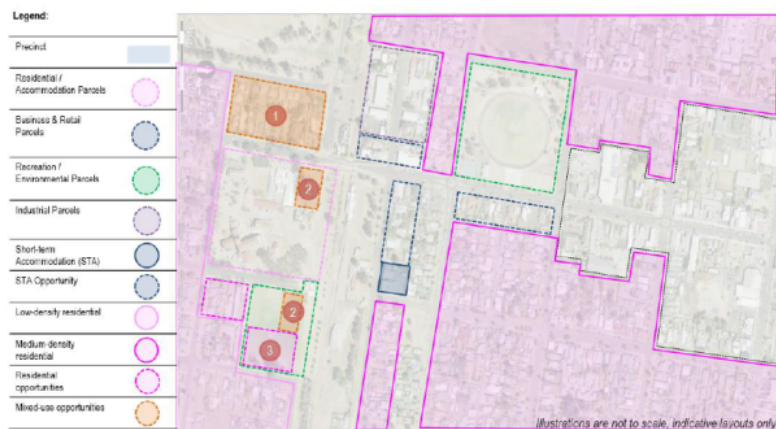


Figure 20 - Housing – Opportunities

Key opportunities are noted by number reference on Figure 20 above.

- 1) Opportunity to change to a mixed-use zone or introduce special development provisions to encourage mixed use health and residential development.
- 2) Targeted mixed use health, education and housing opportunities adjacent to the Mudgee Medical Centre and on the Cahill Park site, in association with other uses, would be suitable for key workers and students.
- 3) Providing a significant inner CBD site for an aged care provider will allow for the future expansion of aged care within Mudgee, either through an existing provider expanding to this site, or allowing for a new provider to enter Mudgee.

Encouraging medium density residential development and appropriately targeted mixed use development surrounding the Precinct will support the general housing needs of Mudgee, providing medium term relief in the rental market which may allow for an improved situation for students and key workers, as well as for lower socio-economic members of the community. This activity will support businesses and health growth within Mudgee.

4.3. Key Constraints Summary

Many of the constraints within the Precinct and CBD arise from the smaller town nature of Mudgee. There has not been the scale to necessarily deliver some of the services desired, or to appropriately co-locate and improve physical infrastructure to support elements of health and education services. This is not always the case, as local organisations have made significant headway into improving some services through effective collaborative leadership (e.g. Mudgee for Doctors program). Regardless, constraints are present and these need to be addressed through precinct planning.

Local road safety matters have arisen in peak times, particularly the back up on Church Street and the Horatio Street roundabout and the Church and Meares Street intersection. The helicopter flight path for the hospital needs to be maintained clear of obstructions, which may limit some development opportunities. Infrequent public transport and stops that are not rationalised to key building or activity entrances, does not assist in improving non motor vehicle transport and for those who use cars there is a perceived lack of parking in both the CBD and Mudgee Hospital locations. This is despite very significant on street parking availability, which is often largely full, making it difficult to get door to door accessibility.

Pedestrian and cycle connections to the Precinct are inadequate, particular for those with a disability or the elderly. There is no appropriately safe connection between the CBD and the Precinct, which should be addressed through Precinct planning. Cycle safety is also compromised with no real cycle safety signage on roads, despite certain local road routes being promoted as cycle routes around Mudgee. With respect to recreational elements, Cahill Park within the Precinct is noted not continuing its main sporting activity in the future, meaning the space will be underutilised in the future.

Health and education services are constrained by a lack of formal facilities in Mudgee. Students undertake placements within health facilities, with informal learning space provided in these facilities. While this is good, it is not always appropriate for ongoing learning outside of working hours. Additionally, a lack of affordable short and medium term housing options for health students and key health workers exacerbates issues with attracting key health workers and students to Mudgee. Further, health facilities are spread out across Mudgee due to historical patterns of development, creating poor resident accessibility for related health service access.

A lack of nearby retail amenity in the Precinct further deteriorates the amenity of the Precinct for workers and students, lessening the ability to provide proximal services and increasing motor vehicle trips outside the Precinct. General business allowances across Mudgee's residential zones further decreases the concentration of health and businesses within the CBD and around the Precinct, decreasing resident accessibility and potentially stymying business growth.

Housing development is concentrated on new large lot residential development on the outskirts of town, further entrenching motor vehicle reliance and reducing affordability for key workers and vulnerable members of the community. This is not helped by the historical lot size and mix, historical housing footprint and zoning allowances within the medium density residential zoning around the CBD, which is preventing development from easily and sequentially occurring in these areas. The housing situation creates issues with affordability and short-medium term housing options in close proximity to services, both of which create issues for attracting key workers and students to Mudgee. This also presents issues for those experiencing socio-economic stresses, exacerbating vulnerability and community issues.

These constraints generally make Mudgee a more difficult place to learn and work, and for residents to access services. While this is the case, the situation can continue with those needing care gaining it and key workers being attracted via other mechanisms to offset these issues. However, this represents a sub-optimal and potentially financially burdensome position for organisations and residents.

4.4. Key Opportunities Summary

A wide variety of opportunities exist within the precinct area to enhance health and education facilities and programs, community facilities, key worker attraction and accommodation improvements.

Improvements to some road safety around Meares and Church Street, as well as the Church Street railway bridge will assist in ensuring safety as the Precinct grows. Important public transport connection and stop improvements can be made to better schedule local and regional trips, as well as improve access to key health facilities. Localised parking increases can be explored to support new uses and to act as relief parking for Mudgee Hospital and surrounding uses.

A key opportunity arises from Council's commitment for a new indoor recreation pool for Mudgee. Such a facility is able to be multi-functional to serve broader community health, recreation, business and amenity needs. Key co-located uses include rehabilitation, health facilities, retail amenity and child care. Localised pedestrian and cycle improvements can also be made across the Precinct and into the Mudgee CBD by way of widened footpaths, improved road crossings, DDA compliant structures, bus stops and walk ways to key activity centres (Mudgee Hospital, Mudgee Medical Centre, new indoor pool).

Key health and education opportunities arise through a collaborative education centre between the Western NSW LHD, UOW and any other interested parties. Such a facility should be located nearby the hospital so that it can meet LHD needs, as well as student and other learning needs of the community. Special zoning and use considerations to promote health businesses within the CBD and around the Precinct should be explored, allowing uses to cluster, promoting ease of access for residents and worker collaboration. The indoor recreation pool is a key opportunity for primary and allied health private businesses, allowing increased access to therapeutic and rehabilitation opportunities for residents. Supporting non-infrastructure programs for health businesses, including on attracting and supporting key workers in a regional setting, education programs for staff and improvements to housing will also assist in improving health and education opportunities.

Economic and housing enhancements arise through the potential to rationalise zoning use allowances, increasing the presence of medium density residential housing around the Precinct and through promoting the concentration of health uses in the CBD and the Precinct. Many of these opportunities have medium to longer term impacts. Given this, shorter term measures, such as promoting Government owned sites for specific affordable housing, aged care, seniors living and medium density residential outcomes, will inject shorter term benefits to housing affordability and availability for key workers.

Increasing residential densities and providing a mix of dwelling types will cater for key workers, improve affordability and allow for improved options for ageing in place. This will also support business sustainability with the added benefit of improving security through the provision of 'eyes on the street'.

The range of opportunities would support the growth of Mudgee as a whole, providing improved health and education services for the entire community. These opportunities and constraints were included in stakeholder consultation and within a briefing provided to participants of the design charrette, noted in Section 5.3 below.

5. CONSULTATION

Consultation for the Precinct Master Plan was undertaken through individual one on one consultations and a collaborative Design Charrette involving all stakeholders. To guide this consultation, best practice precinct principles and information was provided. This section will provide this best practice precinct principles, before detailing the individual and collaborative consultation undertaken, including the outcomes of this consultation for the Precinct.

5.1. Best Practice Principles

An analysis of best practice health related precincts has been previously undertaken by Destravis¹⁰. This analysis concluded that there are a number of common themes across health-related precincts that are able to be condensed into 6 Best Practice Principles that can be used to guide planning on health-related precincts. These Best Practice Principles, and their sub-principles, are shown in Figure 21.

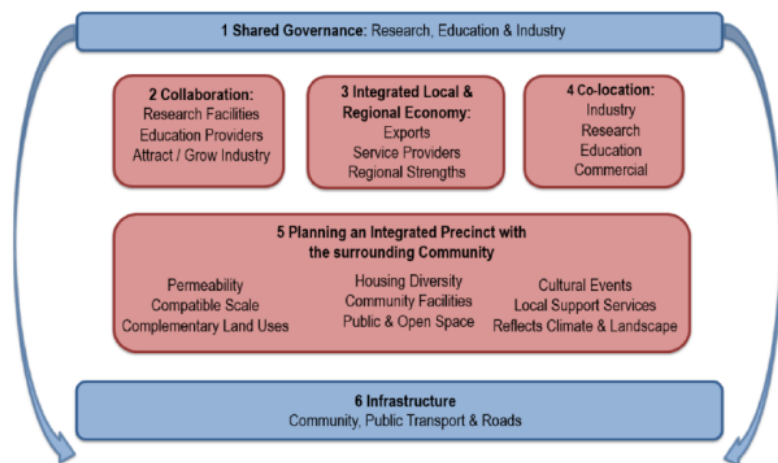


Figure 21 - Health Precinct Principles

It should be noted that the realisation of each principle dependent on the scale or focus of the hospital in question. For example, a smaller regional hospital may focus more on education than industry, while a larger facility may collaborate more with research and industry. Each principle and sub-principle is explained in further detail below.

- 4) **Shared Governance Model** – Shared Governance is an integral part of the health precinct. A collaborative decision making model where all parties are involved in decisions about the activities and direction of the precinct is a critical part of achieving success for all organisations. Shared governance facilitates the success of co-location ensuring the

different organisations and places surrounding the precinct work together on mutually beneficial outcomes. Shared governance will differ depending on the focus of the precinct, be it on education, research or on the commercial development and implementation of new health technology. The sub-principles focus on each of these areas of collaboration:

- a) **Education:** Every hospital requires a well trained workforce of doctors, nurses, allied health professionals, administrative workers and support services (e.g. maintenance, ICT) to function and all of these professions require continued professional development for the hospital to operate efficiently. As such, a level of collaborative governance with education providers is beneficial for the operation of the hospital. Education programs can focus on the strengths of the health precinct, for example cancer care, with the precinct then providing broader benefits by educating workers who can work at facilities across the country, thus enhancing export industries.
 - b) **Research:** Health related research requires strong links to hospitals particularly to support clinical trials. Research activities benefit from strong collaborative governance arrangements and rely on scale, access to patients and facilities and a willingness to collaborate over the long term given the significant investment in research facilities and personnel.
 - c) **Industry:** Links to industry arise when the commercialisation of health related research is the focus of commercial enterprise within a health precinct. Industry will seek to partner with research and the hospital to identify how a new piece of technology, pharmacological or health practice can be replicated for commercial sale / distribution, ensuring research and development activities can be realised. Collaborative governance is necessary to ensure the activities undertaken at the hospital, by research and by industry can be focused to mutually beneficial ends. These links may be small in scale through allowances to test new technology or practices, or could be major collaborations heavily focused on research, development and export to other health facilities through the industrial partner.
- 5) **Co-located** – Co-location is critical to enable easy movement between complementary services for workers and visitors of the precinct. Co-location enhances efficiency and improves sustainability and amenity, providing the critical mass that will enhance strategic relationships and the economic output from the site.
- a) **Research institutions:** The co-location of research institutions is critical to facilitate research activity, enhancing employment and improving health outcomes in the locality.
 - b) **Education providers:** Co-locating with education providers facilitates and streamlines student and higher order learning, both activities undertaken within a hospital on an on-going basis. Co-location also potentially provides opportunities for shared facilities such as meeting and training rooms, improving resource and funding efficiency.
 - c) **Industry:** Businesses who partner with research and development rely on close relationships and access to the health precinct for these activities, and for sharing human capital between organisations. Co-location with industry, primarily high tech manufacturing and pharmaceutical, can help improve linkages between research and development and the scaling up of new technology or innovations for establishment across the broader market.
 - d) **Commercial and retail services:** Commercial services such as shops, café's, restaurants, offices and child care centres located within the health precinct provide direct support services to workers and visitors. These services also provide opportunity for private consulting rooms, surgeries, legal services and the like.

¹⁰ Destravis Pty Ltd, Tweed Health Precinct Background and Scenario Analysis Report, October 2018.

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- 6) **Collaboration between organisations** – Every health precinct requires ongoing education and training for staff in order to facilitate the operation of a hospital and medical facilities on site. Additionally, all health precincts have the ability to facilitate research, either passively through provision of health statistics, or directly through on site clinical trials. Translating this research into commercially viable opportunities is the focus of industry. Collaboration between education, research and industry organisations is necessary to ensure the success of a health precinct.
- Research:** The provision of research facilities on site, along with the collaborative arrangements to support the integration of research and hospital activity, allows for ongoing research and development that can enhance health outcomes for patients both on site and where replicated at other facilities. These facilities can lead to increased employment, building the strength of the precinct.
 - Education Providers:** Links to education providers are critical to the operation of a hospital or health facility, with physical facilities for education highly desirable within the precinct due to the ease of integration and access to students. Collaboration with education providers to include education facilities on site are important for any health precinct, no matter the scale.
 - Attract and grow industry:** Attraction and retention of industry on site helps grow the health precinct, solidifying its ongoing operational capacity and specialisations. Collaboration on research and development, intellectual property and clinical trials provides an environment for industry to be attracted to the precinct, and to grow existing health industries in the locality. This focus enhances employment, export capacity and the overall economic health of the precinct and region.
- 7) **Integration with the Local and Regional economy** – Regional and local economic integration seeks to build on the relative strengths of the area, identifying those sectors of the economy that have a competitive advantage in the locality in order to expand upon their successes.
- Regional strengths:** Integration may take the form of fostering collaboration on research and development that relates to the strength of the region (e.g. aged care or pharmaceutical manufacturing), builds on the existing success of this area to help improve services on site and to expand the regional economy.
 - Expand exports:** A focus on expanding exports seeks to grow the economy and strength of the health precinct beyond local borders, providing funding back into the health precinct and growing employment and related services.
 - Links to local health and service providers:** Integrating with local service providers for supply and health care services will build those local businesses who provide an existing and scalable service to patients and members of the community. Links to local providers assists the health precinct through not having to establish these services themselves and limits any impact the health precinct may have by ensuring services are not duplicated.
- 8) **Planning an integrated precinct with the surrounding community** – Planning a precinct that is integrated with the urban form and landscape ensures the health precinct is seen as a part of the community. Embracing the surrounding environment will ensure the precinct is not just a place to go when you are ill but is a destination in its own right that the public are familiar with and can utilise at any time.
- Permeability:** The ability to walk through the site, linking the health precinct into the existing movement network, ensures the site is a part of the surrounding built form and is not blocked from it.
 - Compatible scale:** Wherever possible, the scale of the precinct should reflect the surrounding urban and natural environment, or its desired scale and density, to provide for a visually amenable outcome. Where higher density is sought, the edges of the precinct should step down to the same or similar scale to the surrounding built form or landscape (e.g. height of trees) to improve compatibility.
- Complementary land uses:** Similar to providing a compatible scale, land uses should integrate well with the surrounding uses of land by ensuring the same or complementary land uses are established at the borders of the precinct. For example, providing for service related and residential uses as they abut residential land, or park and open space as they abut natural features.
 - Community facilities:** Providing community facilities, such as libraries, pools or other publicly accessible places, assists with broadening the activity on the site and with linking the health precinct with the existing community in the area. The facilities help normalise the health precinct, improving the social interactions between patients, visitors, workers and members of the community, making the health precinct a destination that is not solely based around illness.
 - Promotes Housing diversity:** The provision of housing is critical to the success of the precinct. Some housing is required to be in close proximity to the site to allow for long-term visitors, family and staff. Housing is needed across the broader locality, with a mix of housing types (e.g. detached dwellings, townhouses, apartments) preferred to allow for the range of needs of workers across the income scale. A range of housing types also provides for long-term visitors and members of society who may seek to locate themselves close to a hospital precinct, for example aged care providers and seniors housing.
 - Public open space:** Open space, including parks and play equipment, is critical for the amenity and wellness of patients, visitors and workers on the site, and can provide for local community needs. Open space can form the centrepiece of the precinct and can be linked to existing open space and natural landscapes to enhance and build off the features of these areas.
 - Reflects surrounding climate and landscape:** Design that reflects the local climate and surrounding landscape, including its vegetation and physical features, helps to blend the precinct with the natural environment of the area, improving sustainable outcomes and visual amenity.
 - Provides local support services (commercial):** Providing local support services such as shops, café's, restaurants and child care centre/s directly supports workers and visitors by helping them meet their day to day needs without having to travel off the precinct. Providing these services at the ground floor plane assists in providing a normative commercial environment, ensuring the hospital is welcoming at its edges and through the ground floor public spaces that link buildings and sections of the precinct. This directly improves amenity for workers and visitors, improving their wellbeing.
 - Links with local cultural events:** Providing space for and links to local cultural events will help to enhance the connection the precinct has with the local community, broadening the use of the precinct and improving the connection patients and visitors have with community celebrations and the localities identity.
- 9) **Connects with Infrastructure** – Connections to infrastructure are critical to the success of the hospital and health precinct. This principle does not focus on services such water, sewer, electricity, but on those pieces of infrastructure that enhance the functionality of the precinct and supports all of the health precinct principles. Connections into the broader urban fabric and economy are enhanced by movement connections ensuring the facility is not isolated. Links to community facilities help enhance connectivity to the surrounding community and urban fabric while providing opportunities for amenity and wellness for workers, visitors and the surrounding community.
- Community facilities:** The provision of community facilities such as parks, open space, recreation facilities (e.g. pool), libraries or community meeting rooms enhance connections with the local community provide a broader public benefit. The facilities enhance the role of the hospital as a part of general day to day life by provide services to workers, visitors and patients and can potentially be used by multiple agencies – for example a pool
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may be used for rehabilitation purposes as well as recreational or sporting uses, or community meeting rooms can be used as meeting rooms for hospital workers – serving to improve asset use and value for money.

- b) **Public transport:** Strong links to public transport provide access to the health precinct for all members of society and improve the sustainability of transport access to the precinct. High frequency public transport that is connected to key city hubs and housing areas will help reduce the number of car spaces and land required for parking. This will improve the efficiency of the precinct while providing or strong connections between housing and economic areas in the locality.
- c) **Road network:** Easy connections to regional road networks are required to facilitate movement of workers, patients and visitors to the precinct, many of whom come from afar. Strong links to regional road networks also facilitate appropriate emergency and disaster response activities by allowing emergency vehicles to efficiently travel to the site.
- d) **Pedestrian / cycle network:** Improvements to pedestrian and cycle infrastructure, both by way of quality and through increasing network infrastructure, assist with improving active transport connections to key activity clusters both within a precinct, and from a precinct to other activity areas in a community. This infrastructure helps improve the accessibility and sustainability of a precinct.

These principles were used as a basis for consultation on the Mudgee Health Precinct Master Plan principles during the Design Charrette of 3 March 2020. The consultation undertaken during the Design Charrette is detailed in section 4.3 below.

5.2. Consultation – Individual Stakeholders

To assist in understanding specific opportunities and constraints for economic growth and more generally within the precinct, consultations with key precinct stakeholders were undertaken. The aim of this consultation was to better understand existing and future planned investments and to better identify opportunities and constraints to future growth within precinct for infrastructure and with respect to relationships between stakeholders. Consultation included the following stakeholders:

- University of Wollongong
- Western NSW Local Health District
- Mid-Western Regional Council
- Western NSW Primary Health Network
- Mudgee Medical Centre
- Regional Development Australia - Orana
- Transport for NSW
- DPIE – Regional Development Central West / Orana
- TAFE NSW - Mudgee Campus
- Mudgee Medical Centre
- Mudgee Health Council
- Mudgee Chamber of Commerce
- NSW Ambulance
- South Mudgee Surgery
- Pioneer House (Aged Care)
- Opal Mudgee (Aged Care)
- Mudgee Disability Support
- Mudgee Local Aboriginal Land Council
- Lifeskills Plus
- Peabody Energy, Kepco Australia, Glencore and Bowden Silver – mining organisations

Minutes from each meeting are included in Appendix B: Stakeholder Consultation Minutes.

Meetings were sought with the following organisations but were not able to be organised:

- Kanadah (Aged Care)
- Live Better Community Services
- Yancoal (mining organisation)

Multiple email and phone contacts were made with all of these organisations, however representative contacts were not able to confirm times for meetings or the suitable personnel for a meeting, leading to consultation not occurring. While these organisations were not able to be formally independently engaged at this stage of the project, any future consultation on the Precinct Master Plan should seek to make further contact with these organisations, or more broadly with the sectors they represent.

A number of key issues and opportunities arose across stakeholder groups, highlighting key points for the opportunities and constraints analysis. Key common constraints included:

1. There is a general future shortage of health workers across the Central West and Orana – this is the same for Mudgee where demand for health workers is increasing at a faster pace than other employment types.
2. Lack of student accommodation or facilities leads to Mudgee being a less attractive place for students to undertake work placement, making it difficult to attract and retain health staff.

3. Cost and availability of housing has increased, in particular within the rental market due to use of housing via Airbnb for the Tourism industry. This is particularly heightened over March-November (cooler months – higher tourism demand). This makes it difficult to attract and retain key workers and students and is also a significant social housing challenge. This also presents challenges for large events (e.g. sporting) which have been moved elsewhere in the past due to a lack of enough accommodation.
4. A lack of General Practitioner (GP) services in town was seen to be an issue by many community and business organisations. The primary issue was not being able to see someone within 1-2 days, with waits sometimes extending to a month. Issues also arose from return to work advice or plans not being undertaken well across the medical community. While this was an issue for many, other stakeholders did not feel this was the case, with GP services in Mudgee exceeding national benchmarks. This issue may have been a significant past issue which has been addressed through programs to attract and retain GP's in Mudgee.
5. Access to specialists was seen as an issue. Particular specialties seen as difficult to access were mental health and psychiatry, paediatric and MRI access for head injury scans. While specialists are able to visit from time to time and telehealth does support consultations, the limited nature of this access makes it difficult to receive care in Mudgee.
6. The ability of private health providers to take on student placements was seen as a limiting factor -These providers, need to be large enough to take on more students, or a broader range of providers need to be involved in student placements programs to allow for students to learn in Mudgee. The ability of practitioners within certain specialist learning areas was also a constraint given students need to learn across multiple areas in their course, which may mean they need to travel further afield to complete studies.
7. Access to recreational facilities was seen to be an issue. Limited pool access, play equipment or recreational activities for teenagers was seen to detract from the towns' attractiveness and ability to retain young persons.
8. There are local road and pedestrian safety issues around the Mudgee Hospital that need to be considered should any increase in intensity of activity occur in this area.
9. PT services were seen to be inadequate and not appropriately catering for persons with a disability or older residents.

Key common opportunities included:

1. Most organisations see opportunity for growth in Mudgee, with key growth areas noted as aged care, home care services for the elderly and disability care / social and community support.
2. The new Mudgee Hospital (to be opened approximately mid-year) will significantly improve services in Mudgee and will improve the attraction of health workers to Mudgee.
3. There may be an opportunity to establish a Country Universities Centre in Mudgee, which would help provide the student resources and networking opportunities that would make attracting and retaining students easier in Mudgee.
4. Organisations are open to clustering with each other to establish a one stop shop approach to for residents where access to multiple health facilities as well as retail and recreational services are offered. This was seen as beneficial for residents as it would help provide choice, improve access and allow for ease of cross-referral, and was seen to be beneficial for staff as well as it would allow improved cross-referral and networking amongst health professionals.
5. The establishment of an indoor heated recreational pool and associated recreation, with supporting facilities was seen to be a key investment for Mudgee that all users could benefit from. There was interest from all health providers to use the pool for rehabilitation and recreation activities, which would support the overall health of

patients. Aged care, allied health and disability support services are particularly interested in co-use of this facility.

6. There may be opportunity for re-use of the station land, although it was noted that this is dependent on whether train services will be brought back to Mudgee with that as the preference of community and business stakeholders.
7. Establishment of specialist or broadened health care opportunities in Mudgee for mental health, paediatric and Aboriginal and Torres Strait Islander health would provide better for resident needs, helping to attract and retain residents in Mudgee. This may be either through specialists being located in town (preference) or significantly expanded telehealth support including better access and more regular consultation times.
8. Establishment of business support programs may assist businesses in attracting and retaining workers in Mudgee.
9. Additional accommodation services would help to attract and retain students, key health workers and larger events in Mudgee.
10. Larger businesses currently do and are willing to provide support for community and local infrastructure in Mudgee.

These factors have been considered within the opportunities and constraints analysis, and in determining potential residential and non-residential demand for the precinct.

5.3. Consultation – Design Charrette

A design charrette was held on 3 March 2020, the purpose of which was to discuss the principles, opportunities, constraints and potential actions for the Mudgee Health Precinct.

Attendees were briefed on best practice precinct principles outlined in Section 4.2 above and on the draft opportunities and constraints developed from desktop analysis. Attendees participated in two facilitated workshop sessions – one to clarify and build principles and the other to discuss opportunities and constraints in detail. Facilitated sessions were run as follows:

Principles session:

- Group split into 5 tables – one principle discussed per table. Attendees asked a series of questions:
 - Is the principle right for Mudgee?
 - What should Mudgee's focus be (e.g. add specifics)?
 - What are the top 3 items under this principle for Mudgee?
 - Each table fed back top 3 items under the principle for Mudgee to the entire group, providing a focus for the following sessions.

Opportunities and Constraints session:

- Group split into 5 tables, with each table focusing on one or two separate opportunities and constraints layers (outcomes detailed in Section 5 below). Each group was given approximately 15 minutes to discuss opportunities and constraints before moving onto the next table, building upon the work of the previous tables until attendees had worked their way through all 5 tables.
- Materials to visually sketch over the precinct and to write down opportunities and constraints were provided, allowing visual and written outputs to be retained from the Design Charrette.
- Following completion of the facilitated session, all attendees were asked to gather around each table to discuss the outcomes of each discussion, building the picture for the precinct.

- At the end of the session, a single master plan sketch was commenced, bringing together the ideas from each table.

Attendees noted there was a broad consensus amongst the group around the key opportunities for the precinct as a whole, with many of the opportunity's layers overlapping each other to create a more definitive picture on the key infrastructure, land use planning and organisational opportunities for the precinct. A selection of the visual outcomes from each of the tables is provided below.

Please note that at the time of the workshop participants also included discussions about activity within the Mudgee CBD, notes of which will be included in the visuals below. Following the workshop it was clarified that the Mudgee CBD is not included in the Mudgee Health Precinct Master Plan.

Transport and Parking

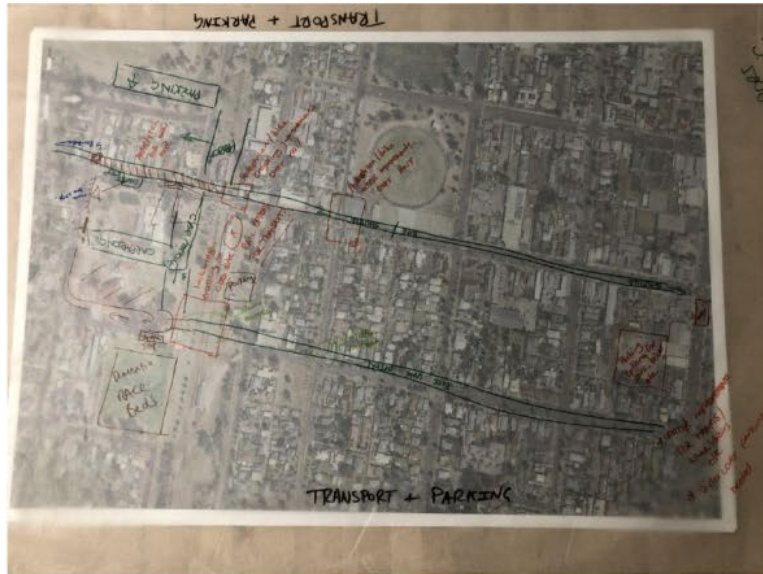


Figure 22 - Transport and Parking Design Charrette Outcomes

Discussions on transport and parking evolved into active travel as well and focused on making localised improvements to the range of transport connections. Localised road improvements were noted for safety around Church and Meares Street. There was significant focus on improving pedestrian and cycle safety. A two pronged approach was preferred with a cycle spine along Lewis Street, away from the busier Church Street and pedestrian improvements along Church Street. A new bridge or appropriate crossing over the railway was proposed to enhance options for relief parking and further development.

Additional parking areas were proposed along the rear of the showgrounds to support intensified development between Church and Atkinson Street. Improvements were noted for rail or regional link transport and public transport stops, facilitating better access for residents.

Recreation & Active Travel

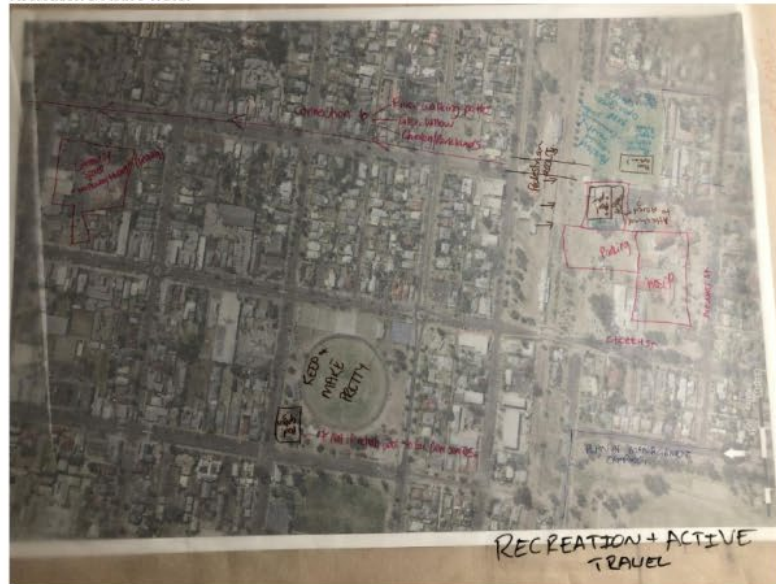


Figure 23 - Recreation & Active Travel Design Charrette Outcomes

The discussion around recreation and active travel centred on improving walkability and cycle safety, as noted in the transport and parking discussion. A focus on retaining and improving recreational assets was noted, particularly on Victoria Park was noted. Retaining a recreational focus for Cahill Park was also noted, with the indoor pool being potentially located at either Cahill or Victoria Park.

Health & Education

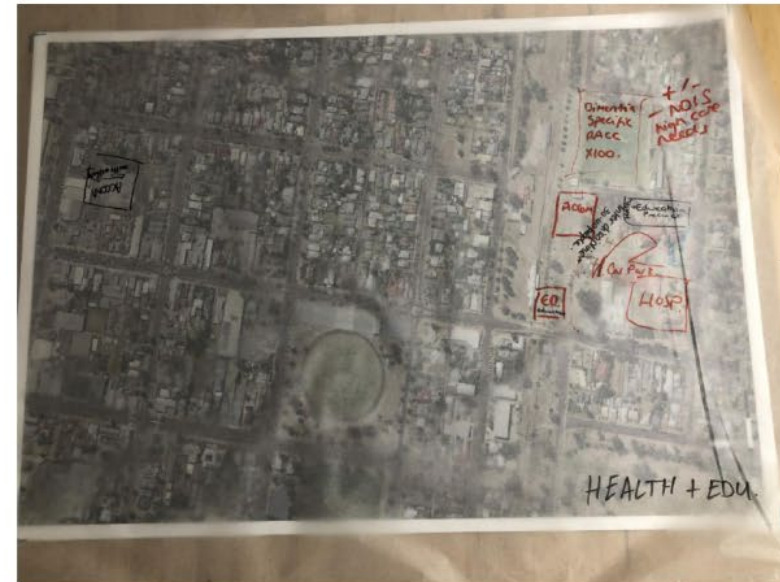


Figure 24 - Health and Education Design Charrette Outcomes

Health and Education was a significant talking point across all tables. In this table discussion, there was a strong preference for locating expanded health and education services in close proximity to the Mudgee Hospital. A shared education centre for health workers and students was seen as a priority for the Precinct, allowing improvements which would assist in providing appropriate education and training spaces across a spectrum of health needs in Mudgee. Locating these services nearby the Hospital means workers can easily go to training during working hours and be back inside the hospital within 5-10mins if required. For this reason, this centre was not recommended to be in the CBD.

Additional space for residential aged care was sought on the Cahill Park site, with a focus for providing additional dementia care, a focus which would assist with balancing high care between the public and private sector.

Many other health related actions were discussed that do not have a physical element. For example, proposals such as cross organisation workforce planning, health worker attraction programs and education and training programs were all seen as priorities to help expand health services over time.

Economy



Figure 25 - Economy Design Charrette Outcomes

The primary economic opportunities were focused on expanding mixed use opportunities around the Precinct and within the CBD. The CBD focus was for a mixed commercial and residential development, with the opportunity to open up the CBD for this type of mixed commercial and residential use seen as beneficial for businesses and residents. There was a query with respect to increasing building heights in the CBD, with this seen as beneficial for increasing mixed use opportunities throughout the CBD. This is due to the fact it would allow ground level parking behind street facing commercial activation, and two levels of residential apartments above, a more viable development outcome compared to only a single level of residences.

Around the Mudgee Hospital, opportunity for expanded health businesses and targeted retail services to that support workers and visitors was seen as a priority. Focus points for development included up-zoning land around the hospital, in particular opposing the Hospital site over Church Street, as well as re-using the Railway land for some speciality retail, business uses and residential opportunities.

Housing

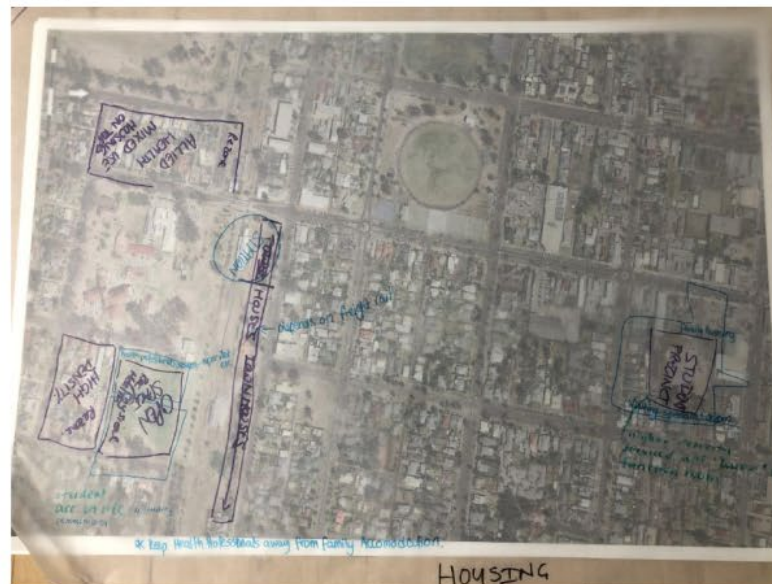


Figure 26 - Housing Design Charrette Outcomes

Housing opportunities were discussed broadly amongst the group, focusing on two aspects. The first was direct housing investments for key workers and for students. Providing general housing improvement was not seen to be an adequate solution, or an adequately quick solution to meet the needs of these groups. The nature of stay for a group of key workers and students within Mudgee is short to medium term, meaning general rental tenancies are more difficult to attain. This results in a requirement to construct purpose built facilities for these cohorts, at an appropriate size to meet demand. The location of these services was preferred around the Mudgee Hospital, as most travelling key workers attend this location, with the majority of health students also in this location, or the adjacent Mudgee Medical Centre.

The second priority was to establish improved housing options around the Mudgee Hospital and within the CBD at the more affordable end of housing costs. Additionally, a preference on a mix of housing types was sought to promote an increase in density of lower density housing, allowing increased housing choice for a variety of family and key worker needs. This increase benefits Mudgee more generally, not just key workers, assisting in achieving a range of Government priorities.

The mixed use nature of sites in close proximity to the Mudgee Hospital was recognised, providing housing and business benefits. The Council CBD site did not have a clear outcome, with a mix of options focusing on student accommodation, family accommodation and mixed general commercial and residential opportunities.

6. Mudgee Health Precinct

6.1. Vision

Following the Design Charrette, consultation on the outcomes of the Charrette developed the following Vision for the Precinct:

/// To enhance and enable greater access to health and education services for the people of the Mid-Western Region. This will be done by focusing on improving co-located and collaborative health and health education, affordable housing and spaces for community wellbeing. ///

This vision is used to guide the Principles, Strategies and Actions that will support the long-term growth of the Precinct.

6.2. Mudgee Health Precinct Principles

Through consultation, the following principles tailored for the Mudgee Health Precinct drive the focus and priorities for activity and investment in the Precinct.

Principle 1 – Collaborate

- through the establishment of collaborative education spaces in Mudgee for health students, workers and educators
- through improving networks of care amongst primary, allied health and acute services
- by undertaking collaborative planning for attracting key health workers.

Principle 2– Co-locate

- primary and acute health, and education services
- recreation, aged care services and supporting amenity (e.g. small-scale retail, park)
- an appropriate scale of housing, in close proximity to key health activity centres.

Principle 3 – Plan an Integrated Precinct

- by increasing housing options for health students and key health workers in close proximity to health services
- by increasing affordable housing across Mudgee
- through establishing an accessible and central hub for primary, acute and aged care services in Mudgee
- through allowing targeted supporting amenity, including recreation, park and small-scale retail, to establish with health services
- by establishing improved access for residents, both physical (e.g. road, public transport and active travel) and virtually (e.g. tele-health / online connectivity).

Principle 4 – Enhance Infrastructure

- by improving public and active transport connections through the precinct to better connect users to the CBD
- by advocating for increased regional transport connections, including timing services to ensure patient travel needs to Dubbo and Bathurst are accommodated in the same day.

6.3. Precinct

Development of the precinct is proposed in line with the following figures and commentary.



Figure 27 - Mudgee Health Precinct Master Plan

The Mudgee Health Precinct aims to facilitate key improvements to the health and health education sectors within Mudgee, specifically centred around the Mudgee Hospital. Potential funding sources need to be investigated within the Precinct, in particular the prospect of a Council led indoor recreation pool and possible additional education facilities. A focus on enabling other health related development and increasing residential density adjacent to the precinct, will serve to increase convenience for residents when accessing health services, while improving housing choice for key workers, students and Mudgee's residents.

Targeted transport and community infrastructure will connect key users and developing areas. In particular, improvements to public and active transport will be made to help facility improved access between developing areas, the CBD and the Precinct. These improvements will both improve the amenity of the precinct and reduce the reliance on private motor vehicle transport for short trips, further enhancing the amenity and sustainability of the Precinct.

Supporting the overall Precinct intent, a number of zoning allowances are recommended within specific portions of the Precinct. The primary changes within the precinct are with respect to the Mudgee Hospital site, which is proposed to be SP2 (Government, Health & Education) Special Purposes, allowing for greater flexibility and collaboration in the development of the site.

A change to R3 Medium Density Residential should also be investigated for one block of General Residential lots to the South, East and West of the Mudgee Hospital. The purpose of this is to encourage further residential intensity in close proximity to the Mudgee Hospital, allowing for medium-long-term improvements in housing choice for key workers, students and Mudgee's community.



Figure 28 - Mudgee Health Precinct Master Plan – Proposed Zoning

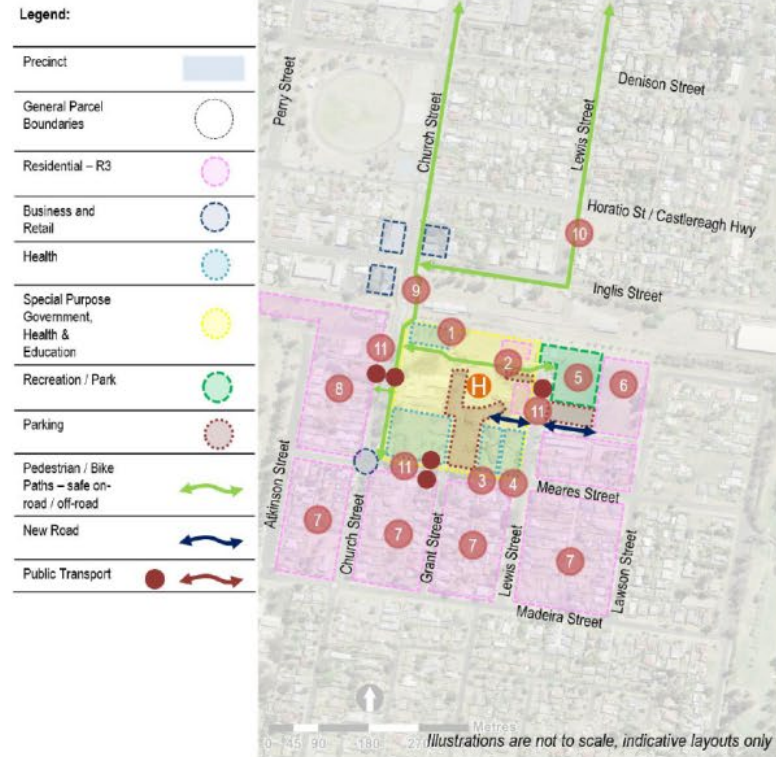


Figure 29 - Mudgee Health Precinct – Key Areas

A number of key elements of the Precinct plan are noted on Figure 29. A description of each point is provided below.

1) Shared education centre

The shared education centre could provide an opportunity for the Western NSW LHD to have purpose built out of clinical education and training space that can be collaboratively used by educators, health workers and health students undertaking placements in Mudgee. The centre could provide space for simulation beds, a larger lecture style theatre (scaled appropriately for the expected maximum audience number), tutorial and large group training space, a student resource and collaborative learning space and ancillary office and administrative space to support the running of the centre and hospital functions. The viability of a shared education centre would be subject to further investigation.

2) Key health worker and student accommodation

Suitable accommodation for key health workers and students is a priority for the precinct, with approximately 6 units sought for key workers and some subsidised shared student accommodation. An early case for key health worker accommodation (developed by the WNSW LHD) has already been made and priority should be given to constructing this accommodation. A collaborative approach with UOW and other interested educators should be undertaken to determine if this can be extended to include a student accommodation building / extension to the key health worker accommodation building, or whether two co-located but separate buildings should be constructed for these needs.

3) Future health space (potential ambulance station)

While not specifically required at this time, there may be the need for expanded or contemporary ambulance facilities in Mudgee in the future. Land within the precinct has been identified as an option to meet this need, subject to future planning and investigation of need by the NSW Ambulance service.

4) Future health space (health specialist expansion)

While not specifically required at the present time, there may be a need for further hospital outpatient specialist space, or private health provider expansion into the future. Allowing this activity to occur on site provides key proximity for staff who may operate out of both the hospital and a private or outpatient facility, improving operational functionality. It also allows for improved resident access, with co-located health services in close proximity making it easier for residents to visit multiple specialists. Such a facility would also provide the option for the hospital to decant outpatient, dental or office space in the longer term should other internal expansions be required for inpatient activity. Please note that this is not required now, but that the option is there for the future, a prudent approach to planning for health services on the Precinct.

5) Indoor pool, rehabilitation & sporting services

Providing a multi-functional community and business facility focused on the key Council investment of an indoor pool for Mudgee will promote a significant increase in community activity on the site, and appropriately supportive uses for the Precinct. A multi-functional facility that allows the pool to be leased out for private therapeutic and rehabilitative activities by private health, disability and aged care providers will not only benefit the community, it will help finance the operation of the pool. To this end, the pool should include appropriately designed access and temperature control for rehabilitation activities. Extending this further by adding small-scale retail and other community facilities may be beneficial to support the function of this facility. The location should be supported by a small scale park to support the local community. In the event the pool does not eventuate in this area, small scale retail and other community facilities, including a local park, should be enacted in this location.

Parking will be associated with this venue or location more generally, with space set aside for approximately 75 car parks that will cater for the pool use but also any spill over parking needs from hospital and health activity in the Precinct. The 75 car park allowance is based on a measured area of 2,250sqm, allowing approximately 30sqm / car park space for at-grade car parking. This benchmark should adequately cater for an efficient car park layout.

6) Residential aged care

Providing space for additional residential aged care within Mudgee is required to support the medium and long-term needs of the ageing population. The future deficit in residential aged care beds will mean extensions of existing aged care providers, or a new aged provider may be required in Mudgee. Providing such a facility in close proximity to the multi-functional indoor pool and community facility, as well as health services on the Mudgee Hospital site, will be an attractive opportunity for an aged care provider.

7) Residential mixed use development

Increasing the quantum of medium density residential activity surrounding the Hospital will allow for an increase in housing choice, improving affordability through allowing smaller lot or building sizes. This will cater for the medium and long-term needs of Mudgee's community, allowing a students, key workers, smaller families and lower socio-economic groups a better opportunity to have accessible and affordable accommodation within walking distance of the Precinct and the Mudgee CBD.

8) Medium density mixed use health and residential development

Existing allied health and child care services have already established in closer proximity to the hospital, across Church Street. To allow for increased health business activity in this area it is proposed that special use rights for health consulting / health services be added to the block bounded by Church, Atkinson, Meares and Nicholson streets, along with an upgrade to R3 zoning. This will allow some residential intensification and mixed use health services to be provided in close proximity to the Mudgee Hospital and other health services while also catering for some increasing in residential density. Undertaking this change allows choice for businesses who may wish to locate off government land, but in close proximity.

9) Improved pedestrian connectivity and safety, new DDA compliant railway crossing

Significant improvements can be made to pedestrian safety and connectivity between the CBD and the Precinct along Church Street through widening footpaths, including pedestrian safety signage at road crossings and through proving surface treatments and medium islands on wide road crossings. In addition to this, subject to considerations on whether the Gwabegar line will remain operational, a new compliant DDA crossing of this line will assist in improving connection between key land parcels. This will all help to make it easier for people to traverse the Precinct and the CBD.

10) On-road separated active transport spine

The promotion of cycling is important in Mudgee, however there are no off road bike paths or on road marking that separate cyclists and motor vehicles. Rather than compromise the higher traffic volumes along Church Street, a separate grade separated bike path between the CBD and Meares Street, along Lewis Street, is proposed. This will improve cycle safety to the CBD and onto Meares Street, which is noted as a cycle route for tourists. This will also provide an opportunity for improved active transport for and from the Precinct.

11) New and re-aligned bus stops

A number of re-alignment and new bus stops are proposed around the Precinct. The purpose of these is to improve access for those who use these services, and in particular the elderly and persons with a disability.

While the stops are nearby each other, they have been designed to ensure direct access to key services, including the hospital entrance, the medical centre entrance and the new indoor multi-functional pool facility. These changes should be undertaken sequentially, as development progresses.

6.4. Residential & Non-Residential Demand Estimates

To assist in understanding the quantum of change that may eventuate from the proposed land use and density for the Precinct, a 'demand' model was created. The results of this demand model are intended only as a guide to the potential development of the precinct. This model does not act as an economic analysis, nor does it replace the need to undertake a specific business cases or economic analysis for projects as they arise.

The model is derived from measuring the area of each 'developable parcel', reducing this parcel to allow for roads where large enough. Each parcel is then reduced by a site cover allowance and is broken down into use types, how much of each use is within each parcel, and the assumed height for each type. This gives us an area that each parcel has available to develop, which is called the 'Gross Building Area' (GBA).

Note that this does not equate to 'Gross Floor Area' and should not be used to guide commercial or retail yield analysis. GBA includes items like plant, travel, foyers and servicing areas, which is always larger than the available Gross Floor Area.

Each floor area then either equate to a GBA for a commercial or health use or is then broken into the number of residential dwellings that may be accommodated in this location, dependent on a mix of house, townhouse or apartment types. The number of persons within the precinct can then be calculated using the average persons per dwelling for Mudgee. These figures are noted below:

- House GBA: 300sqm
- Townhouse GBA: 200sqm
- Apartment GBA: 150sqm
- Mudgee avg. persons / dwelling (2016 census): 2.4

For reference, outcomes are also expressed in a maximum Dwellings / Ha for each parcel and the precinct as a whole, allowing comparison to typical strategic planning analysis.

The following developable parcels were used for the model:



Figure 30 - Developable Parcels for Demand Model

Note this does not include the Mudgee Hospital or Medical Centre, as these are existing uses and only specific areas of development on each site have been used.

The following detailed assumptions by precinct were used for the demand model:

| Precinct | Use | Percentage | Height | Housing Mix |
|--|-------------|------------|--------|-------------------------------|
| 1 - Health & Education | Health | 66.7% | 1 | - |
| | Education | 33.3% | 1 | - |
| 2 - Residential Support | Residential | 100% | 1 | 100% Apartment |
| 3 - Aged Care (Site Cover 40%) | Residential | 100% | 2 | 50% Townhouse / 50% Apartment |
| 4 - Residential Intensification (Site Cover 40%) | Residential | 100% | 2 | Apartment |
| 5 - Residential Mixed (Site Cover 40%) | Residential | 80% | 2 | 50% Townhouse / 50% Apartment |
| | Health | 20% | 2 | - |

Figure 31 - Demand Model Input Assumptions

The results of the demand model are shown in Figure 32 and the dwelling / ha by precinct reference in Figure 33.

| Use | GBA / Units / Persons | Unit |
|---------------------|-----------------------|------------|
| Health | 5,882 | sqm |
| Residential | 735 | Persons |
| Education | 1,500 | sqm |
| Commercial / Retail | - | sqm |
| Total GBA's | 5,882 | sqm |

Figure 32 - Demand Model Results

The results of the demand show that the Precinct may be able to accommodate more than 700 people should the use split in the assumptions be maintained. Further, almost 6,000sqm of GBA for health related uses (e.g. primary health, community health, allied health facilities such as physio, mental health, medical imaging, specialists and the potential ambulance station etc.) could be accommodated. An allowance of 1,500sqm of GBA for Education uses (the shared education centre) has been provided although it is noted this area could be increased should densities be increased on that portion of the Mudgee Hospital and adjacent Medical Centre sites.

Against the Mid-Western Regional Council expected growth of 2,350 persons to 2041, the potential population in the precinct could accommodate almost a third of this growth. While this is the case, the growth of the Precinct may occur over a longer time period, which would result in the population growth being a smaller percentage of Mudgee's overall growth. Further, there is the potential for the Precinct to accelerate jobs growth in Mudgee, which may in turn increase population growth. As shown in the figures above, an acceleration of the population growth rate could be accommodated within the Precinct.



Figure 33 - Demand Model – Dwelling / Ha Reference by Precinct

In addition to the figures above, the overall density for the Precinct equates to approximately 30 dwellings per hectare, which can be considered to be a low-medium density built form. It is noted that the surrounding low density built form remains.

It is noted that a medium density built form is not necessarily imposing on the surrounding areas. At 30 dwellings per hectare, the average area per dwelling is 1,333sqm. In effect this means there would be a mix of small-lot housing and small scale townhouse / terrace house outcomes at the 2 storey scale. This also assumed a 40% site cover, meaning 60% of the land would be free for private open space, landscaping and parking areas. While denser than many of the 1000sqm blocks present, this does not present an imposing large scale built form on the surrounding environment, but one not dissimilar from the housing around the CBD in many regional towns.

Further to this, as the growth is expected over a long period of time, this density will gradually build, providing a reasonable pace of change for surrounding residents.

7. STRATEGY AND ACTION RECOMMENDATIONS

To progressing the intent of the Precinct Master Plan a series of strategies and actions are recommended. These strategies and actions and are grouped actions that support the Precinct Principles and Vision. The actions proposed in this section are designed to support the overall precinct vision developed in consultation with Precinct stakeholders.

7.1. Strategy 1 – Facilitate collaborative education, key worker attraction and business development between organisations

Strategy 1 aligns directly with Principle 1 of the Precinct Master Plan, focusing on collaborative activities that will strengthen organisations abilities in workforce planning, training and education and service offerings to serve resident needs. The following actions are recommended:

| Action | Responsible | Key Stakeholders | Priority | Alignment |
|---|----------------------|--|---------------------------------|------------------------|
| Strategy 1 – Facilitate collaborative education, key worker attraction and business development between organisations | | | | |
| 1. Undertake a health workforce plan for the region to identify the quantum of health workers needed and the key growth disciplines for the Mid-Western Region. Key partners include, the PHN, WNSW LHD, Mudgee Health Council, local health and aged care providers, UOW, TAFE and the MWRC. | WNSW LHD | WNSW PHN UOW Mudgee TAFE Mudgee Health Council Local providers MWRC | First 12 Months | N/A |
| 2. Investigate the establishment of a Mudgee education and training network between key education providers (UOW, TAFE), the WNSW LHD and business organisations. The purpose of this is to develop education pathways between providers to enhance the skills of local employees and to attract suitable employees to the region, supported by continuous education opportunities. | WNSW LHD | Mudgee TAFE UOW RDA Orana MWRC | 1-2 Years | N/A |
| 3. Work with RDA Orana to deliver a health workforce recruitment and retention program for Mudgee, and regionally. Consider seeking funding from the Commonwealth Regional Jobs and Investment Packages program, should the program continue with additional funding extended to the NSW Central and Far West areas. | RDA Orana / WNSW LHD | MWRC UOW Mudgee TAFE Mudgee Health Council | First 12 Months | N/A |
| 4. Support programs to attract doctors (including visiting specialists), nurses and allied health workers to the Mid-Western Region. | WNSW LHD | WNSW PHN Local GP Practices Mudgee Health Council Mudgee4Doctors program Western NSW Regional Training Hub | Continue 3 years (new programs) | Mudgee4Doctors program |

7.2. Strategy 2 – Co-locate key health, education and recreation facilities

Strategy 2 directly aligns with Principle 2 of the Precinct Master Plan, recognising the need for organisations within the Precinct to work together to harness opportunities and growth in the Precinct. The following actions are recommended:

| Action | Responsible | Key Stakeholders | Priority | Alignment |
|--|-------------|---|-----------|---|
| Strategy 2 – Co-locate key health, education and recreation facilities | | | | |
| 1. Investigate construction of a joint WNSW LHD, UOW and shared facility for health and clinical education and training on the Mudgee Hospital site to cater for student and workforce training needs with multi-purpose education and training space. Spaces to include clinical simulation, tutorial, lecture / large group training, student learning and resources hub and ancillary office space. | WNSW LHD | UOW Other interested parties (e.g. other education providers) Mudgee Health Council | 1-2 years | N/A |
| 2. Undertake a business case for a new indoor all-season pool in the area of Cahill Park as noted on the precinct map. The pool is to include supporting retail and commercial amenity, private led health therapy and rehabilitation areas, maximising functionality for all community members. | MWRC | WNSW LHD Other interesting parties (e.g. allied health / retail businesses) | 1-2 years | MWRC Indoor Pool Feasibility Study – Potential site option to investigate |
| 3. Provide space clear of development for future health needs on the Mudgee Hospital site. This space may cater for Mudgee’s ambulance station, expanded mental health capacity or outpatient services for the Mudgee Hospital should the need arise. | WNSW LHD | N/A | Ongoing | N/A |

7.3. Strategy 3 – Increase housing choice and affordability to improve key worker attraction

Strategy 3 directly aligns with Principles 1 and 3 of the Precinct Master Plan. Strategy 3 aims to specifically support the housing needs of workers and students in Mudgee, both in the short and the long term, recognising this is a critical element to attracting workers to the region. The following actions are recommended:

| Action | Responsible | Key Stakeholders | Priority | Alignment |
|---|-------------|--|-----------|-----------|
| Strategy 3 – Increase housing choice and affordability to improve key worker attraction | | | | |
| 1. Investigate the construction of an accommodation facility for key health workers and students. The facility is to be located on the Mudgee Hospital site and must include a funding model for subsidised student accommodation before it is enacted. | WNSW LHD | Potential other education and health providers with student / key worker accommodation needs | 1-2 years | N/A |
| 2. Investigate an LEP amendment to encourage low rise medium density housing opportunities. | MWRC | | 1-2 years | N/A |
| 3. Add provisions to the MWRC DCP to cater for low rise medium density housing opportunities ensuring appropriate space for parking, separation of habitable spaces, privacy amenity and servicing. | MWRC | | 1-2 years | N/A |

7.4. Strategy 4 – Promote development that supports the health and education focus of the Precinct

Strategy 4 directly aligns with Principle 3 of the Precinct Master Plan, with a focus on delivering the overall precinct map with respect to preferred land uses, adjacencies, densities and infrastructure to support the long-term development of the Precinct. This strategy recognises the importance in positioning the Precinct and the CBD as the main health service hubs in Mudgee, with residential activity the focus of residential zones. The following actions are recommended:

| Action | Responsible | Key Stakeholders | Priority | Alignment |
|--|-------------|--|-----------|-----------|
| Strategy 4 – Promote development that supports the health and education focus of the Precinct | | | | |
| 1. Investigate amendments to the MWRC LEP to facilitate the Health Precinct Master Plan. a) enact the land zoning changes identified in the Precinct map (Figure 28 – page 35) b) remove 'health services facilities' as an allowable use from the R1 General residential zone c) Investigate opportunities to increase dwelling density of attached and detached housing in the R3 Medium-Density Residential Zone, in line with ongoing monitoring of residential land supply within the R3 zone. | MWRC | Local primary and allied health businesses | 1-2 years | N/A |
| 2. Investigate the opportunity for a suitable residential aged care facility over the developable portion of the Cahill Park site. | MWRC | Aged care providers NSW DPIE - Crown Land | 1-5 years | N/A |

7.5. Strategy 5 – Improve transport infrastructure connections and links through the Precinct

Strategy 5 directly aligns with Principle 4 of the Precinct Master Plan. The strategy aims to deliver the supporting infrastructure and network planning required to enhance physical connectives across the Precinct and more broadly across Mudgee and the region. The following actions are recommended:

| Action | Responsible | Key Stakeholders | Priority | Alignment |
|---|-------------------|--|-----------------|---|
| Strategy 5 – Improve transport infrastructure connections and links through the Precinct | | | | |
| 1. Collaborate with Transport for NSW to improve regional transport connection frequency and scheduling to ensure ease of same day connections to Dubbo, Orange and Bathurst for health appointments. Identify whether regional connections would be better run from a CBD location. | Transport for NSW | WNSW LHD MWRC | First 12 Months | Better public transport for isolated communities state-wide project |
| 2. Undertake an infrastructure analysis to identify whether the precinct can be supported with existing water, sewerage, energy and telecommunications infrastructure. | MWRC | | 1-2 years | N/A |
| 3. Undertake localised traffic, parking and cyclist safety improvements to the Church and Meares Street intersections, and nearby local roads. Consider changing all parking to reverse in, forward out bays, rather than forward in reverse out bays, to improve cycling safety on roads. | MWRC | WNSW LHD Mudgee Medical Centre | First 12 Months | |
| 4. Consider for inclusion within Council's Pedestrian Access Mobility Plan the establishment of improved pedestrian connections along Church Street between the CBD and Mudgee Hospital, as indicated on the Precinct map (Figure 27, Page 34). These connections are to be for improved pedestrian movement, including widened footpaths, safer road crossings inclusive of signage and pedestrian islands, and a DDA compliant crossing alongside Church Street over the Gwabegar railway line. | MWRC | WNSW LHD Mudgee Medical Centre Transport for NSW | 1-2 years | Partial – Pedestrian Access Mobility Plan. |
| 5. Establish a safe pedestrian crossing over Church Street between the medical centre and up-zoned residential development. | MWRC | Mudgee Medical Centre | First 12 Months | March 2020 Council minutes (Mudgee Medical Centre pedestrian refuge discussion) |
| 6. Construct a safe off-road / on-road grade separated bicycle and pedestrian route between the CBD and the precinct, inclusive of a railway crossing, along Lewis Street. | MWRC | Transport for NSW | 1-2 years | |
| 7. Investigate a change to the network plan for bus services in Mudgee to suit the new stop arrangements as shown on the precinct plan. | Transport for NSW | MWRC | 1-2 years | |
| 8. Should investigations confirm the need, construct new bus stops as shown on the precinct plan, allowing for improved connections for seniors, persons with a disability and socially disadvantaged groups in Mudgee. | MWRC | Transport for NSW | 1-2 years | |
| 9. Confirm the future of the Gwabegar Railway line, for freight and passenger traffic, and any anticipated impacts this will have to proposed precinct actions, including pedestrian crossing upgrades. | Transport for NSW | MWRC | 3 years | |

7.6. Funding Source Options

An exploration of funding sources has been undertaken to support the Precinct. This is not an exhaustive list, nor an assessment of detailed eligibility criteria. It is intended as a starting point for future funding investigations for specific projects.

Shared Education and Training facility:

- Regional Growth Fund - Growing local economies (subject to fund renewal)
- Potential partnership between WNSW LHD, UOW and Country Universities Centre.

Council indoor pool and multi-functional facility:

- Council funds
- Grants from local mining companies
- Regional Growth Fund – Stronger Communities Fund
- Regional Growth Fund – Resources for Regions (potential, subject to criteria under review).

Affordable housing

- Partnership with affordable housing provider (e.g. Salvation Army), waived land value, development application and Council contribution costs.

Local infrastructure upgrades

- Regional Growth Fund – Resources for Regions (potential, subject to criteria under review)
- Regional Growth Fund - Growing local economies (subject to fund renewal)
- Developer contributions & Council funding.

Local bike, pedestrian, bus and road upgrades

- Developer contributions & Council funding.

Support programs to attract doctors

- Grants from local mining companies
- Partnership funding between universities, the Western NSW LHD and local health businesses
- Council funding.

Further opportunities for funding sources should be explored as and when projects commence their business case or early options planning.

8. LIST OF REFERENCES

The following is a list of references, provided by order of appearance.

- 1) Census Quick Stats, Mid-Western Regional Council LGA, https://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/LGA15270, accessed March 2019.
- 2) Department of Education, Skills and Employment - Small Area Labour Markets, September Quarter 2019.
- 3) CDM Smith, Mudgee Health Precinct Master Plan Economic Analysis, March 2020.
- 4) Census Quick Stats, Mid-Western Regional Council LGA, https://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/LGA15270, accessed March 2019.
- 5) CDM Smith, Mudgee Health Precinct Master Plan Economic Report, March 2020.
- 6) NSW Government, Future of Transport 2056, March 2018, Version 3.1, p 31.
- 7) NSW Government, Future of Transport 2056, March 2018, Version 3.1, pp 32-33
- 8) <https://www.nswnationals.org.au/better-public-transport-for-isolated-communities/>
- 9) Destravis Pty Ltd, Tweed Health Precinct Background and Scenario Analysis Report, October 2018.

APPENDIX A: CDM SMITH ECONOMIC ANALYSIS

Destravis Group

Mudgee Health Precinct – Economic Analysis

23 March 2020

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Section 1 Introduction

Section 1 Introduction

CDM Smith was engaged by Destraavis Group to prepare a regional analysis for the potential Mudgee Health Precinct Master Plan. The proposed Health Precinct Master Plan is focused on the existing Mudgee Health Service and vacant Council owned land currently used for parking off Mortimer and Church Streets in the Mudgee Central Business District (CBD).

This study will analyse the grounds of the Mudgee Health Precinct Master Plan in order to provide an analysis of the past, current and projected economic profile of the Mudgee area and outline any potential opportunities.

1.1 Report Structure

The structure of this report is as follows:

- **Section 1: Introduction:** Provides an overview of the purpose of this study, report structure and the geographic study areas considered in the assessment.
- **Section 2: Socio-Economic Analysis:** Provides an overview of past trends in demographics in addition to population projections for the subject areas.
- **Section 3: Knowledge Intensity within the Mudgee Economy:** Analyses local and regional employment to determine areas of relative economic strength.
- **Section 4: Opportunities and Constraints for Mudgee:** Provides an overview of the opportunities and constraints for the health sector in Mudgee, based on the outcomes of the previous sections of the analysis, supplemented by stakeholder consultation outcomes provided by Destraavis Group.

1.2 Geographic Study Areas

The areas referenced throughout this report are outlined below:

- Mudgee SA2
- Lithgow SA2
- Orange SA2
- Bathurst SA2
- Parkes SA2
- Dubbo SA3
- Sydney - City and Inner South SA4
- Melbourne - Inner SA4
- Brisbane Inner City SA4
- Mid-Westerns Regional LGA
- Central West and Orana Planning Region
- New South Wales (NSW)

Section 2 Socio-Economic Analysis

The socio-economic analysis considers the characteristics of the local and regional economies potentially impacted by the Mudgee Health Precinct Master Plan benchmarked to NSW. Demographic analysis presented in this section of the report includes population by age and gender, family composition and home ownership trends as of the 2006, 2011 and 2016 Censuses, in addition to population projections from 2016 to 2041.

2.1 Demographics

An outline of the demographic profile of the Mudgee SA2, Mid-Western Regional LGA and Central West and Orana Planning Region, benchmarked to NSW is as follows:

- Between the 2006 and 2016 Censuses the average age increased by up to 2.2 years in all areas analysed. The largest increase in average age was recorded in the Central West and Orana Region, where the average age increased from 38.5 years in 2006 to 40.7 in 2016. The average age in the Mudgee SA2 remained relatively stable over the course of the Census ranging from 38.5 years in 2006 to 38.8 years in 2016.
- The Mudgee SA2, Mid-Western Regional LGA and the Central West Orana Regional Planning area all demonstrated a decrease in the incidence of couple families with children between 2006 and 2016. NSW however, was consistent across all Censuses, as the incidence of couple families with children remained the most popular family composition accounting for 31.5% of all dwellings in 2016.
- The incidence of lone person households decreased in all areas between 2006 and 2016 however remains the most common household composition in Mid-Western Regional LGA (25.8% of dwellings) and in the broader Central West and Orana Region (23.2% of dwellings) in 2016.
- The average household size was similar when comparing all areas, with only a marginally higher State average when compared to the other regions as at the 2016 Census.
- Between 2006 and 2016, the incidence of fully owned homes decreased across all areas analysed. Within the Mudgee SA2, renting was more common than homes owned outright (27.1% in 2016) and homes owned with a mortgage (28.9% in 2016) at the time of the 2016 Census with 32.8% of dwelling being rented. This proportion is consistent with the NSW rental proportion of dwellings in 2016, however the incidence of renting is lower within the Mid-Western Regional LGA and the Central West and Orana Region.
- The average weekly rent increased between 2006 and 2016 across all areas analysed, with the largest increases occurring between 2006 and 2011. The highest average annual growth rate (AAGR) in weekly rents between 2006 and 2016 was recorded in the Mudgee SA2 at 5.8% per annum, and the other areas analysed were only marginally lower ranging from 5.1% to 5.4% per annum.
- Average monthly housing loan repayments increased significantly between the 2006 and 2016 Censuses across all areas analysed, with repayments increasing from \$1,372 per month in 2006 to \$1,943 per month in 2016. The average monthly housing repayment in the Mudgee SA2 was lower than the NSW average, but exceeded the Mid-Western Regional LGA and the Central West and Orana Planning Region.
- Between 2006 and 2016, the incidence of persons aged 15 years and over with a post school qualification has increased across all areas analysed, with the incidence increasing most significantly in the Mudgee SA2 where growth between 2006 and 2016 nearly doubled the growth experienced throughout NSW. Despite this, the incidence of persons with a Bachelor or higher qualification within the Mudgee SA2, Mid-Western Regional LGA and Central West and Orana Region remains significantly lower than the State average of 23.4% of persons aged 15 years and over.
- In 2016, the Mudgee SA2 and the Mid-Western Regional LGA had marginally lower full-time employment rates relative to NSW. All areas analysed also recorded an increase in the incidence of part time employment between 2006 and 2016.

Section 2 Socio-Economic Analysis

- The unemployment rate in the Mudgee SA2 and the Mid-Western Regional LGA decreased between the 2006 and 2016 Censuses, however the Central West and Orana Region and NSW recorded increase in unemployment rates over the same time period. In 2016, the highest unemployment rates among the study areas were recorded in the Mid-Western Regional LGA and the Central and Orana Region (both 6.5% in 2016). Current estimates indicate employment conditions are favourable in both Mudgee SA2 and the Mid-Western Regional LGA, with an estimated unemployment rate of 3.4%, lower than the NSW average of 4.4%¹;
- Between 2011 and 2016, residents of the Mudgee SA2 and the Mid-Western Regional LGA were most likely to be employed in the mining industry. However, residents of the broader Central West and Orana Region and NSW were most likely to be employed in the Health Care and Social Assistance sector between 2011 and 2016. Over the last three Censuses, there has been an increase in the proportion of persons in Mudgee SA2 employed within the Health Care and Social Assistance sector. However, the incidence of persons employed in the Health Care and Social Assistance sector in Mudgee SA2 has remained below region and state averages;
- The accommodation and food services sector has traditionally been a significant sector of employment in the Mudgee SA2, accounting for 8.8% of employment in 2016. The accommodation and food services sector in Mudgee SA2 has accounted for a higher proportion of employment relative to the comparator regions, but recorded a decline in the share of total employment between the 2011 and 2016 Censuses; and
- In 2016 the most common occupation for residents of the Mudgee SA2, the Mid-Western Regional LGA and the Central West and Orana Region were technicians and trades workers which is consistent with the high employment in the mining industry in these areas. In NSW the most common occupation was professionals in 2016 which accounted for 23.6% of the total working population.

Table 2-1 summarises the socio-economic profile of the Mudgee SA2, Mid-Western Regional LGA and Central West and Orana region, benchmarked to NSW.

¹ Department of Education, Skills and Employment - Small Area Labour Markets, September Quarter 2019

Section 2 Socio-Economic Analysis

Table 2-1 Socio-Economic Profile - Mudgee SA2, Mid-Western Regional LGA and Central West and Orana region and NSW, 2006 – 2016

| | Mudgee SA2 | | | Mid-Western Regional LGA | | | Central West and Orana Region | | | New South Wales | | |
|--|------------|---------|---------|--------------------------|---------|---------|-------------------------------|---------|---------|-----------------|-----------|-----------|
| | 2006 | 2011 | 2016 | 2006 | 2011 | 2016 | 2006 | 2011 | 2016 | 2006 | 2011 | 2016 |
| Population | 9,587 | 10,483 | 11,734 | 21,090 | 22,318 | 24,070 | 259,123 | 267,513 | 278,729 | 6,549,170 | 6,917,641 | 7,480,242 |
| Ave. Annual Population Growth (%) | - | 1.8% | 2.3% | - | 1.1% | 1.5% | - | 0.6% | 0.8% | - | 1.1% | 1.6% |
| Population by Age | | | | | | | | | | | | |
| 0-14 Years | 22.3% | 21.7% | 22.1% | 21.0% | 20.3% | 20.4% | 21.9% | 21.2% | 20.0% | 19.8% | 19.3% | 18.5% |
| 15-24 Years | 12.2% | 12.7% | 11.1% | 10.8% | 11.2% | 10.1% | 12.6% | 12.6% | 11.9% | 13.3% | 12.9% | 12.5% |
| 25-34 Years | 11.6% | 11.8% | 13.7% | 9.6% | 9.7% | 11.1% | 10.9% | 10.6% | 11.5% | 13.6% | 13.6% | 14.3% |
| 35-44 Years | 14.2% | 13.7% | 12.3% | 14.2% | 13.3% | 11.5% | 13.5% | 12.5% | 11.4% | 14.6% | 14.0% | 13.4% |
| 45-54 Years | 12.3% | 12.8% | 12.9% | 13.9% | 14.0% | 14.2% | 13.8% | 13.6% | 13.1% | 13.8% | 13.7% | 13.1% |
| 55-64 Years | 11.2% | 10.2% | 10.7% | 14.1% | 13.2% | 13.1% | 12.0% | 12.7% | 13.0% | 11.0% | 11.7% | 11.9% |
| 65+ Years | 16.2% | 17.1% | 17.3% | 16.4% | 18.2% | 19.7% | 15.3% | 16.8% | 19.2% | 13.8% | 14.7% | 16.3% |
| Average Age | 38.5 | 38.8 | 38.8 | 40.1 | 40.6 | 41.1 | 38.5 | 39.4 | 40.7 | 38.1 | 38.8 | 39.5 |
| Household Type (% of dwellings) | | | | | | | | | | | | |
| Couple families with children | 27.8% | 27.4% | 27.0% | 27.7% | 26.9% | 25.2% | 29.0% | 27.1% | 22.4% | 31.8% | 31.7% | 31.5% |
| Couple families without children | 25.3% | 25.4% | 23.7% | 28.7% | 28.3% | 25.6% | 27.0% | 26.8% | 22.8% | 24.1% | 24.5% | 24.2% |
| Single parent family | 10.8% | 10.7% | 10.4% | 9.6% | 9.8% | 9.4% | 11.0% | 11.2% | 9.9% | 10.8% | 11.0% | 10.7% |
| Lone person households | 27.7% | 25.8% | 25.5% | 25.3% | 25.5% | 25.8% | 25.2% | 26.4% | 23.2% | 22.8% | 23.1% | 22.4% |
| Average household size | 2.4 | 2.5 | 2.5 | 2.5 | 2.4 | 2.4 | 2.5 | 2.4 | 2.4 | 2.3 | 2.6 | 2.6 |
| Household Finances | | | | | | | | | | | | |
| % of households fully owning home | 32.9% | 30.1% | 27.1% | 41.1% | 38.5% | 34.4% | 38.2% | 35.8% | 34.0% | 33.2% | 31.9% | 30.7% |
| % of households purchasing home | 27.4% | 28.1% | 28.9% | 26.6% | 27.7% | 27.5% | 28.8% | 29.6% | 28.6% | 30.2% | 31.9% | 30.4% |
| % of households renting | 33.4% | 32.9% | 32.8% | 24.9% | 25.9% | 25.3% | 26.5% | 27.4% | 26.7% | 28.4% | 29.1% | 30.3% |
| Average weekly household income | \$745 | \$1,059 | \$1,295 | \$700 | \$929 | \$1,131 | \$744 | \$900 | \$1,161 | \$1,006 | \$1,237 | \$1,486 |
| Average monthly housing loan repayment | \$1,372 | \$1,848 | \$1,943 | \$1,282 | \$1,728 | \$1,851 | \$1,285 | \$1,624 | \$1,665 | \$1,805 | \$2,196 | \$2,204 |
| Average weekly rent payment | \$172 | \$257 | \$301 | \$204 | \$299 | \$336 | \$140 | \$192 | \$237 | \$239 | \$329 | \$403 |
| Average housing costs (as a % of income) | 19.3% | 19.3% | 17.6% | 18.5% | 20.2% | 17.9% | 16.5% | 18.2% | 14.9% | 19.2% | 20.8% | 18.6% |

Section 2 Socio-Economic Analysis

| | Mudgee SA2 | | | Mid-Western Regional LGA | | | Central West and Orana Region | | | New South Wales | | |
|---|------------|-------|-------|--------------------------|-------|-------|-------------------------------|-------|-------|-----------------|-------|-------|
| Labour Market | | | | | | | | | | | | |
| Full-time employment (% labour force) | 57.0% | 58.5% | 58.8% | 57.1% | 58.1% | 56.4% | 59.7% | 60.5% | 58.2% | 60.8% | 60.2% | 59.2% |
| Part-time employment (% labour force) | 30.3% | 30.8% | 30.5% | 29.8% | 30.4% | 31.6% | 27.7% | 28.1% | 29.6% | 27.2% | 28.2% | 29.7% |
| Total employment (% labour force) | 93.2% | 94.8% | 94.4% | 92.7% | 94.3% | 93.4% | 93.7% | 94.6% | 93.5% | 94.1% | 94.1% | 93.7% |
| Unemployment rate (% labour force) | 6.8% | 5.3% | 5.6% | 7.3% | 5.7% | 6.5% | 6.4% | 5.4% | 6.5% | 5.9% | 5.9% | 6.3% |
| Participation rate (% of population > 15 years) | 58.6% | 59.2% | 58.4% | 55.4% | 55.8% | 54.1% | 58.4% | 58.4% | 37.6% | 58.9% | 59.7% | 59.2% |
| Qualifications | | | | | | | | | | | | |
| % of persons with a non-school qualification | 35.8% | 40.1% | 45.7% | 34.5% | 39.0% | 43.2% | 33.9% | 38.6% | 43.0% | 40.7% | 45.8% | 50.4% |
| % of persons with Bachelor or higher | 9.1% | 10.7% | 12.7% | 8.3% | 9.8% | 10.9% | 9.2% | 10.7% | 12.6% | 16.5% | 19.9% | 23.4% |
| % of persons with Diploma | 5.7% | 6.5% | 7.3% | 5.3% | 6.2% | 6.8% | 5.4% | 6.2% | 7.2% | 7.4% | 8.3% | 8.9% |
| % of persons with Certificate | 21.0% | 22.9% | 25.7% | 20.9% | 23.1% | 25.5% | 19.3% | 21.7% | 23.2% | 16.8% | 17.7% | 18.1% |
| Occupation | | | | | | | | | | | | |
| Upper White Collar | | | | | | | | | | | | |
| Managers | 13.0% | 11.3% | 11.0% | 18.4% | 15.8% | 14.6% | 18.4% | 15.8% | 14.6% | 13.6% | 13.3% | 13.5% |
| Professionals | 14.0% | 15.0% | 15.1% | 12.7% | 13.6% | 13.1% | 12.7% | 13.6% | 13.1% | 21.2% | 22.7% | 23.6% |
| <i>Subtotal</i> | 27.0% | 26.3% | 26.1% | 31.1% | 29.4% | 27.7% | 31.1% | 29.4% | 27.7% | 34.8% | 36.1% | 37.1% |
| Lower White Collar | | | | | | | | | | | | |
| Community & Personal Service Workers | 8.7% | 9.8% | 10.4% | 8.0% | 8.7% | 9.8% | 8.0% | 8.7% | 9.8% | 8.6% | 9.5% | 10.4% |
| Clerical and Admin Workers | 10.5% | 10.2% | 10.3% | 9.6% | 9.9% | 10.1% | 9.6% | 9.9% | 10.1% | 15.4% | 15.1% | 13.8% |
| Sales Workers | 12.7% | 11.0% | 10.5% | 9.8% | 9.0% | 9.1% | 9.8% | 9.0% | 9.1% | 9.7% | 9.3% | 9.2% |
| <i>Subtotal</i> | 23.2% | 21.2% | 20.8% | 19.4% | 18.9% | 19.2% | 19.4% | 18.9% | 19.2% | 25.1% | 24.3% | 23.1% |
| Upper Blue Collar | | | | | | | | | | | | |
| Technicians & Trades Workers | 16.6% | 17.2% | 17.8% | 16.2% | 16.7% | 17.2% | 16.2% | 16.7% | 17.2% | 13.6% | 13.2% | 12.7% |
| <i>Subtotal</i> | 16.6% | 17.2% | 17.8% | 16.2% | 16.7% | 17.2% | 16.2% | 16.7% | 17.2% | 13.6% | 13.2% | 12.7% |
| Lower Blue Collar | | | | | | | | | | | | |
| Machinery Operators & Drivers | 9.2% | 12.6% | 12.6% | 9.6% | 12.7% | 12.6% | 9.6% | 12.7% | 12.6% | 6.4% | 6.4% | 6.1% |
| Labourers | 13.9% | 11.5% | 11.1% | 14.1% | 12.2% | 12.0% | 14.1% | 12.2% | 12.0% | 9.5% | 8.7% | 8.8% |
| <i>Subtotal</i> | 23.1% | 24.0% | 23.7% | 23.7% | 24.8% | 24.6% | 23.7% | 24.8% | 24.6% | 16.0% | 15.1% | 14.9% |

Section 2 Socio-Economic Analysis

| Employment by Industry (% of employees) | Mudgee SA2 | | | Mid-Western Regional LGA | | | Central West and Orana Region | | | New South Wales | | |
|---|------------|--------|--------|--------------------------|--------|--------|-------------------------------|--------|--------|-----------------|--------|--------|
| | | | | | | | | | | | | |
| Agriculture, forestry & fishing | 4.8% | 2.8% | 2.9% | 13.1% | 9.5% | 8.9% | 12.8% | 10.7% | 10.2% | 2.7% | 2.2% | 2.1% |
| Mining | 6.4% | 14.9% | 17.0% | 7.0% | 13.8% | 15.0% | 2.7% | 4.6% | 4.2% | 0.7% | 1.0% | 0.9% |
| Manufacturing | 8.1% | 5.4% | 4.2% | 8.5% | 6.0% | 4.0% | 8.6% | 7.5% | 5.7% | 9.6% | 8.4% | 5.8% |
| Electricity, gas, water & waste services | 0.8% | 1.0% | 0.8% | 1.1% | 1.2% | 1.0% | 1.5% | 1.6% | 1.3% | 1.0% | 1.1% | 0.9% |
| Construction | 8.4% | 8.0% | 8.2% | 7.2% | 7.8% | 8.0% | 6.3% | 6.5% | 7.2% | 7.3% | 7.3% | 8.4% |
| Wholesale trade | 3.1% | 3.0% | 2.3% | 2.8% | 2.5% | 2.1% | 3.1% | 2.9% | 2.3% | 4.7% | 4.4% | 3.1% |
| Retail trade | 17.0% | 12.9% | 11.9% | 13.4% | 11.3% | 10.5% | 11.5% | 10.6% | 9.9% | 11.1% | 10.3% | 9.7% |
| Accommodation & food services | 10.2% | 10.5% | 8.8% | 8.3% | 8.2% | 7.8% | 6.6% | 6.6% | 6.8% | 6.5% | 6.7% | 7.1% |
| Transport, postal & warehousing | 3.4% | 3.0% | 2.4% | 3.3% | 3.3% | 2.7% | 4.4% | 4.4% | 3.8% | 5.0% | 4.9% | 4.7% |
| Information media & telecommunications | 1.1% | 1.2% | 1.0% | 0.8% | 0.8% | 0.8% | 1.1% | 0.9% | 0.9% | 2.4% | 2.3% | 2.2% |
| Financial & insurance services | 1.4% | 1.3% | 1.1% | 1.2% | 1.2% | 1.1% | 1.7% | 1.5% | 1.4% | 5.0% | 5.0% | 4.9% |
| Rental, hiring & real estate services | 1.8% | 1.5% | 1.4% | 1.2% | 1.3% | 1.2% | 1.1% | 1.1% | 1.1% | 1.7% | 1.6% | 1.8% |
| Professional, scientific & technical services | 4.1% | 3.9% | 3.8% | 3.9% | 3.5% | 3.4% | 3.4% | 3.6% | 3.6% | 7.3% | 7.9% | 8.1% |
| Administrative & support services | 1.7% | 2.0% | 2.9% | 1.8% | 2.2% | 2.8% | 1.9% | 2.4% | 2.7% | 3.1% | 3.3% | 3.5% |
| Public administration & safety | 4.8% | 4.7% | 4.7% | 4.3% | 4.2% | 4.4% | 6.9% | 6.9% | 7.2% | 6.0% | 6.1% | 6.0% |
| Education & training | 7.3% | 6.9% | 7.6% | 7.2% | 7.3% | 7.6% | 8.5% | 8.9% | 9.3% | 7.6% | 7.9% | 8.4% |
| Health care & social assistance | 9.0% | 9.6% | 10.1% | 8.4% | 9.2% | 9.9% | 11.1% | 12.4% | 13.6% | 10.5% | 11.6% | 12.5% |
| Arts & recreation services | 0.8% | 0.6% | 1.2% | 0.8% | 0.7% | 1.1% | 0.9% | 0.9% | 1.0% | 1.4% | 1.5% | 1.5% |
| Other services | 3.9% | 4.9% | 5.2% | 3.2% | 3.9% | 4.7% | 3.6% | 3.9% | 4.0% | 3.8% | 3.7% | 3.7% |
| Total | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

Source: ABS Census Data, Time Series profile 2016

Section 2 Socio-Economic Analysis

2.2 Population Projections

The Mid-Western Regional LGA is expected to experience low levels of population growth between 2016 to 2041, with the population expected to increase by 2,378 persons or an AAGR of 0.4% per annum. This level of growth is consistent with the broader Central West and Orana Region population projections which also predicts an AAGR of 0.3% per annum.

Table 2-2 denotes the population projections for the Mudgee SA2, Mid-Western Regional LGA, the Central West and Orana Region and NSW. The NSW State Government does not publish population estimates at the SA2 level, therefore the growth rates from the broader LGA have been applied to the 2016 Census population of the Mudgee SA2 to attain population estimates over time. If we assume that the rate of population growth in the Mudgee SA2 is consistent with the broader LGA, the population of Mudgee SA2 is projected to increase from 12,010 persons in 2016 to 13,150 persons in 2041, or by 1,140 persons.

Table 2-2 Population Projections - Mudgee SA2, Mid-Western Regional LGA, the Central West and Orana Region and NSW, 2016 to 2041

| | 2016 | 2021 | 2026 | 2031 | 2036 | 2041 | AAGR, 2016-2041 |
|-------------------------------|-----------|-----------|-----------|-----------|------------|------------|-----------------|
| Mudgee SA2 | 12,010 | 12,302 | 12,575 | 12,804 | 12,991 | 13,150 | 0.4% |
| Mid-Western Regional LGA | 24,546 | 25,158 | 25,729 | 26,205 | 26,595 | 26,924 | 0.4% |
| Central West and Orana Region | 284,679 | 291,567 | 297,488 | 301,745 | 304,567 | 306,011 | 0.3% |
| NSW | 7,732,858 | 8,414,978 | 9,011,010 | 9,560,567 | 10,077,964 | 10,572,696 | 1.3% |

Source: Department of Planning, Industry and Environment (2019)

2.3 Projected Age and Gender Profile

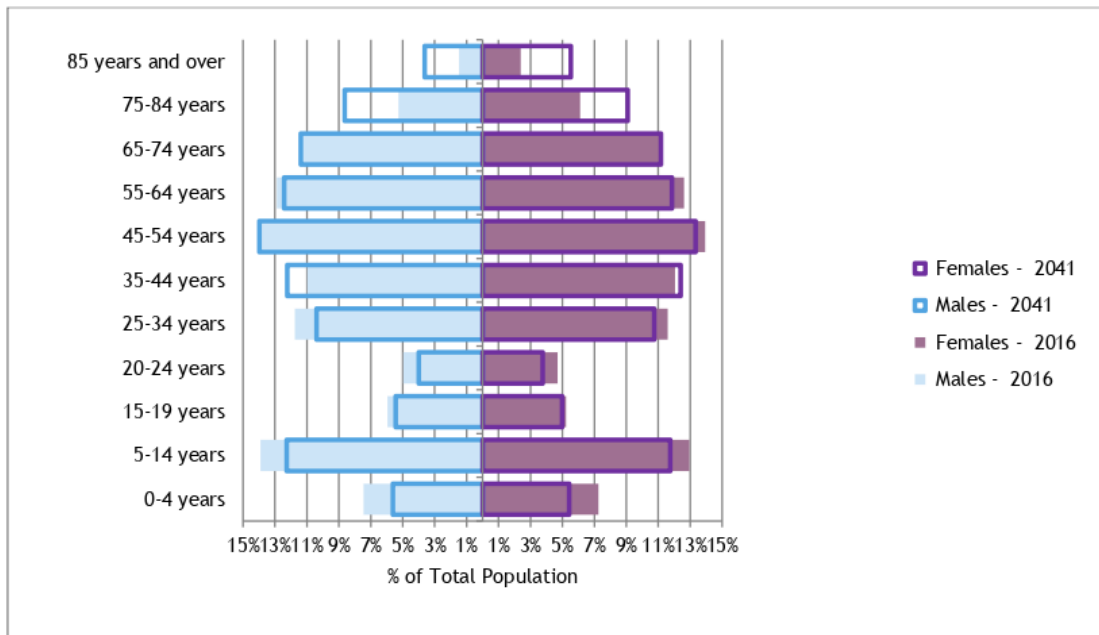
As outlined in Section 2.1, the average age of residents in the Mid-Western Regional LGA was higher than the NSW average as of the 2016 Census. This section will highlight the distribution of the resident populations age and gender within the Mid-Western Regional LGA using population projections from 2016 to 2041. The most significant variance by age and gender cohorts are as follows;

- The incidence of persons aged 0-14 years is anticipated to decrease between 2016 and 2041.
- The incidence of males aged 35-44 years is anticipated to increase between 2016 and 2041.
- The incidence of personas aged 75+ years is anticipated to increase between 2016 and 2041.

Figure 2-1 illustrates the distribution of the population by age and gender in the Mid-Western Regional LGA using 2016 population projections.

Section 2 Socio-Economic Analysis

Figure 2-1 Age Profile – Mid-Western Regional LGA, 2016 - 2041



Source: Department of Planning, Industry and Environment (2019)

Section 3 Knowledge Intensity within the Mudgee Economy

Section 3 Knowledge Intensity within the Mudgee Economy

The purpose of this section is to provide an analysis of the health-related knowledge intensity of the Mudgee regional economy and to compare it to other regional communities and centres to identify strengths, gaps and potential opportunities.

Knowledge intensity is rising across the entire economic profile; however, some sectors are naturally more knowledge intense than others. Knowledge intense sectors have been identified at the two-digit ANZSIC level and categorised into seven broad categories, these being;

- Health;
- Education;
- Industry;
- ICT;
- Tourism, recreation and cultural services;
- Finance; and
- Professional services.

Table 3-1 summaries the knowledge intense sectors at the two-digit ANZSIC level within each category.

Section 3 Knowledge Intensity within the Mudgee Economy

Table 3-1 Definition of Knowledge Intense Sectors

| Knowledge Intense Sector Grouping | Two Digit ANZSIC Sectors Contained |
|---|---|
| Health | <ul style="list-style-type: none"> Hospitals Medical and other health care services |
| Education | <ul style="list-style-type: none"> Preschool and school education Tertiary education Adult, community and other education |
| Industry | <ul style="list-style-type: none"> Coal mining Oil and gas extraction Metal ore mining Exploration and other mining support services Food product manufacturing Beverage and tobacco product manufacturing Polymer product and rubber product manufacturing Transport equipment manufacturing Machinery and equipment manufacturing Air and space transport |
| ICT | <ul style="list-style-type: none"> Publishing (except internet and music publishing) Motion picture and sound recording activities Broadcasting (except internet) Internet publishing and broadcasting Telecommunications services Internet service providers, web search portals and data processing services Computer systems design and related services |
| Tourism, Recreation and Cultural Services | <ul style="list-style-type: none"> Accommodation Food and beverage services Heritage activities Creative and performing arts activities Sports and recreation activities Gambling activities |
| Finance | <ul style="list-style-type: none"> Finance Insurance and superannuation funds |
| Professional Services | <ul style="list-style-type: none"> Professional, scientific and technical services (except computer systems design and related services) |

Note: Two digit ANZSIC sectors identified as potentially being knowledge intense have previously been identified in other work undertaken for the Queensland Government, and hence the definition has been applied here for consistency.

Section 3 Knowledge Intensity within the Mudgee Economy

As implied above, not every part of an industry sector will be knowledge intense, hence it is appropriate to identify knowledge intense occupations as well as potential knowledge intense sectors as a cross check or cross comparison. Table 3-2 below identifies occupations at the two-digit ANZSCO that are considered to have a high potential for knowledge intensity and has categorised them into the following four broad groupings:

- Health;
- Education;
- Managers; and
- Professionals.

Table 3-2 Definition of Knowledge Intense Occupations

| Knowledge Intense Occupation Grouping | Two Digit ANZSCO Occupations |
|---------------------------------------|--|
| Health | <ul style="list-style-type: none"> • Health professionals |
| Education | <ul style="list-style-type: none"> • Education professionals |
| Managers | <ul style="list-style-type: none"> • Managers, nfd • Chief executives, general managers and legislators • Specialist managers |
| Professionals | <ul style="list-style-type: none"> • Professionals, nfd • Arts and media professionals • Business, human resource and marketing professionals • Design, engineering, science and transport professionals • ICT professionals • Legal, social and welfare professionals • Engineering, ICT and science technicians |

Note: Two digit ANZSCO Occupations identified as potentially being knowledge intense have previously been identified in other work undertaken for the Queensland Government, and hence the definition has been applied here for consistency.

3.1 Health Knowledge Intensity and Educational Attainment

Between 2011 and 2016 there has been a general trend of increases in knowledge intensity and educational attainment in the Mudgee SA2. Comparing the level of post school qualification attainment for each industry of employment within the SA2 provides a useful indication of the degree of knowledge intensification and structural change within a given industry.

As of the 2016 Census, the industries of employment in Mudgee SA2 which had the highest incidence of workers with post school qualifications were:

- Education and training (87.1% of workers held a post school qualification);
- Professional, scientific and technical services (79.5% of workers held a post school qualification); and
- Health care and social assistance (78.6% of workers held a post school qualification).

In the Mudgee SA2 the industries of employment which had the most significant growth in the number of workers holding a post school qualification between 2011 and 2016 were:

- Agriculture, forestry and fishing: increase of 14.8% points (increasing from 45.5% of workers in 2011 to 60.3% of workers in 2016 in the sector);
- Financial and insurance services: increase of 10.9% points (increasing from 49.3% of workers in 2011 to 60.3% of workers in 2016 in the sector); and

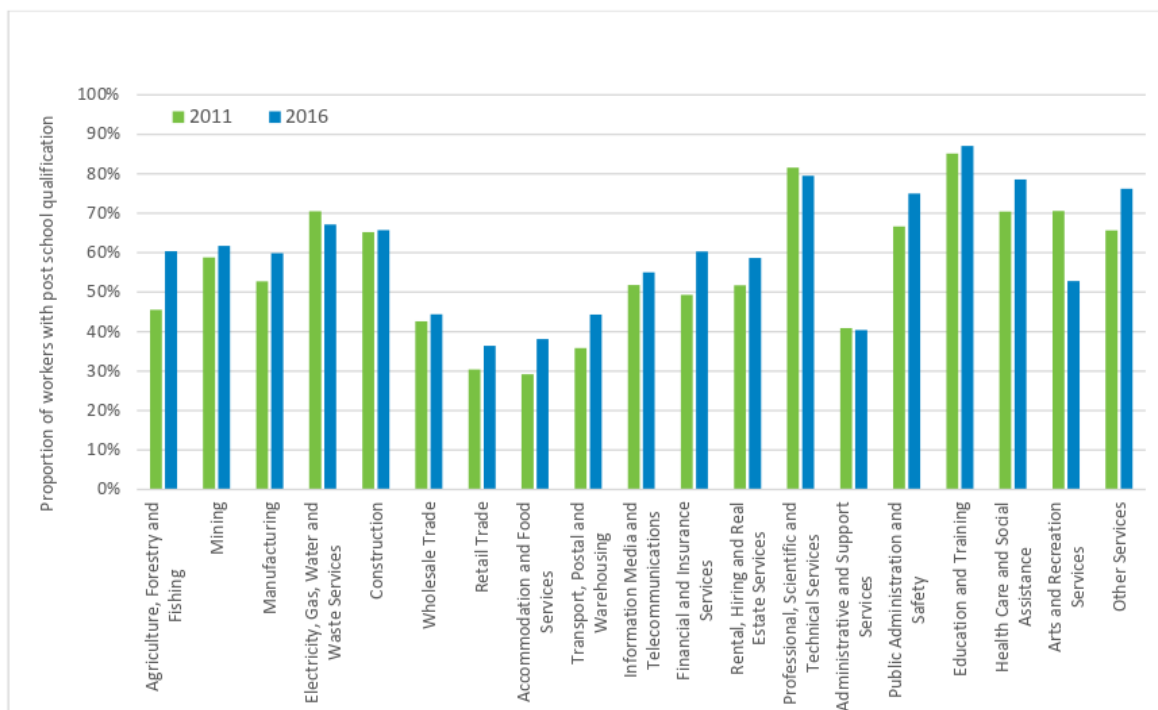
Section 3 Knowledge Intensity within the Mudgee Economy

- Other services: increase of 10.6% points (increasing from 65.6% of workers in 2011 to 76.2% of workers in 2016 in the sector).

The health care and social assistance sector in Mudgee SA2 also recorded significant growth in the incidence of workers that held a post school qualification, increasing by 8.1% points in the 2011 to 2016 period.

Figure 3-1 illustrates the proportion of workers in Mudgee SA2 who hold a post school qualification by single digit ANZSIC category as of the 2011 and 2016 Censuses.

Figure 3-1 Proportion of the Working Population Holding Post School Qualifications – Mudgee SA2, 2011 - 2016



Source: ABS Census of Population and Housing, Place of Work 2016

Between 2011 and 2016 there has been an increase in the level of post school qualification attainment for the majority of industries in the Mudgee SA2. Trends in higher qualification attainment across industries highlights the industries where knowledge intensity is particularly high or growing quickly. Higher qualifications include;

- Advanced Diploma and Diploma Level;
- Bachelor Degree Level;
- Graduate Diploma and Graduate Certificate Level; and
- Postgraduate Degree level.

Within Mudgee SA2, there was an increase in proportion of workers holding higher qualifications across more than half of the listed industry sectors. However, the most significant decline in the proportion of workers with a higher qualification was in the information media and telecommunications sector, where there was a 7.3% decrease between 2011 and 2016.

The employment sectors with the largest incidence of workers holding a higher qualification in 2016 were as follows:

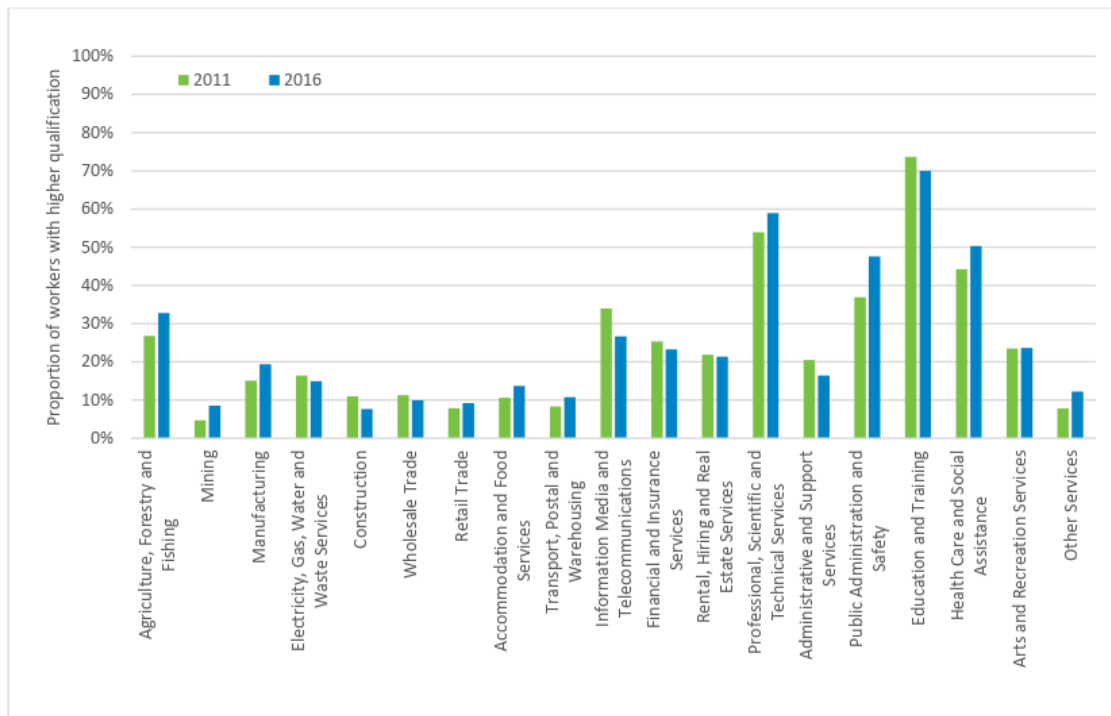
- Education and training: 70.0% of workers in 2016.
- Professional, scientific and technical services: 59.0% of workers in 2016; and

Section 3 Knowledge Intensity within the Mudgee Economy

- Health care and social assistance: 50.3% of workers in 2016.

Figure 3-2 below illustrates the proportion of workers in Mudgee who hold a higher qualification by single digit ANSZSIC category.

Figure 3-2 Proportion of the Working Population Holding Higher Qualifications, Mudgee SA2, 2011 - 2016



Source: ABS Census of Population and Housing, Place of Work 2016

This section of the report focusses on the historical and trends in qualification levels of the workforce in the Mudgee SA2 benchmarked to regional neighbours and capital city centres. To measure the knowledge intensity of Mudgee and benchmark cities, the assessment considered the post school qualification levels of the employed population.

Benchmark cities include:

- Regional Neighbours: Dubbo, Lithgow, Orange, Parkes and Bathurst; and
- Capital Cities: Inner Brisbane, Sydney and Melbourne.

Census data provides details in relation to the qualification levels of the population aged 15 years and over for the following sub-categories:

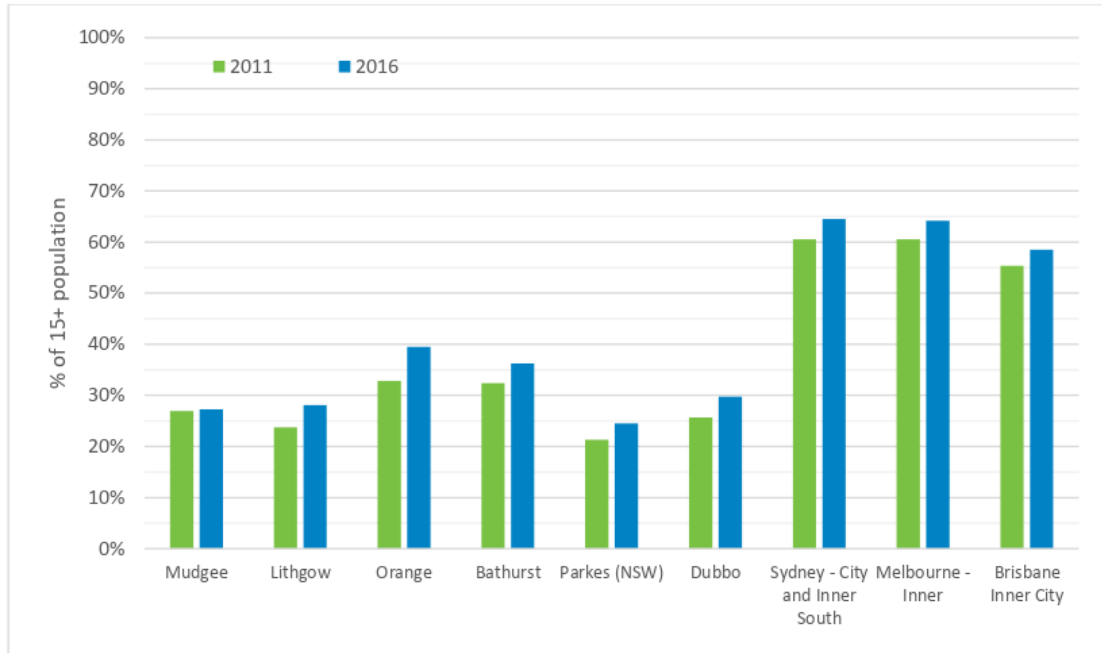
- Higher qualifications;
- Certificate level I and II level qualification;
- Certificate level III and IV level qualification;
- Certificate level not defined; and
- Level of education defined / not stated.

The assessment presented below has focussed on those workers with a higher qualification. The proportion of persons in Mudgee holding a higher qualification increased from 25.6% in 2011 to 27.6% in 2016. The incidence of working age persons with higher qualifications was significantly lower in the Mudgee SA2 than the inner city capitals.

Section 3 Knowledge Intensity within the Mudgee Economy

The incidence of working age residents of the inner city capitals with higher qualifications sat around 55.0% to 65.0% in 2016, while the Mudgee SA2 was almost half the proportion. This indicates that there is a significant gap in higher qualification attainment between the regional and capital city contexts.

Figure 3-3 Proportion of the Working Population Holding a Higher Qualification, Mudgee SA2 and Regional Benchmarks, 2011-2016



Source: ABS Census of Population and Housing, Place of Work 2016

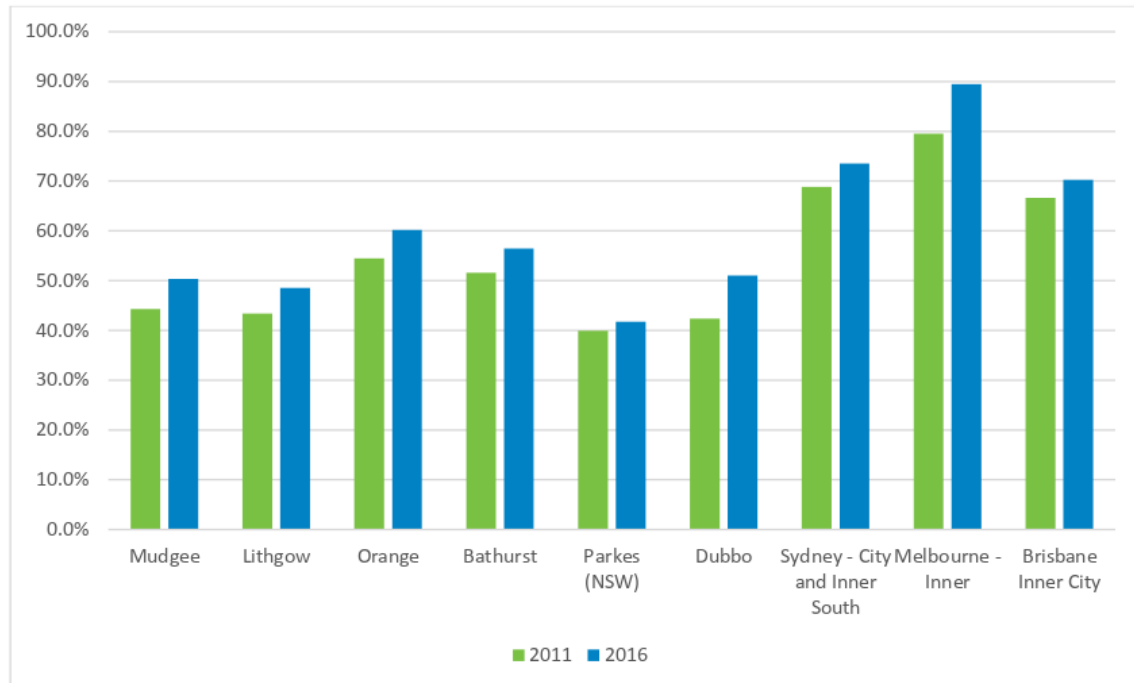
Between 2011 and 2016, all regions analysed recorded growth in the incidence of workers within the health care and social assistance sector holding a higher qualification.

Mudgee SA2 had a significantly lower proportion of workers in the health care and social assistance sector holding a higher qualification relative to the regional neighbours of Orange SA2 and Bathurst SA2 and all comparator capital cities (Sydney, Melbourne and Brisbane). This is likely reflective of the relative range of health care facilities and employment opportunities in Mudgee relative to Orange SA2, Bathurst SA2 and the capital city benchmarks.

Figure 3-4 details the proportion of health care workers holding a higher degree in the Mudgee SA2 benchmarked to regional neighbours and comparator capital cities.

Section 3 Knowledge Intensity within the Mudgee Economy

Figure 3-4 Proportion of the Health Workers Holding a Higher Qualification, Mudgee SA2 and Regional Benchmarks, 2011-2016



3.2 Source: ABS Census of Population and Housing, Place of Work 2016 Size and Relative Significance of Mudgee’s Economy

This subsection discusses the size (in terms of percentage share of employment) and relative significance (utilising location quotients) of the Mudgee SA2 knowledge intense economy based on sectoral and occupational analyses. In formulating the subsequent approach of assessing the size and relative significance of Mudgee’s knowledge economy, attention has been paid to developing a methodology that is simple to understand and simple to replicate by stakeholders regardless of technical proficiency and resourcing.

As previously mentioned, based on the nature of the proposed development, this report primarily focusses on the health sector within knowledge intense industries.

3.2.1 Knowledge Intense Industries

As of the 2016 Census, there were 1,975 persons employed in knowledge intense sectors in the Mudgee SA2, of which 302 were employed in the Health sector accounting for 15.3% of all workers in knowledge intense industries in the SA2.

Between 2011 and 2016, the Mudgee SA2 experienced growth in the number of knowledge intense workers in the area with an AAGR of 2.3% between the two Censuses. Within the knowledge intense industries, employment in the health sector experience the highest AAGR (4.7% per annum) out of all knowledge industries.

Table 3-3 provides a summary of the size of the health sector within the knowledge intense industries of the Mudgee SA2 between 2011 and 2016.

Section 3 Knowledge Intensity within the Mudgee Economy

Table 3-3 Size of the Health Sector Relative to Knowledge Intense Industries, Mudgee SA2, 2011 to 2016

| | Number | | % of Total | | AAGR |
|------------------------------------|--------|-------|------------|--------|-----------|
| | 2011 | 2016 | 2011 | 2016 | 2011-2016 |
| Health | 240 | 302 | 5.2% | 5.8% | 4.7% |
| Total knowledge intense industries | 1,767 | 1,975 | 38.2% | 37.7% | 2.3% |
| Remaining industries | 2,864 | 3,269 | 61.8% | 62.3% | 2.7% |
| Total | 4,631 | 5,244 | 100.0% | 100.0% | 2.5% |

Source: 2011 and 2016 Census Working Population profiles

A key method to measure the relative knowledge intensity of the Mudgee SA2 compared to a regional benchmark is using location quotients. A location quotient is a ratio used to determine the relative concentration or dominance of any given characteristic or asset within a region, compared to another benchmark region. In this instance, the location quotient compares the proportion of workers employed in knowledge intense sectors or occupations within the Mudgee SA2 with the proportion of workers employed in knowledge intense sectors or occupations within other benchmarks to give the relative concentration or significance of the given industry. Hence, a different location quotient is generated depending on the benchmark location. An LQ of greater than one means that employment within the sector is more significant within the Mudgee SA2 when compared to the benchmark region.

The relative significance of employment in health sectors the Mudgee SA2 was lower than NSW as of the last two Censuses, recording location quotients in both 2011 and 2016 of 0.80. However, across all knowledge intense industries, the Mudgee SA2 reports a marginally stronger location quotient of 0.90 in 2016 relative to the State average.

Table 3-4 Location Quotient Assessment, Health and Knowledge Sectors, Mudgee SA2 relative to NSW, 2011 and 2016

| | 2011 | 2016 |
|------------------------------------|------|------|
| Health | 0.80 | 0.80 |
| Total knowledge intense industries | 0.92 | 0.90 |
| Remaining industries | 1.06 | 1.07 |

Source: 2011 and 2016 Census Working Population profiles

3.2.2 Knowledge Intense Occupations

There were an estimated 238 persons employed in health occupations in Mudgee as at the 2016 Census, which accounted for 21.3% of all workers employed in knowledge intense occupations.

The number of persons employed in a health-based occupation in the Mudgee SA2 increased from 221 persons in 2011 to 238 persons in 2016, representing an AAGR of 1.5% per annum. However, the proportion of health-based occupations compared to total employment in Mudgee decreased by 0.3% between the two Censuses.

Table 3-5 summarises the size of the health and knowledge occupation sector in the Mudgee SA2 between 2011 and 2016.

Section 3 Knowledge Intensity within the Mudgee Economy

Table 3-5 Size of Health and Knowledge Occupations, Mudgee SA2, 2011 and 2016

| | Number | | % of Total | | AAGR |
|-------------------------------------|--------|-------|------------|--------|-----------|
| | 2011 | 2016 | 2011 | 2016 | 2011-2016 |
| Health | 221 | 238 | 4.8% | 4.5% | 1.5% |
| Total knowledge intense occupations | 1,064 | 1,115 | 23.0% | 21.3% | 0.9% |
| Remaining industries | 3,567 | 4,129 | 77.0% | 78.7% | 3.0% |
| Total | 4,631 | 5,244 | 100.0% | 100.0% | 2.5% |

Source: 2011 and 2016 Census Working Population profiles

The Mudgee SA2 had a marginal strength in health occupation employment relative to NSW in 2011 (LG of 1.11)

Table 3-6 Location Quotient Assessment, Health and Knowledge Occupations, Mudgee SA2 relative to NSW, 2011 and 2016

| | 2011 | 2016 |
|-------------------------------------|------|------|
| Health | 1.11 | 1.00 |
| Total knowledge intense occupations | 0.70 | 0.63 |
| Remaining occupations | 1.15 | 1.19 |

Source: 2011 and 2016 Census Working Population profiles

3.3 Benchmarking Mudgee to Other Regional Neighbours

To identify the strengths, gaps and potential opportunities for knowledge intense sectors and occupations within the Mudgee SA2, the area has been benchmarked to the following areas:

- Regional Neighbours: Dubbo SA3, Lithgow SA2, Orange SA2, Parkes SA2 and Bathurst SA2; and
- Capital Cities: Inner Brisbane, Sydney and Melbourne (defined by the relevant SA4s).

3.3.1 Regional Neighbours

The location quotient for health sectors in Mudgee relative to Lithgow was 0.63 in 2011, implying that this sector was relatively less concentrated as compared to the Lithgow SA2. However, by 2016 the quotient had increased to 0.80 implying faster relative employment growth in this sector in the Mudgee SA2. Interestingly, overall knowledge-based industries in the Mudgee SA2 are more concentrated than in the Lithgow SA2 and demonstrated an AAGR of 1.5% between 2011 and 2016.

The location quotients for the Mudgee SA2 relative to the Orange SA2 and the Bathurst SA2 outline that in health industries, and in knowledge intense industries, the Mudgee SA2 does not have a relative strength. The location quotient comparing the Mudgee SA2 and the Orange SA2 implies that between 2011 and 2016 the employment in health industries in the Orange SA2 are growing at a faster rate than employment in the Mudgee SA2. The Bathurst SA2 location quotient demonstrates that whilst the Mudgee SA2 did not become relatively weaker between the two Censuses, it also did not improve and therefore as at the 2016 Census Bathurst was relatively stronger with respect to health industry employment.

Similarly, to the Orange SA2, the Mudgee SA2 also demonstrated a decline in location quotients when benchmarked to the Parkes SA2 and the Dubbo SA3. The Mudgee SA2 was relatively more concentrated in health industries in 2011 compared to the Parkes SA2 and recorded a location quotient of 1.03, which decreased to 0.94 in 2016. This trend was reflected in the overall quotients for knowledge intense industries in both Parkes SA2 and the Dubbo SA2 between 2011 and 2016. This decline suggests that the employment in health industries and in overall knowledge intense industry employment has become weaker between the two Censuses. However, despite the decline in the location

Section 3 Knowledge Intensity within the Mudgee Economy

quotients for Parkes SA2 and the Dubbo SA3, in knowledge intense industries as a whole the Mudgee SA2 is stronger in 2016.

Table 3-7 Location Quotient Assessment, Health and Knowledge Intense Sectors, Mudgee SA2 Relative to Regional Neighbours, 2011 and 2016

| | Lithgow SA2 | | Orange SA2 | | Bathurst SA2 | | Parkes SA2 | | Dubbo SA3 | |
|------------------------------------|-------------|------|------------|------|--------------|------|------------|------|-----------|------|
| | 2011 | 2016 | 2011 | 2016 | 2011 | 2016 | 2011 | 2016 | 2011 | 2016 |
| Health | 0.63 | 0.80 | 0.40 | 0.37 | 0.64 | 0.64 | 1.03 | 0.94 | 0.70 | 0.71 |
| Total knowledge intense industries | 1.04 | 1.12 | 0.83 | 0.84 | 0.84 | 0.88 | 1.16 | 1.14 | 1.09 | 1.04 |
| Remaining industries | 0.98 | 0.94 | 1.14 | 1.13 | 1.13 | 1.09 | 0.92 | 0.93 | 0.95 | 0.98 |

Source: 2011 and 2016 Census Working Population profiles

The location quotients for employment in health occupations and knowledge intense occupations returned similar results to those demonstrated in Table 3-7. Mudgee demonstrated a relative strength in knowledge intense occupations when compared to the Lithgow SA2 in 2011, however declined to 0.97 in 2016. Also, when comparing the Mudgee SA2 to the Parkes SA2, there was a higher concentration of health occupation employment in 2011 (LQ of 1.11) which declined to 0.97 in 2016.

Table 3-8 Location Quotient Assessment, Health and Knowledge Intense Occupations, Mudgee SA2 Relative to Regional Neighbours, 2011 and 2016

| | Lithgow SA2 | | Orange SA2 | | Bathurst SA2 | | Parkes SA2 | | Dubbo SA3 | |
|-------------------------------------|-------------|------|------------|------|--------------|------|------------|------|-----------|------|
| | 2011 | 2016 | 2011 | 2016 | 2011 | 2016 | 2011 | 2016 | 2011 | 2016 |
| Health | 0.92 | 0.91 | 0.54 | 0.47 | 0.93 | 0.83 | 1.11 | 0.97 | 0.95 | 0.92 |
| Total knowledge intense occupations | 1.05 | 0.97 | 0.75 | 0.65 | 0.79 | 0.73 | 1.00 | 0.91 | 0.97 | 0.91 |
| Remaining occupations | 0.99 | 1.01 | 1.11 | 1.17 | 1.08 | 1.11 | 1.00 | 1.03 | 1.01 | 1.03 |

Source: 2011 and 2016 Census Working Population profiles

3.3.2 Capital Cities

Between 2011 and 2016, Mudgee had a relatively greater concentration of workers in the health sector compared to the Sydney City and Inner South SA4 shown by a location quotient relative to this area of greater than one. However, the Mudgee SA2 was consistently less concentrated in health industry employment and knowledge intense industry employment in 2011 and 2016 across all other capital cities analysed. For instance, the location quotient of the health sector within the Mudgee SA2 in 2016 was 0.57 for Brisbane, implying that the health sector in the Inner Brisbane SA4 was almost twice as concentrated in Brisbane.

Table 3-9 Location Quotient Assessment, Health and Knowledge Intense Sectors, Mudgee SA2 Relative to Capital City Centres, 2011 and 2016

| | Sydney - City and Inner South SA4 | | Melbourne - Inner SA4 | | Brisbane Inner City SA4 | |
|------------------------------------|-----------------------------------|------|-----------------------|------|-------------------------|------|
| | 2011 | 2016 | 2011 | 2016 | 2011 | 2016 |
| Health | 1.51 | 1.60 | 0.73 | 0.80 | 0.52 | 0.57 |
| Total knowledge intense industries | 0.71 | 0.69 | 0.69 | 0.69 | 0.71 | 0.70 |
| Remaining industries | 1.34 | 1.36 | 1.39 | 1.38 | 1.33 | 1.35 |

Source: 2011 and 2016 Census Working Population profiles

Section 3 Knowledge Intensity within the Mudgee Economy

The location quotient for knowledge intense occupations within the Mudgee SA2, relative to both the Sydney City and Inner South SA4 and the Melbourne Inner SA4 were 2.20 and 1.09 in 2016, respectively. This implies that in 2016, the Mudgee SA2 has a significantly higher concentration of workers in a health-related occupation when compared to Sydney, and a marginal strength when compared to Melbourne.

However, unsurprisingly the Mudgee SA2 was still relatively weaker when benchmarked to the Inner City Brisbane SA4. This is likely due to the high density of healthcare facilities within the Inner Brisbane SA4 which generated 17,602 health professional jobs for the region in 2016.

Table 3-10 Location Quotient Assessment, Health and Knowledge Intense Occupations, Mudgee SA2 Relative to Capital City Centres, 2011 and 2016

| | Sydney - City and Inner South SA4 | | Melbourne - Inner SA4 | | Brisbane Inner City SA4 | |
|-------------------------------------|-----------------------------------|------|-----------------------|------|-------------------------|------|
| | 2011 | 2016 | 2011 | 2016 | 2011 | 2016 |
| Health | 2.31 | 2.20 | 1.13 | 1.09 | 0.88 | 0.80 |
| Total knowledge intense occupations | 0.46 | 0.42 | 0.47 | 0.43 | 0.47 | 0.44 |
| Remaining occupations | 1.53 | 1.58 | 1.50 | 1.55 | 1.51 | 1.51 |

Source: 2011 and 2016 Census Working Population profiles

Section 4 Opportunities and Constraints for Mudgee

The above assessment would suggest the following constraints for the health sector in Mudgee SA2:

- **Relatively few post school training opportunities within Mudgee SA2:** Despite recording a higher incidence of persons aged 0-14 years relative to NSW, there is a lower proportion of persons aged 15-24 years, likely reflective of the fact there are relatively few post school training opportunities in Mudgee SA2. There was no university identified in the Mudgee SA2. The TAFE NSW Mudgee campus offers a range of training opportunities but there are limited opportunities within the health sector, with the only health qualifications offered being a Certificate III in Individual Support (Ageing) and a Certificate II and III in Community Pharmacy;
- **Relative scale of health sector in Mudgee SA2:** The Census data would suggest that the health sector in Mudgee SA2 is less prominent relative to both Lithgow SA2 and Parkes SA2 which have a similar population size to Mudgee SA2, with the health sector recording a lower location quotient relative to both regions as of the 2016 Census. The health sector in Orange SA2 and Bathurst SA2 is more significant relative to Mudgee SA2, likely supported by the presence of a broader range of facilities, including a public hospital, private hospital, TAFE campus and university in each location;
- **Increasing accommodation costs:** Consultation has identified that there is a perceived lack of affordable housing opportunities within Mudgee SA2, with weekend tourism reducing the housing stock available for rent. Data from SQM Research indicates that the vacancy rate in the postcode 2850 has declined steadily in the past year and is currently sitting at 1.3% (a balanced rental market typically has a vacancy rate in the order of 3-4%). Median weekly rents in the postcode 2850 for three bedroom houses have also increased by approximately 25% in the past three years, as compared to declining by 2.4% in Sydney. Therefore, whilst Mudgee remains affordable relative to the capital city average, the affordability gap has narrowed significantly, hence reducing the relative appeal of Mudgee SA2;

The above assessment would suggest the following opportunities for the health sector in Mudgee SA2:

- **Expansion of training opportunities or student support within the Mudgee SA2:** At present, there is a TAFE campus offering limited health training opportunities within Mudgee SA2. There could potentially be the opportunity to either expand the range of courses available at the TAFE in Mudgee or to expand the level of support services to support online learning externally within the health sector (potentially both through TAFE and the university sector). This is likely to assist with student retention within Mudgee SA2 with the potential for these students to consider a career within Mudgee SA2, rather than leaving to study elsewhere and obtaining employment outside of Mudgee SA2;
- **Ageing population:** As previously identified, there is a growing population of persons aged 65 years and over in Mudgee SA2, both in terms of total persons and the share of total persons. There is likely to be a growing need for health services to support an ageing population. These services are likely to include support for ageing-in-place, disability service providers and rehabilitation health providers. There could also be the opportunity to increase aged care beds and the provision of retirement village accommodation within Mudgee SA2; and
- **Co-Location of services within hospital precinct:** Where possible, it is suggested that health services are co-located with the hospital, providing a health node within Mudgee SA2. It is envisaged that locating within the health node would be beneficial for both businesses and patients. The co-location of a student support hub with the hospital would also be desirable, providing linkages between education providers, students and prospective employers.

APPENDIX B: STAKEHOLDER CONSULTATION MINUTES

| Meeting Minutes | | Mudgee Health Precinct Master Plan | |
|-----------------|--|------------------------------------|--|
| Type of meeting | Stakeholder Consultation – MWRC | | |
| Time and date | Monday 17 February 4pm | | |
| Location | Teleconference | | |
| Present | AC Anthony Colwell KR Kayla Robson AA Alina Azar | | |
| Item | | | |
| 1 | What is your current number of rooms / facility make up? N/A | | |
| 2 | What is your percentage occupancy / occupancy vs your current capacity? N/A | | |
| 3 | Do you have any plans for expansion in Mudgee? If so, are you able to share particulars? – Former discussion regarding a new council pool – opportunity for co-use and co-location as a part of this process. – Discussed very briefly the social housing initiative previously undertaken. Unsure if there is further interest in this, however it may be an area to be investigated. | | |
| 4 | What are the key issues / constraints you have at your current location, particularly with respect to infrastructure and relationships / links to other facilities in the area / Mudgee? – Intersection of Meares and Church Street can be very congested – needs to be looked into. – General traffic safety an issue along Church Street. Has been pedestrian safety recommendations made. Available on traffic committee minutes. Should be considered as a part of this study. ACTION: Provide minutes where pedestrian safety recommendations are made. – Issue with traffic backing up from roundabout over Railway Bridge – previous incidents in this location. | | |
| 5 | What are the key opportunities you see for users within the area, particularly with respect to infrastructure and relationships / links to other facilities in the area? – Hydro-pool / Council pool – preferred location is the parkland adjacent to the hospital site. – NSW Transport looking to see what they can do with the railway station and railway corridor land. Would potentially advocate for changed zoning to enhance use of this land. – Would be interested in seeing what allied health services are undertaking over road form Church Street. Believe Council would be very interested in ensuring allied health businesses are consulted to identify their growth and preferences about where they would locate their growth. – CBD site - Query on parking in CBD site – parking study undertaken by Council. Need to ensure retaining parking across some of the site, unsure as to how much is able to be released for development. However, releasing part of this land for development is preferred and if it can be linked to health related uses or other general development potential that would be suitable for the location. ACTION: Provide CBD parking study if available. | | |
| 6 | In considering a Health Precinct, could you envisage synergies for you organisation? Are there any links to other health organisations or civic services that you would find beneficial for your organisation? – Potential links with health service and allied health professions with respect to pool facility. Preference for multiple use of this facility to enhance its functionality and affordability. | | |



7 **What are the kinds of relationships (or other enablers) required to deliver those benefits and where would you identify potential overlaps / synergies that would benefit from close integration? Please consider existing functions and non-existing, including amenity that would support these.**
N/A

8 **General Notes / Land Use discussion**

- On hospital site and rec land would be happy to seek appropriate re-zoning. CBD site already has zoning which allows broad range of uses suitable for the CBD.
 - Limited need for-zoning to the south and east of Mudgee Hospital site. These areas can maintain their low density residential nature.
 - Some opportunities for land use investigation into the western side of Church street given this is a small pocket off land and there are existing health uses established, as well as some pockets of denser housing.
 - Noted that many sites already have approval to proceed with residential subdivision and housing, with the particular growth areas being on the Western side of town. These existing approval and sites likely contain a considerable amount of land supply. Existing approval lot sizes generally minimum 800sqm, however mix of sizes up to 2,000sqm in sizes dependent on location.
 - **ACTION:** Provide current residential land supply.
 - Potential gap in smaller lot sizes – would need to be targeted to certain areas and around the hospital precinct or in town may be a good location for these. .
-

ACTIONS:

1. **ACTION:** Provide minutes where pedestrian safety recommendations are made.
2. **ACTION:** Provide CBD parking study if available.
3. **ACTION:** Provide current residential land supply.



| Meeting Minutes | Mudgee Health Precinct Master Plan | |
|-----------------|--|----------|
| Type of meeting | Stakeholder Consultation – Opal Aged Care | |
| Time and date | Thursday 20th February 8am | |
| Location | Teleconference | Location |
| Present | AC Anthony Colwell SR Sarah Wright (Opal Aged Care) | |
| Item | | |
| 1 | <p>What is your current number of rooms / facility make up?</p> <ul style="list-style-type: none"> – 40 beds including companion rooms. Some with shared bathrooms in Mudgee. – Focus on developing communities in Mudgee – Do not refuse residents – we accept all. – Include patients with dementia – provider of choice for department of veteran's affairs. – Integrated care community – do not separate resident cohort. | |
| 2 | <p>What is your percentage occupancy / occupancy vs your current capacity?</p> <ul style="list-style-type: none"> – Completely full. Previously was low – was not able to fill the beds – Some respite day care residents although now that beds are full we are not able to accommodate all of these. | |
| 3 | <p>Do you have any plans for expansion in Mudgee? If so, are you able to share particulars?</p> <ul style="list-style-type: none"> – Will be need for growth into the future. Opal has not specifically identified Mudgee at the present time as expansion is occurring elsewhere across Australia. Wait until see the results of royal commission and expansions elsewhere across the Country. | |
| 4 | <p>What are the key issues / constraints you have at your current location, particularly with respect to infrastructure and relationships / links to other facilities in the area / Mudgee?</p> <ul style="list-style-type: none"> – In fringe of town and in lower socio economic area – can present challenges for access and to visit town for outings etc. – Public transport – twice a day – limits ability of residents to get into town for social or health related services and the service is not accessible – difficult for aged patients. – Small amount of taxi's – expensive and not always available. – GP's – very difficult to access and not enough of them. – Specialists once a week / month – presents difficulty if injuries occur. We have to wait for assessment and treatment – pushes us to the hospital and can delay care and rehabilitation. – Don't send anyone to the hospital until they need to go. Issue is they don't have the diagnostic capability (e.g. head strike from a fall – no MRI – patients either don't get proper treatment or are sent to Dubbo). – Dislocated health services – can't always gain access in one trip. Often have to organise a trip that is quite expensive. . | |
| 5 | <p>What are the key opportunities you see for users within the area, particularly with respect to infrastructure and relationships / links to other facilities in the area?</p> <ul style="list-style-type: none"> – Public transport including disabled access PT. – GP's – location are two buses to get there – would be preferred to have GP's in town. – Increasing community transport in town. | |



– Would love to have an accessible and safe pool facility – very useful for rehabilitation and exercise – a wellness centre.

6 **In considering a Health Precinct, could you envisage synergies for your organisation? Are there any links to other health organisations or civic services that you would find beneficial for your organisation?**

– Nil identified.

7 **What are the kinds of relationships (or other enablers) required to deliver those benefits and where would you identify potential overlaps / synergies that would benefit from close integration? Please consider existing functions and non-existing, including amenity that would support these.**

Links with hospital are good – they will come to us if required given access difficulties.

Links with home care provider – Australian unity – strong relationship with this as the provider.

Local real estate agents

Local MPHS's across the region – overflow from these facilities.

8 **General Notes.**

Royal Commission went to Mudgee. Was not good for one provider in town. May have been a factor in increasing occupancy in our facility.



| Meeting Minutes | Mudgee Health Precinct Master Plan |
|-----------------|---|
| Type of meeting | Stakeholder Consultation – DPIE Regional Development |
| Time and date | Tuesday 18 February 1pm |
| Location | Teleconference Location |
| Present | AC Anthony Colwell BM Ben Morgan |
| Item | |
| 1 | General Notes. <ul style="list-style-type: none">– Program supports local business for local development and in responding to local needs such as drought or bushfire.– Support in Mudgee has focused on drought support and bushfire support for agribusinesses in the recent past.– Limited involvement in health related businesses in Mudgee.– Want to ensure employment for local persons is prioritised, particularly for construction industry and longer term employment.– Have heard there is difficulty in attracting and retaining skilled workers for trades – may be an issue for additional construction work.– Would like to participate in design charrette if available – meeting sent. Will provide opportunity to hear what stakeholders are after and to identify if Regional Development is able to provide any support in this space. |



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| Meeting Minutes | Mudgee Health Precinct Master Plan |
|-----------------|---|
| Type of meeting | Stakeholder Consultation – Lifeskills Plus |
| Time and date | Tuesday 18 February 12noon |
| Location | Teleconference Location |
| Present | AC Anthony Colwell Owen (CEO) |
| Item | |
| 1 | <p>What is your current number of rooms / facility make up?</p> <ul style="list-style-type: none"> – 660sqm building fully owned by business and rebuilt 5 years ago. – 65 staff – centre based and community based. All local. Have had no issues with staff – do training themselves and with TAFE locally. Ensures workforce can be trained from local persons. – Own two homes in town for support into the building. Growing part of business – renting and looking to purchase a home. Minimal modifications wheelchair access and bathroom. – Over 200 clients. |
| 2 | <p>What is your percentage occupancy / occupancy vs your current capacity?</p> <p>N/A</p> |
| 3 | <p>Do you have any plans for expansion in Mudgee? If so, are you able to share particulars?</p> <p>Doubled in past year and will likely double within the coming years. Need additional workspace – discussion recently but likely a year away from a proposal and then a further year from the actual build.</p> <p>Happy to be individually located at the present time but would be interested in co-location with other services in order to make it easier for clients and to enhance cross referral services. Would be happy to be collocated with other services to make to easier for other clients. Have not yet considered the specific strategy for expansion and would be interested to hear more about the precinct to understand if it would be a good fit for the business.</p> |
| 4 | <p>What are the key issues / constraints you have at your current location, particularly with respect to infrastructure and relationships / links to other facilities in the area / Mudgee?</p> <p>Don't have great relationship with hospital, seek to move clients from hospital as soon as possible back to care services out of the hospital. See the hospital as wanting to move the clients on as their issues are less acute and better provided for by organisations such as Lifeskills plus.</p> |
| 5 | <p>What are the key opportunities you see for users within the area, particularly with respect to infrastructure and relationships / links to other facilities in the area?</p> <p>Co-location of services would be better for clients – allows for client choice and ease of access.</p> |
| 6 | <p>In considering a Health Precinct, could you envisage synergies for you organisation? Are there any links to other health organisations or civic services that you would find beneficial for your organisation?</p> <p>N/A</p> |
| 7 | <p>What are the kinds of relationships (or other enablers) required to deliver those benefits and where would you identify potential overlaps / synergies that would benefit from close integration? Please consider existing functions and non-existing, including amenity that would support these.</p> <p>N/A</p> |

8 **General Notes.**
N/A.



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| Meeting Minutes | Mudgee Health Precinct Master Plan | |
|-----------------|---|----------|
| Type of meeting | Stakeholder Consultation – WNSWLHD | |
| Time and date | Tuesday 18 February 19.30am | |
| Location | Teleconference | Location |
| Present | AC Anthony Colwell Jeff Morrissey (Western NSW LHD) Caren Harrison (Western NSW LHD) HSM Mudgee & Goulbourn Liz Mitchell (Western NSW LHD) GM Maryanne Hawthorn (Western NSW LHD) | |

| Item | |
|------|---|
| 1 | <p>What is your current number of rooms / facility make up?</p> <ul style="list-style-type: none"> – 1 July operational commissioning. Demountable will be removed as activity will be within the new build. – New build meets CSP infrastructure requirements. – Limited actual shell space within the building. Shell space for imaging only. Otherwise expansion over car park and towards existing hospital locations, or vertically, would be the option. – Run wellness program in Mudgee for aged persons to increase mental agility and to ensure they are not socially isolated. Run out of junior rugby leagues club. Will be run from within the hospital once complete. – No properties owned across town for staff accommodation. – One house on site for ED locum free of charge. – Staff housed within general hotels across Mudgee. |
| 2 | <p>What is your percentage occupancy / occupancy vs your current capacity?</p> <p>N/A</p> |
| 3 | <p>Do you have any plans for expansion in Mudgee? If so, are you able to share particulars?</p> <ul style="list-style-type: none"> – Current project meets needs. – Staff accommodation – separate accommodation study undertaken. Recommends 6 x single bedroom units on hospital land. |
| 4 | <p>What are the key issues / constraints you have at your current location, particularly with respect to infrastructure and relationships / links to other facilities in the area / Mudgee?</p> <ul style="list-style-type: none"> – Only 3 GP's work full time – difficult to get an appointment for chronic and specialist issues – can take up to 4 weeks. Overspill from GP to ED. – Many GP's also support hospital in specialist role- that takes precedence and further limits GP time and access for residents. . – New ED will help to ease the pressures through creating a larger waiting space, however the flow is still there and is an issue in town. . |
| 5 | <p>What are the key opportunities you see for users within the area, particularly with respect to infrastructure and relationships / links to other facilities in the area?</p> <ul style="list-style-type: none"> – Hydrotherapy pool is an opportunity however it would only be appropriate for outpatients rather than inpatients. The issue would be in how to transfer patients to pool for rehab sessions. Within the hospital there is staffing to support this, however when outside a staffing model and transport model would need to be established. Given this, it would be more appropriate as an outpatient model (e.g. pre and post rehab). |

- 6 **In considering a Health Precinct, could you envisage synergies for your organisation? Are there any links to other health organisations or civic services that you would find beneficial for your organisation?**
N/A
-
- 7 **What are the kinds of relationships (or other enablers) required to deliver those benefits and where would you identify potential overlaps / synergies that would benefit from close integration? Please consider existing functions and non-existing, including amenity that would support these.**
N/A
-
- 8 **General Notes.**
- AC noted RAC will continue to grow within Mudgee over the coming years – could go nearby hospital site given larger plot of land is available. LHD concerned that associated support services such as imaging, ambulance, pathology would need to expand as well – not enough in town to support the needs at the current time.
 - Reinforced that the plan must complement the hospital and must not be a drain on existing resources.
-



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| Meeting Minutes | Mudgee Health Precinct Master Plan | |
|-----------------|--|----------|
| Type of meeting | Stakeholder Consultation – Mudgee TAFE | |
| Time and date | Thursday 20th February 10am | |
| Location | Teleconference | Location |
| Present | AC Anthony Colwell Aleisha (LALC Chair) | |

Item

- 1 **General Notes.**
- No aboriginal specific service in town. Use main services. Issue is more about knowing what services there are, if we don't know what we can access here people don't access anything.
 - Access to specialists is an issue given waiting lists – specific chronic health issues amongst aboriginal and Torres strait islander people require additional competency and holistic care, difficult to receive this when aspects of what's needed may not be in town.
 - Access to hospital is not too bad – close to town and easy with parking. No issue there.
 -
 - Pool service – would be good if it is covered so it can be used in the winter. New pool would be supported. Needs to have outdoor play and parkland, adequate parking.
 -
 - Aged care services – issue with there being no beds available. One of the home is not suitable – should be removed. Issue with cultural appropriateness – limited space for family and visits. Aged care providers need to cater for larger rooms and an approach where family visit their relatives in the home, space is needed for this and a staffing model that allows and encourages it
 - One of the homes (pioneer) is the best – have already engaged with the LALC – e.g. smoking of rooms prior to admission, space for activities and family.

| Meeting Minutes | | Mudgee Health Precinct Master Plan | |
|------------------------|--|---|--|
| Type of meeting | Stakeholder Consultation – Mudgee Disability Support | | |
| Time and date | Thursday 20th February 11.30am | | |
| Location | Teleconference | Location | |
| Present | AC Anthony Colwell CP Christine Puxty | | |
| Item | | | |
| 1 | What is your current number of rooms / facility make up? – Currently have 50 clients – grown from a small base (20). – 25 staff. – Have a group home that houses 5 clients with high support needs. – Recently bought another house for day program and respite care – look after adult and children in this space. | | |
| 2 | What is your percentage occupancy / occupancy vs your current capacity? – Full – have clients who can't be serviced due to lack of staff. | | |
| 3 | Do you have any plans for expansion in Mudgee? If so, are you able to share particulars? – Growing quicker than anticipated. Cannot get enough staff – are not able to gain staff. Have staff who have no experience whatsoever – need to train them up and this is an issue. Not always successful as the industry is not necessarily for them. Losing staff as quick as we are employing them. – Looking to purchase another facility for the office – issue with rental prices too high and office not fit for purpose. – – Ideal location would be close to the CBD – needs to be accessible for clients. Parking for PWD absolute necessity. Happy to be by ourselves – key criteria is it's accessible to clients. Don't necessarily need to be near other specialists. | | |
| 4 | What are the key issues / constraints you have at your current location, particularly with respect to infrastructure and relationships / links to other facilities in the area / Mudgee? – Other specialist are not necessarily in Mudgee – need to take them to Orange. When specialists are available, often don't have the right equipment – e.g. hearing specialists in incorrect room. Making sure the infrastructure in Mudgee is appropriate for the specialist need is required – just because they are visiting doesn't mean they can use just any room. Need purpose built consult rooms. – Doctors not necessarily skilled for dealing with persons with a disability. – Do sometimes group together appointments to bring specialists into town. | | |
| 5 | What are the key opportunities you see for users within the area, particularly with respect to infrastructure and relationships / links to other facilities in the area? – Would be very pleased to see a new pool that is accessible and able to be used by clients. Great for recreation and rehabilitation. – Work in juvenile justice – would need to see more services in town for recreation for youth to assist in improving social outcomes -pool would be particularly important – theatre and parkland also important | | |
| 6 | In considering a Health Precinct, could you envisage synergies for you organisation? Are there any links to other health organisations or civic services that you would find beneficial for your organisation? | | |



– Nil discussed.

7 **What are the kinds of relationships (or other enablers) required to deliver those benefits and where would you identify potential overlaps / synergies that would benefit from close integration? Please consider existing functions and non-existing, including amenity that would support these.**

– Nil discussed.

8 **General Notes.**

– Would prefer to not be in a facility with other disability providers – can be more disruptive. For other professions not as much of an issue but also not a great need for the business.

| Meeting Minutes | Mudgee Health Precinct Master Plan | |
|-----------------|--------------------------------------|----------|
| Type of meeting | Stakeholder Consultation – RDA Orana | |
| Time and date | Friday 21st February 10.30am | |
| Location | Teleconference | Location |
| Present | AC Anthony Colwell MD Megan Dixon | |

Item

- | | |
|---|--|
| 1 | <p>General Notes.</p> <ul style="list-style-type: none"> – Currently undertake two programs in Mudgee – workforce development (training and education opportunities, migration for short-term needs & working with employers recruitment and retention practices). – Health one of critical sectors. Skills shortage list 5000 new jobs over the next 10 years across the region. While the need is smaller in Mudgee, it is relatively the same across all towns in the region and is a key issue. . – Also provide general assistance for example education for employers – e.g. recruitment and retention training for employees. Could be replicated for Mudgee subject to their being business interest. – Mudgee on radar for delivering more programs with businesses. E.g. education for business on recruitment and retention, on linking with migrants. – Could link in with Western NSW LHD to provide a more targeted formal health worker attraction and retention program. – Would like to participate in workshop – invite sent. |
|---|--|
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| Meeting Minutes | Mudgee Health Precinct Master Plan |
|-----------------|--|
| Type of meeting | Stakeholder Consultation – Kepco Australia |
| Time and date | Friday 21 st February 5.15pm |
| Location | Teleconference Location |
| Present | AC Anthony Colwell BV Bill Vatovec |

| | Item |
|---|--|
| 8 | <p>General Notes.</p> <ul style="list-style-type: none">– Appeal for Bylong mine set down for August this year, outcome likely next year.– Would rely on existing health service for general health needs.– 20-30 staff during exploration and community consultation. Reduced at the present time.– If approval is provided, by 2022 construction should start and take two years. About 650 people during construction (peak).– Again would rely on local health services for specific needs, such as drug and alcohol, fatigue etc.– Operations – open cut mine with workforce of about 300 persons. Additional need for lung assessment at this time and specialists appointments. Paid for by the mine, but needs either local health service or would travel further afield if required. Local would be better for workforce.– Residential operation – not FIFO and seeking to employ locally. <p>– Believe health services in Mudgee would need to grow to support the mine, business opportunity and may allow the scale for certain specialist services to be within Mudgee.</p> <p>Social responsibility:</p> <ul style="list-style-type: none">– Would have a fund for contribution to community needs.– E.g. contributed to a youth hostel and other community groups.– Subject to mine being approved through Courts this is an area where further collaboration with local groups and the MWRC would be sought. |

| Meeting Minutes | Mudgee Health Precinct Master Plan | |
|-----------------|---|----------|
| Type of meeting | Stakeholder Consultation – Mudgee Chamber of Commerce | |
| Time and date | Friday 21st February 4pm | |
| Location | Teleconference | Location |
| Present | AC Anthony Colwell AP Andrew Palmer | |

Item

| | |
|---|--|
| 8 | <p>General Notes.</p> <ul style="list-style-type: none"> – Would like to see additional services – town is growing well and will continue to do so over time due to diversity in its economy. – Development in other areas in particular health services is a key attractor – Mudgee would benefit from a wider range to health services to make the decision to settle in Mudgee vs other centres such as Dubbo or Orange. – With residents needing to go elsewhere for health services they take their shopping or other retail opportunities while they are there – this is a detractor for businesses in Mudgee – locals could be spending money earned in Mudgee in Mudgee, but are going elsewhere. . – Indoor pool facility would be supported – needed for town. – Need recreation space for families and children – e.g. play park or skate park or other play facility, – Also require good bike paths that are safe that connect key locations and closer wineries into Mudgee. – Touch football carnival – lost over accommodation – did not have enough to support the carnival. Did not have enough hostel / budget type accommodation for groups to make this work. Cheaper student or budget accommodation would support not only students or key workers, but would help in these type of larger sporting events. – Generally need more accommodation within Mudgee. Have seen some new accommodation in town, however mixed message from existing motels – not always full. New approvals are in place but haven't been able to commence as vacancy rates are not supporting the need. Difference is that Airbnb has shifted people preferences – people prefer to stay in Airbnb – has an impact on the rental market – made it much tighter. – More housing generally may help this need but will take time to establish as Airbnb is focusing on older places, while newer housing on edge of town is meeting a different need. – From March to November there is high pressure – highest pressure on housing due to Tourism, drops off over summer. – Bulk of housing 3-4 bedrooms on lots from 500sqm to 800sqm and higher. – Units – mixed demand, low turnover. – Very high demand for centrally located housing – particularly in east of CBD and within 3-4 blocks of CBD. – Some opportunities for block splits to help create smaller and more affordable lots although this is noted as a fairly low turn-over and limited opportunity. . to. |
|---|--|



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| Meeting Minutes | Mudgee Health Precinct Master Plan |
|-----------------|--|
| Type of meeting | Stakeholder Consultation – NSW Transport |
| Time and date | Friday 21st February 11.30am |
| Location | Teleconference Location |
| Present | AC Anthony Colwell LP Lachlan Paull OI Oyshee Iqbal |

| Item |
|--|
| 1 General Notes. <ul style="list-style-type: none">– Discussed PT – there has been work in this area by Lachlan colleagues and this will be provided to AC separately via email and through workshop participation.– Station – not sure what is happening at the current station in terms of property direction. Will seek information from colleagues and let AC know <p>Project occurring in Mudgee:</p> <ul style="list-style-type: none">– Preparing regional transport plan for central west and Orana. Long-term planning for freight and passenger in region. 6 months until draft plan release. This process can help feed into the plans understanding in Mudgee.– TransLink coach service from Lithgow. New service from Mudgee and Dubbo once a week. Will use exiting coach stop form Mudgee Station. AC identified that it would be good to link up with specialist appointment times in Dubbo to get best use out of this service.– Movement and Place framework – draft principles published – keep in back of mind for precinct planning outcomes. – LP agreed additional info on project will be provided via email. LP will be at workshop with colleagues to participate in precinct development. |



| Meeting Minutes | Mudgee Health Precinct Master Plan |
|-----------------|---|
| Type of meeting | Stakeholder Consultation – South Mudgee Surgery |
| Time and date | Friday 21st February 11am |
| Location | Teleconference Location |
| Present | AC Anthony Colwell JM Jenny Marchant |
| Item | |
| 1 | <p>What is your current number of rooms / facility make up?</p> <ul style="list-style-type: none"> - 8 total doctors. - 9 consulting rooms - 1 large procedure room with 2 x clinical areas - 1 clinic room for chronic care and over 75's health assessment. - 2 x offices, reception and large room for staff and meetings. - Designated student room (one of the consults) for UOW students. Use for telehealth consults as well. - - 1 GP and 2 new registrars started recently. Has meant we can cope with daily demand. - - Have one acute doctor – keep his appointments free to ensure daily urgent demand is able to be met. Helps to reduce burden on Hospital ED in the morning. - - 2 x specialists accommodated once per month. - - |
| 2 | <p>What is your percentage occupancy / occupancy vs your current capacity?</p> <ul style="list-style-type: none"> - 100% - always full. However, with new GP's on board we are meeting demand. |
| 3 | <p>Do you have any plans for expansion in Mudgee? If so, are you able to share particulars?</p> <ul style="list-style-type: none"> - Recently expanded the building. No plans at this stage. |
| 4 | <p>What are the key issues / constraints you have at your current location, particularly with respect to infrastructure and relationships / links to other facilities in the area / Mudgee?</p> <ul style="list-style-type: none"> - Hoping that the development of the hospital will bring more services for mental health into town – current deficiency. Need to ensure the staffing is there for mental health spaces. - Paediatric services are very minimal - once a month at the other medical centre. Would prefer to see additional services here for children. |
| 5 | <p>What are the key opportunities you see for users within the area, particularly with respect to infrastructure and relationships / links to other facilities in the area?</p> <ul style="list-style-type: none"> - Expansion of telehealth services with other providers and to other facilities, particularly for mental health. |



6 **In considering a Health Precinct, could you envisage synergies for you organisation? Are there any links to other health organisations or civic services that you would find beneficial for your organisation?**

– Nil identified.

7 **What are the kinds of relationships (or other enablers) required to deliver those benefits and where would you identify potential overlaps / synergies that would benefit from close integration? Please consider existing functions and non-existing, including amenity that would support these.**

– Nil identified.

8 **General Notes.**

– Nil identified.

| Meeting Minutes | Mudgee Health Precinct Master Plan | |
|-----------------|--|----------|
| Type of meeting | Stakeholder Consultation – Glencore | |
| Time and date | Monday 24th February 11am | |
| Location | Teleconference | Location |
| Present | AC Anthony Colwell CA Charlie Allan | |

Item

- | | |
|---|--|
| 1 | <p>General Notes.</p> <ul style="list-style-type: none"> – Biggest gap is in injuries (rare but do occur) – prefer a preventative approach – e.g. physio intervention. Issue is that consistent engagement with doctors is difficult – doctors not providing what return to work strategies are available. Providing a tick and flick approach, perhaps as they may be too busy to provide this additional support. – No issue with getting in to see anyone. – Have been involved in the Mudgee for doctors program – in last two years brought more than 10 doctors to area. Has helped in reducing wait times. Provide significant financial investment in this program although we note it is coming to the end of its tenure. – Support sporting groups and charities within town through community investment program from Glencore and locally. The support includes drought and annual Mudgee running festival. – Provide time of worker as well as cash contributions. – Happy to partner with Council on programs although no specific upcoming programs noted. |
|---|--|
-



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| Meeting Minutes | Mudgee Health Precinct Master Plan | |
|-----------------|------------------------------------|----------|
| Type of meeting | Stakeholder Consultation – Peabody | |
| Time and date | Monday 25th February 12 noon | |
| Location | Teleconference | Location |
| Present | AC Anthony Colwell IF Ian Flood | |

Item

- 1 **General Notes.**
- Current issue with ability to access doctors in a timely manner – issue for dealing with illness and return to work.
 - With physio – currently pay extra to access priority service so no issues there.
 - Peabody have a site budget spent each year on community causes.
 - Have an arrangement with UOW for scholarship or doctors who return to country areas.
 - Have no issue with spending the money but prefer to spend over a number of years – e.g. \$15,000k over three years.
 - Many smaller sponsorships of smaller community sporting groups and organisations across MWRC.
 - Haven't really undertaken larger contributions in additional to the funding provided to Council under planning agreements for state significant projects.
 - Rates increase noted recently – note Council is receiving funds from the mining sector which should help it contribute to larger local infrastructure projects in the area.
 - Would like to see an indoor heated pool in Mudgee – would be very supportive of this as it would allow for year round rehab – much preferred to support staff and their return to work.



| Meeting Minutes | Mudgee Health Precinct Master Plan |
|-----------------|--|
| Type of meeting | Stakeholder Consultation – Western NSW PHN |
| Time and date | Thursday 25th February 4pm |
| Location | Teleconference Location |
| Present | AC Anthony Colwell SB Sonya Berryman |

Item

- 1 **General Notes**
- 16 GP's. Ratio of 1: 1500 persons approximately. Commonwealth ratio of 1:1700. Given this, GP ratio exceeds national ratio.
 - Recently added 6 registrars and 2 medical students (GP).
 - Acknowledged this is the result of recent work by Council, UOW and other partners to attract and retain GP's in town.
 - This means that Mudgee has higher ratio of doctors compared to other towns.
 -
 - Have not really heard of specific issues with primary health network in Mudgee – well serviced. Have access to most allied health specialists with the exception of a few higher specialities requiring travel to Dubbo, Newcastle or Sydney.
 -
 - Agreed to leave further conversation to workshop given no real issues with primary health provision in Mudgee – Sonya and additional colleague will attend.
-



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| Meeting Minutes | Mudgee Health Precinct Master Plan |
|-----------------|--|
| Type of meeting | Stakeholder Consultation – Mudgee TAFE |
| Time and date | Wednesday 26th February 9.00am |
| Location | Teleconference Location |
| Present | AC Anthony Colwell MF Matthew Felvus |

Item

1

General Notes.

- Matt's role – campus operations and community engagement.
- TAFE in negotiation with Council currently about country university model on campus. Likely T4 start up with lease of existing space if this negotiation is successful.
- Limited existing partnerships with the hospital
- Offer individual support (cert III/IV) – assistance nursing.
- Seeking to provide meaningful pathways from high school, to TAFE to University. This is a change in focus and additional partnerships with university sector and businesses in town are sought to create this focus.
- Would like to provide this so that a students can go from high school, got to TAFE for cert III/IV and do a full nursing degree with university, including placements in town. Would like to see this qualification on site in Mudgee Hospital.
- Plenty of land available on TAFE site – would like it to be an education precinct and Council has indicated interest in working with TAFE on developing the site.
- Requires improved transport connections like footpaths and PT – currently not well connected to town, other than by car.
- Interested in attending the workshop to contribute further - invite sent.

| Meeting Minutes | | Mudgee Health Precinct Master Plan | |
|------------------------|--|---|--|
| Type of meeting | Stakeholder Consultation – UOW | | |
| Time and date | Wednesday 26 February 10am | | |
| Location | Teleconference | | |
| Present | AC Anthony Colwell | | |
| | <p>UOW attendees Belinda Smith Tracey Moroney Kathleen Packer Sari Dan David Game Kelly Newell Joanne Spangaro Karen Walton</p> <p>Apologies Kelly Newell Paul De Souza</p> | | |
| | Item | | |
| 1 | <p>What is your current number of rooms / facility make up?</p> <ul style="list-style-type: none"> – Noted no facility in Mudgee – students do placements in workplace, with workplace providing space as necessary. – Current placements support, medical students, GP trainees, exercise sports science, dietetics, nursing and nutrition | | |
| 2 | <p>What is your percentage occupancy / occupancy vs your current capacity?</p> <ul style="list-style-type: none"> – Refer to student numbers sent separately and withheld from minutes to maintain confidentiality. | | |
| 3 | <p>Do you have any plans for expansion in Mudgee? If so, are you able to share particulars?</p> <ul style="list-style-type: none"> – Yes – Dependent on partner interest and subject to providing an environment that is attractive for student learning, the following areas would like to be expanded into <ul style="list-style-type: none"> – Physio – Podiatry – OT – Radiography – Ideally approximately 10 students at any one time in Mudgee would be preferred, or more if interest and support network is there. – AC noted that there appeared to be strong need for disability and aged care related health and social work in town - an area to target growth (e.g. add social work) | | |
| 4 | <p>What are the key issues / constraints you have at your current location, particularly with respect to infrastructure and relationships / links to other facilities in the area / Mudgee?</p> | | |



- Mudgee Hospital does not take UOW students – no existing agreement in place given they take students from other universities. Would be good to have an agreement in place but note that have many agreements in place and no real shortage of existing placements. Would be a matter of if there was growth, an agreement with the LHD would be preferred.
- Capacity of businesses to take students – in particular taking more than a small number of students – need to expand into more businesses as taking a student can be a large burden for the business.
- Availability of specialists who can appropriately supervise within the learning area – some services can only accommodate small amount of the university curriculum.
- Social work placements are a variable thing – students need to be matched to specific businesses and can change over time. Most connection with not-for-profit sector and health/justice sectors for government.
- For social work – placements are long – 500 hours over longer period of time (e.g. 6 moths. with maximum 5 placements. Requires longer term accommodation and support of the businesses in the area.
- Noted the models in aged care do not currently support the additional speciality areas (e.g. RN, dietician and allied health). Perhaps on the back of the royal commission this may be another area for expansion given the need.
-
-

5 **What are the key opportunities you see for users within the area, particularly with respect to infrastructure and relationships / links to other facilities in the area?**

- Critical to support current and future expansion of student numbers in Mudgee is student accommodation. Preference to have support space and accommodation in town / nearby the hospital and close to where people are undertaking their placements. Ideally within a safe walking distance given late night finishes and in an area that is activated. Student safety and comfort is important. Linking with other facilities (e.g. rec or local businesses) also seen as beneficial as it will activate the place and improve networks and relationships amongst students.
- Supportive of having other health related business within the same building – best for collaborative approach to health care in town – best for patients.
-

6 **In considering a Health Precinct, could you envisage synergies for you organisation? Are there any links to other health organisations or civic services that you would find beneficial for your organisation?**

- Notes above / below provide key relationships and synergies.

7 **What are the kinds of relationships (or other enablers) required to deliver those benefits and where would you identify potential overlaps / synergies that would benefit from close integration? Please consider existing functions and non-existing, including amenity that would support these.**

- Relationship with Council is strong – supportive of program for attracting and retaining GP's in town and believe they are seeking to enhance this connection. .
- Require stronger connections with local businesses
- Require a relationship with either a provider or group of providers who wish to do student accommodation and services. May be a JV opportunity if the capital and operational considerations were justifiable. Preference for capital solution by UOW, but could be a consortium or leasing model if this stacked up.

8 **General Notes**

- . Keep at front of mind – Mudgee needs the health workforce – need to make it as attractive as possible
-

| Meeting Minutes | | Mudgee Health Precinct Master Plan | |
|------------------------|--|---|--|
| Type of meeting | Stakeholder Consultation – Mudgee Medical Centre | | |
| Time and date | Tuesday 3 March 2020 2.30pm | | |
| Location | Teleconference | Location | |
| Present | AC Anthony Colwell CB Colleen Best Dr Roberts | | |
| Item | | | |
| 1 | What is your current number of rooms / facility make up? – 16 rooms total – 16 doctors not all full-time and many serving the Mudgee Hospital as well. | | |
| 2 | What is your percentage occupancy / occupancy vs your current capacity? – Full – consults always booked well in advance. | | |
| 3 | Do you have any plans for expansion in Mudgee? If so, are you able to share particulars? – Not looking to expand - make up of building makes it difficult to undertake a sideways expansion without reconfiguring the practice. For this reason the practice is not likely to expand further. – Believe South Mudgee Surgery is also in this same situation with respect to not being able to expand. | | |
| 4 | What are the key issues / constraints you have at your current location, particularly with respect to infrastructure and relationships / links to other facilities in the area / Mudgee? – Don't believe the town could support another GP practice, already difficult to attract and retain GP's in town. Would need to be of an appropriate size to be self-sustaining. | | |
| 5 | What are the key opportunities you see for users within the area, particularly with respect to infrastructure and relationships / links to other facilities in the area? – Nil discussed. | | |
| 6 | In considering a Health Precinct, could you envisage synergies for you organisation? Are there any links to other health organisations or civic services that you would find beneficial for your organisation? – Nil discussed. | | |
| 7 | What are the kinds of relationships (or other enablers) required to deliver those benefits and where would you identify potential overlaps / synergies that would benefit from close integration? Please consider existing functions and non-existing, including amenity that would support these. Nil discussed. | | |
| 8 | General Notes. – Nil discussed. | | |



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| Meeting Minutes | Mudgee Health Precinct Master Plan |
|-----------------|---|
| Type of meeting | Stakeholder Consultation – Pioneer Aged Care |
| Time and date | Wednesday 4 March 3pm |
| Location | Teleconference Location |
| Present | AC Anthony Colwell DS Dean Saxby |
| Item | |
| 1 | <p>What is your current number of rooms / facility make up?</p> <ul style="list-style-type: none"> – 81 bed RAC – 2 dementia specific beds – 16 and 18 beds for a total 34. – Also offer respite care – block booked respite rather than respite day care. – Meals on wheels - about 25 a day. – Approximately 120 staff. |
| 2 | <p>What is your percentage occupancy / occupancy vs your current capacity?</p> <ul style="list-style-type: none"> – Small lag last year, this year about 95% occupancy – effectively full waiting some assessment of persons on the waiting list. |
| 3 | <p>Do you have any plans for expansion in Mudgee? If so, are you able to share particulars?</p> <ul style="list-style-type: none"> – Not looking to expand in Mudgee at the present time, however can do on site as own properties around the centre. Would require approval to expand. |
| 4 | <p>What are the key issues / constraints you have at your current location, particularly with respect to infrastructure and relationships / links to other facilities in the area / Mudgee?</p> <ul style="list-style-type: none"> – Similar to others – getting GP access, particularly for out of town residents – difficult for GP's to pick up new clients. – Access to doctors, e.g. psychogeriatrician – would like to have these people visit the centre and provide assessment and care within the centre rather than having to rely on trips to Mudgee, or out of town. – Transport issues – getting residents to specialist appointments. Patient transport ok for out of town, however when this is not the case there is limited ability to transport persons to places in Mudgee for assessment. |
| 5 | <p>What are the key opportunities you see for users within the area, particularly with respect to infrastructure and relationships / links to other facilities in the area?</p> <ul style="list-style-type: none"> – If there was a provider who was able to build a new facility in town to modern standards believe it would fill up. Opportunity for another provider in town. |
| 6 | <p>In considering a Health Precinct, could you envisage synergies for you organisation? Are there any links to other health organisations or civic services that you would find beneficial for your organisation?</p> <ul style="list-style-type: none"> – Nil Noted |
| 7 | <p>What are the kinds of relationships (or other enablers) required to deliver those benefits and where would you identify potential overlaps / synergies that would benefit from close integration? Please consider existing functions and non-existing, including amenity that would support these.</p> <ul style="list-style-type: none"> – Links with new indoor heated pool would be great – excellent opportunity to help provide another therapeutic element of aged care in town. |

8

General Notes.

– Get good support from the palliative care team in hospital, some hospital in the home.

–



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| Meeting Minutes | Mudgee Health Precinct Master Plan |
|-----------------|--|
| Type of meeting | Stakeholder Consultation – Bowdens Silver |
| Time and date | Thursday 5 March 2020 10am |
| Location | Teleconference Location |
| Present | AC Anthony Colwell BH Blake Hjorth |

Item

- 1 **General Notes.**
- Likely to lodge approval process shortly – likely will take 1 year for approvals process outcome.
 - About 190 jobs during construction.
 - 230 operational jobs for 16 years.
 - Prefer to hire local for operational and as much construction as possible, although note specialist trades may be difficult to source locally. .
 - General health access to GP, Physio and rehab required. Would be particularly difficult near Rolleston nearer to mine. Preference is to have additional GP services in Rolleston given proximity to mine.
 - Within proposal to government will have a community investment program. May be a focus on health to assist in securing and subsidising a GP on a contract basis – preferably nearer Rolleston (closer to mine). Operational – have staff on site who are trained health professionals (e.g. emergency response) where locals may also be able to gain assistance.
 - Additional elements: contribution to health and emergency services, particularly volunteer services (e.g. volunteer rescue association). Would likely provide additional funding for these services.
 - Look to contribute to roads infrastructure at a local level.
 - Put on buses from town for workforce.

| Meeting Minutes | | Mudgee Health Precinct Master Plan | |
|------------------------|--|---|--|
| Type of meeting | Stakeholder Consultation – Mudgee Health Council | | |
| Time and date | Friday 13 March 2020 -1.30pm | | |
| Location | Teleconference | Location | |
| Present | AC Anthony Colwell JC John Bentley JB Judy Blackman Peter | | |
| | Item | | |
| 1 | What is your current number of rooms / facility make up? – N/A | | |
| 2 | What is your percentage occupancy / occupancy vs your current capacity? – N/A | | |
| 3 | Do you have any plans for expansion in Mudgee? If so, are you able to share particulars? – N/A | | |
| 4 | What are the key issues / constraints you have at your current location, particularly with respect to infrastructure and relationships / links to other facilities in the area / Mudgee? – Refer below – issues turned into opportunities. | | |
| 5 | What are the key opportunities you see for users within the area, particularly with respect to infrastructure and relationships / links to other facilities in the area? – 4 major gaps in Mudgee: – Medical training centre – to cover nursing, medical and allied health – Hospice for palliative care, with family and accommodation around them. – Hydrotherapy pool and rehabilitation centre. – Health prevention and wellness centre – education, social and health services and a wellness focus. Exercise and healthy eating a part of this focus. Other priorities:: – Medical imaging – would like to see an MRI within Mudgee. – Mental Health – significant issue in the area, particularly for men’s health. That’s more community counselling, psychology and rehabilitation services. Would need the services to be within the community, prefer to be within a home like environment. – Drug, alcohol and smoking prevention and rehabilitation services. – Accommodation centre for people who are out of town to support the above. – Early intervention centre and NDIS focus – happy to bring those service providers into the precinct to. – Community education and information centre – for visitors and residents – to link people in with community and health organisations. – Continuation of more specialists appointments in Mudgee – extension of the existing arrangements for more days per week / month. | | |
| 6 | In considering a Health Precinct, could you envisage synergies for you organisation? Are there any links to other health organisations or civic services that you would find beneficial for your organisation? – Linked into opportunities above. Key connections are with community health organisations. | | |



-
- 7 **What are the kinds of relationships (or other enablers) required to deliver those benefits and where would you identify potential overlaps / synergies that would benefit from close integration? Please consider existing functions and non-existing, including amenity that would support these.**
Nil discussed.
-
- 8 **General Notes.**
– Nil discussed.
-

Looking After Our Community

Vibrant towns and villages with a rich history, a safe and healthy community, and a strong sense of community pride – a great place for families

A safe and healthy community

Maintain the provision of high quality, accessible community services that meet the needs of our community

| Strategy | Action Name | Comments | Status |
|--|--|--|-------------|
| Provide comprehensive community support programs and services that embrace social justice, access and equity | Provide Meals on Wheels service | Meals on Wheels continues to maintain relatively high service delivery figures, as many of the service's clientele are frail aged and continue isolating due to COVID-19. Volunteer numbers increased as those classed as 'vulnerable' were re-engaged in service delivery activities. Whiddon Pioneer House are not continuing with the supply of meals and the exercise to identify a suitable substitute has commenced. | Progressing |
| | Provide Community Transport service | Council continues to promote Community Transport as an option for eligible participants without any suitable public transport options. The service also continues to promote that it is not restricted to transportation for medical appointments in accordance with the goals of the Commonwealth Home Support Program, which is to keep people living in their own homes for longer. | Progressing |
| | Provide financial and in-kind support to MWRC Youth Council to deliver a range of youth oriented initiatives | Council continues to deliver youth initiatives across the region in accordance with COVID-19 restrictions. Youth Services staff work to deliver a range of programs throughout school terms and holidays to engage with local youth and provide them with subsidised access to a range of activities, such as book clubs, art projects, and outdoor sporting opportunities. | Progressing |
| | Provide Family Day Care service | Council coordinates, monitors and supervises Family Day Care services across the region, as well as Wellington. The services provide personalised, affordable in-home care for 0-4 year olds, as well as before and after school care to older children, to assist families access and maintain employment and other opportunities. Family Day Care remains one of the preferred and more affordable child care options for local families due to flexibility of charged hours and the option for weekend and overnight care. | Progressing |
| Provide customer focused library and information services | Deliver high quality, modern library services at Mudgee, Kandos, Rylstone and Gulgong | The Library continues to provide residents with a comprehensive, current, visually inviting and accessible library service, enabling them to meet their information, recreation, education and cultural needs. The Library is administered through 4 library branches and a Mobile Library Service, and serviced through the provision of extensive print and online collections, which are freely available. The Library also runs a varied and interesting range of programs and events, designed to engage community interaction with the Library and to encourage lifelong learning. | Progressing |
| | Provide Mobile Library service | The Mobile Library continues to be an integral part of the Library's Outreach Service, visiting small schools, outlying communities and housebound customers in their own homes or care facilities. The Mobile Library travels across the region on a 3-week rotation, extending the Library's reach within the community, through the loan of physical library items and by promoting the use of the Library's online resources. | Progressing |

| Strategy | Action Name | Comments | Status |
|----------|---|---|-------------|
| | Deliver children and youth library programs including pre-school Bookworms and school holiday reading program | The Library continues to encourage a lifelong love of books and reading through its 3 early literacy programs for small children - Born to Read, Toddler Tales, and Bookworms - as well as hosting a wide range of children's craft and storytelling sessions during the school holidays. There is a continuous high demand for the Library's Children's Services & Programs, including the annual special events - Dad's Night In, Bookweek, National Simultaneous Storytime, The Reading Hour and the Summer Reading Program. | Progressing |
| | Maintain an up to date library collection in accordance with Collection Policy | The Library continues to purchase items in line with the Collection Development Strategy. Items purchased include audio books, magazines, fiction and non-fiction for adults and children in both print and electronic formats and DVDs. | Progressing |

Work with key partners and the community to lobby for effective health services in our Region

| DP Action | Action Name | Comments | Status |
|--|--|---|-------------|
| Explore funding opportunities for improved health services and work in partnership with Western Local Area Health Network to promote health projects | Lobby government and industry for funding including potential upgrade of Mudgee Hospital | Council representatives continue to participate in the working group for the redevelopment of Mudgee Hospital. The Mudgee Hospital was opened to the public on 27 May 2020. | Progressing |
| | Liaise with Western NSW Local Health District and work with local Medical Services Organisations through inter-agency meetings | Council has continued to hold inter-agency meetings during the period, although no representatives from Health have attended. Staff continue to engage with health workers through other means, including through the Child and Family Network and Targeted Early Intervention activity planning. | Progressing |
| | Provide accommodation assistance for Doctors in the region | Council continues to set aside funds to assist in providing appropriate accommodation for medical practitioners in the region as and when needed. | Progressing |

Support networks, programs and facilities which promote health and wellbeing and encourage healthy lifestyles

| DP Action | Action Name | Comments | Status |
|---|---|---|-------------|
| Provide financial assistance in accordance with Council's Community Grants Program Policy | Provide financial assistance for local and regional bodies in accordance with Community Grants Program Policy | All planned reports to Council have been completed. \$41,745 of the \$112,500 budget has been allocated this financial year to date. | Progressing |
| Promote and support programs aimed at increasing community health and wellbeing | Provide funding for Healthy Communities initiatives | Council provides funding for a range of exercise programs across Gulgong, Mudgee and Rylstone. All programs have adjusted to meet COVID-19 restrictions. All activities are patronised relatively consistently and Council receives regular positive feedback regarding the programs. | Progressing |

Work with key partners and the community to reduce crime, anti-social behaviour and improve community health and safety

| DP Action | Action Name | Comments | Status |
|---|--|---|-------------|
| Support and implement programs which aim to reduce anti-social behaviour. | Maintain effective working relationship with NSW Police | Council continues to work closely with NSW Police on matters of community concern. | Progressing |
| | Participate in the Liquor Accord as required | Council maintains contact with the Liquor Accord and provides advice and feedback when requested. There were no meetings held in the six month period. | Progressing |
| | Maintain Alcohol Free Zones in Town Centres | The date ranges for all AFZ signage across Mudgee, Gulgong, Kandos and Rylstone have been replaced. Any future events requesting a temporary suspension to the AFZ will be presented to Council for consideration. | Progressing |
| | Increase lighting and other safety initiatives in parks and gardens as per Capital Works Program 2020/21 | Planning has commenced for lighting to be installed along Pitts Lane footpath towards Glen Willow Sporting Complex. This will see lighting extended to the Ulan road underpass. | Progressing |
| | Investigate options for CCTV cameras in town centres | Work has progressed to provide additional surveillance cameras to protect Council assets including playgrounds, buildings and waste transfer stations. | Progressing |
| Maintain clean and attractive streets and public spaces where people feel safe | Regular street cleaning and litter collection in town centres | Council's street sweeping and town litter cleaning programs are progressing as scheduled. | Progressing |
| Work effectively with State Agency partners to maintain and enhance public safety | Participate in review of Emergency Plan as required | The Local Emergency Management Committee meets quarterly. Plans are reviewed as required. An update is proposed for 2021 following the COVID-19 pandemic. | Progressing |
| Effective public health regulation and continuing education | Work in partnership with the NSW Food Authority to address matters such as food premises inspections, safe food handling and food borne illness investigations | The annual food inspection program is planned to recommence in March 2021, which is when the majority of fixed premises inspections are undertaken. During the period, staff responded to a minor number of complaints regarding insufficient COVID-19 plans and practices. | Progressing |

| DP Action | Action Name | Comments | Status |
|-------------------------------------|---|--|------------------|
| | Continued support and promotion of Scores on Doors initiative | The Scores on Doors program was suspended during COVID-19. It is planned to recommence in March 2021. | Not Due To Start |
| | Onsite sewerage management registration and inspections | The OSSM program is progressing relative to applications received for new systems or approvals to operate existing systems. Very few applications are a result of complaints due to failure of a system. | Progressing |
| Effective animal control regulation | Utilise website to actively re-home animals | Council's Law Enforcement Officers work closely with residents in maintaining compliance with the Companion Animals Act and its Regulations. Quarterly activity reports are provided to the Executive and Councillors. | Progressing |
| | Encourage registration of dogs through Council media channels | The region has a poor record for registration of Companion Animals. Law Enforcement Officers continue to promote legislative requirements and issue penalty notices when warnings are not adopted by residents. | Progressing |
| | Provide off leash dog areas | Stage 2 of the Glen Willow Sports complex includes a new off leash area for companion animals in Mudgee. | Progressing |

Vibrant towns and villages

Respect and enhance the historic character of our Region and heritage value of our towns and villages

| DP Action | Action Name | Comments | Status |
|---|---|--|-------------|
| Review of Development Control Plan | Conduct annual review of Development Control Plan | Council continues to monitor the Development Control Plan and make relevant amendments as required. Amendment No. 5 was endorsed by Council in August 2020. | Progressing |
| Heritage advisory services and heritage conservation | Access to heritage funding through Local Assistance Program | Local Heritage Grants have been allocated, with works commenced on two of the three projects. | Progressing |
| Support and assist preservation of important historical sites in the region | Maintain historical sites within the region, for example Red Hill Reserve | Historical sites are being maintained to ensure their preservation and enhance the historic character of our towns and region via the Capital Works program and maintenance works as required. | Progressing |

Manage the impacts of mining operations in the Region

| DP Action | Action Name | Comments | Status |
|--|---|--|-------------|
| Monitor employment and population growth | Provide updated population estimates based on building statistics and employment growth | Council continues to monitor relevant statistics and update documentation in conjunction with government agencies. | Progressing |
| Meet regularly with mining companies | Hold quarterly meetings with mine managers | Quarterly meetings held with representatives of local mines. | Progressing |

Make available diverse, sustainable, adaptable and affordable housing options through effective land use planning

| DP Action | Action Name | Comments | Status |
|---|---|--|-------------|
| Ongoing monitoring of land release and development | Review and release land for development as required | Council utilises a Land Use Monitoring tool to monitor building approvals, subdivision approvals, construction and subdivision certificates against Council's Urban Release Strategy. | Progressing |
| Implement the Land Use Actions in the Local Strategic Planning Statement (LSPS) | Deliver annual strategic planning works program in accordance with the LSPS | Council has commenced work on implementing the short term Land Use Actions outlined in the LSPS. | Progressing |
| Promote affordable housing options within the region | Provide funding to lease emergency housing for women and children leaving family violence | Council continues to work with Barnardos and Housing Plus to address crisis accommodation across the region. In the last six months, there was no access to a purpose-specific crisis property due to it being sold. Alternate solutions were sought for emergency accommodation but this was challenging given increased visitation to the region, conversion of properties to cater for the tourist market and increased rental prices. Barnardos continues to prioritise families with children recognised as the most vulnerable members of the community. | Progressing |

Maintain and promote the aesthetic appeal of the towns and villages within the Region

| DP Action | Action Name | Comments | Status |
|--|---|--|-------------|
| Maintain and beautify civic open space and street access areas within towns and villages in the region | Implement program of street beautification and tree planting | Street tree planting across the region has recommenced. This includes administering resident street tree planting requests through a coordinated program. Large tree planting has been completed in Caerleon Estate Mudgee following a number of trees being lost during the drought. A targeted tree replacement program for Rylstone has also commenced. | Progressing |
| | Work in partnership with local groups to apply for grants to buy and install sculptures across the region | Council, in partnership with Sculptures in the Garden, acquired one large work of art from the 2020 event which is intended to be installed within the grounds of the new gallery. A further two pieces were acquired through Moolarben Coal and Friends of Sculptures in the Garden, which will be installed at sites along the Lawson Park Sculpture Walk. | Progressing |

| DP Action | Action Name | Comments | Status |
|---|---|---|-------------|
| Application of appropriate building and development controls to protect and enhance the natural and built environment in the region | Deliver planning functions and building regulation in accordance with relevant legislation and adopted planning instruments | Council continues to undertake planning and building regulatory functions. Monthly reports are provided to Council on the number of applications determined and processing. | Progressing |

Effective and efficient delivery of infrastructure

Provide infrastructure and services to cater for the current and future needs of our community

| DP Action | Action Name | Comments | Status |
|--|--|--|-------------|
| Review asset management plans and underpin with financial strategy | Review, update and develop asset management plans for each major category of infrastructure in accordance with AMP review schedule | Asset Management Plans continue to be updated in line with the fair value revaluation process. | Progressing |
| Manage and maintain sportsgrounds, parks, reserves and playgrounds across the region | Review and update Parks Management Plans | New management plans are being developed as a result of reforms to the Crown Land Management Act. Consultants have been engaged to develop new plans to which a first version draft has been completed for review. | Progressing |
| | Maintain and operate public open space in accordance with agreed service levels | Reactive and programmed works programs continue to be carried out throughout the year. This includes inspection programs to ensure that real and perceived risks are adequately managed. Maintenance activities include garden beds maintenance, playgrounds/play spaces operations, open space tree maintenance, irrigation services and sports grounds maintenance/renovations. Despite the extended 'growth' season experienced in open space areas, Council has maintained desired service levels. | Progressing |
| Manage and maintain sportsgrounds, parks, reserves and playgrounds across the region | Passive parks and facilities upgrades as per Capital Works Program 2020/21 | Passive parks are being maintained at desired service levels and industry standards. Works have commenced on a shade sail for the liberty swing in Robertson Park and facility improvements at Flirtation Hill Mudgee. The remaining capital program items are in planning and procurement phase. | Progressing |
| | Public toilet construction and refurbishment as per Capital Works Program 2020/21 | Council has continued with the construction and refurbishment of public toilets as per the Capital Works program. | Progressing |
| | Playground installations and upgrades as per Capital Works Program 2020/21 | Playgrounds are being maintained through Council's reactive and programmed maintenance program. Works have commenced on the replaced of a playground at Robinson St/Fishers St in Gulgong. | Progressing |
| | Active parks and facilities upgrades as per Capital Works Program 2020/21 | Council continues to maintain the region's sporting facilities to a high standard. The turf management annual maintenance plan is being achieved with positive feedback validating that agreed service levels are being met. Sports lighting at Victoria Park Gulgong has been installed. | Progressing |

| DP Action | Action Name | Comments | Status |
|--|---|---|-------------|
| Manage and maintain cemeteries throughout the region | Maintain and operate town and rural cemeteries in accordance with adopted service levels and policy requirements | Funeral services and maintenance of the cemeteries are operating in accordance with service levels and policy requirements. | Progressing |
| | GPS mapping of town cemeteries | GPS mapping has commenced at Mudgee Cemetery. | Progressing |
| | Upgrades and extensions of cemeteries as per 2020/21 Capital Works Program | Upgrades to signage continue to be completed at all cemeteries. GPS plotting is underway at Mudgee Cemetery, along with upgrades to the road network and perimeter fence. Avenue tree planting at Gulgong Cemetery has also commenced. Drainage and road improvements to the Rylstone Cemetery are also underway. | Progressing |
| Manage, plan and maintain buildings and other assets across the region | Building upgrades and refurbishments as per Capital Works Program 2020/21 | Capital works continue throughout the year in line with the Capital Works program and allocated budgets. | Progressing |
| Maintain and operate swimming pool centres across the region | Maintain and operate swimming pool facilities at Mudgee, Gulgong and Kandos in accordance with adopted service levels | Council pools are being maintained and operated to industry standards, with no extensive down time at any of the facilities. Audits conducted by the NSW Health department have demonstrated industry compliance and meeting desired service levels. | Progressing |
| | Undertake capital upgrades and renewals to swimming pool facilities as per Capital Works Program 2020/21 | Council pools are being maintained and operated to industry standards. The Capital Works program is currently in planning and procurement phase with the majority of the works to be completed at the completion of the current pool season. | Progressing |

Meet the diverse needs of the community and create a sense of belonging

Support programs which strengthen the relationships between the range of community groups

| DP Action | Action Name | Comments | Status |
|--|--|--|-------------|
| Provide youth representation through the Youth Council | Provide secretarial support for Youth Council | Council continues to provide secretarial and mentoring support to the Mid-Western Regional Youth Council, who provide ideas for youth-led activities and events across the region. | Progressing |
| | Provide funding for delivery of youth oriented initiatives | Council's Youth Services Officers provide a range of after school and school holiday activities for the region's local youth. Activities range from book clubs the outdoor sporting events and regional excursions to Dubbo and Bathurst. Participation rates for most activities are increasing as local residents become more aware of the consistency of events and activities. All events and activities are heavily subsidised in order that disadvantaged youth do not miss out. | Progressing |

| DP Action | Action Name | Comments | Status |
|---|--|--|-------------|
| Provide meaningful employment to members of the disabled community | Maintain policies that support employment for people with disabilities at MWRC | Council continues its support for the employment of people with disabilities including through the Ironed Out and Recycling facilities. | Progressing |
| | Continued operations of Mudgee Recycling and Ironed Out | Ironed Out and Mudgee Recycling continue to provide high levels of employment and service to Council's supported workforce. | Progressing |
| Work with lead agencies to ensure adequate provision of a range of services | Attend inter-agency meetings | Council staff undertook facilitation of Interagency meetings via online platforms for the period of October to December 2020. Topics discussed amongst the group included community resilience in response to the Black Summer bushfires and service providers continued to share information as to how services were being delivered and at what capacity. | Progressing |
| Promote volunteering through the community | Run community services programs that encourage volunteering | Council auspices Community Transport and Meals on Wheels services and engages with volunteers to deliver services. Council also partners with Rotary Clubs of Mudgee to facilitate Mudgee Town Hall Theatre with Rotary volunteers. COVID-19 presented some challenges due to the vulnerability of existing volunteers, but this has given rise to a new wave of individuals and groups willing to assist with volunteer duties. Council is also welcoming back previously-isolating volunteers to regular duties. | Progressing |

Support arts and cultural development across the region

| DP Action | Action Name | Comments | Status |
|---|---|--|-------------|
| Arts and cultural events promotion | Provide financial and in-kind support to events in accordance with Events Assistance Policy | The Events Assistance program continues to be delivered in line with policy. | Progressing |
| | Promote the use of Council facilities for significant events | Many planned events for 2020 were cancelled due to COVID-19. Council continues to promote local venues for future events and conferences. | Progressing |
| Provision of meeting and exhibition space | Promote the use of community buildings and make available at reasonable cost | The final stages of Council's new facilities booking software "Bookable" are being implemented. Upon completion, the community will be able to book and manage facility bookings directly and view availability of venues 24/7. Staff continue to monitor Fees and Charges to ensure they meet community expectations and remain at a reasonable cost to all user sectors. | Progressing |
| | Promote the use of exhibition space provided at Mudgee Library | The Mudgee Library continues to host the WS Tatlow collection, as well as other pieces from Council's art collection. When the new Mudgee Regional Art Gallery is completed, there will be a shift in focus for exhibition space to the new facility. | Progressing |

| DP Action | Action Name | Comments | Status |
|--|---|---|-------------|
| Coordinate and facilitate cultural and arts projects throughout the region | Liaise with Cultural Development Committee, Orana Arts and local arts and cultural groups to develop cultural and artistic projects within the region | The commencement of construction of the Mudgee Regional Art Gallery has provided an invigorated platform for networking amongst local artists and cultural groups. The Gallery Curator has met with a range of stakeholders in order to engage and prepare for future gallery programming. The Cultural Development Committee continues to meet regularly to discuss a variety of matters touching upon arts and culture across the region. | Progressing |
| | Support arts events and programs in the region | Minimal cultural and arts projects were held during the period due to COVID-19. Council continues to work with arts organisations on future event planning, such as Fermenta in March 2021. | Progressing |

Provide equitable access to a range of places and spaces for all in the community

| DP Action | Action Name | Comments | Status |
|---|---|--|-------------|
| Public facilities to be accessible | Continue to monitor existing buildings | Council continues to monitor public buildings and upgrade in accordance with the 30 year asset maintenance plan and the works request system. All maintenance and upgrades are undertaken to meet current accessibility standards. | Progressing |
| | Deliver actions developed in the Disability Inclusion Action Plan | Council continues to work with its section 355 Access Committee to address issues of accessibility across the region for the benefit of residents and visitors alike. Council also promoted International Day of People Living with Disability in December 2020 and continue to work on improvements to the region's footpath network. | Progressing |
| Coordinate the provision of local community centres and halls for community use | A variety of community facilities available for use | The final stages of Council's new facilities booking software "Bookable" are being implemented. Upon completion, the community will be able to book and manage facility bookings directly and view availability of venues 24/7. | Progressing |

Protecting Our Natural Environment

Conserving and promoting the natural beauty of our region

Protect and enhance our natural environment

Ensure land use planning and management enhances and protects biodiversity and natural heritage

| DP Action | Action Name | Comments | Status |
|--|--|---|-------------|
| Include biodiversity and heritage as key components in the development application process | Implement Development Control Plan (DCP) through the development assessment process | The Development Control Plan is considered during the assessment of development applications. | Progressing |
| Manage environmental and cultural factors impacted by physical works on Council lands | Prepare Review of Environmental Factors for MWRC works | REF work is ongoing during the year. All current REFs have been completed and work will continue as required. | Progressing |
| | Work with local Aboriginal groups to effectively plan works involving sites of cultural significance | Due diligence assessment being completed with REFs as required. | Progressing |

Minimise the impact of mining and other development on the environment, both natural and built

| DP Action | Action Name | Comments | Status |
|--|---|---|-------------|
| Work with the community and government agencies to identify and address the issues and mitigate impacts associated with mining | Raise any issues as part of State Significant Development process | Council is actively engaged in the planning process for State Significant Development. This includes meeting with IPC representatives, making submissions and working with proponents to manage local impacts for the Wollar Solar Farm, Crudine Ridge Wind Farm, Bowdens Silver Mine, Liverpool Wind Farm, Valley of the Winds Wind Farm, Stubbo Solar Farm, Uungula Wind Farm, Burrendong Wind Farm and St Matt's High School projects. | Progressing |
| | Represent MWRC on Community Consultative Committees | Councillors are represented on Community Consultative Committees for local State Significant Developments. | Progressing |

Raise community awareness of environmental and biodiversity issues

| DP Action | Action Name | Comments | Status |
|--|---|--|-------------|
| Deliver projects which work towards protecting biodiversity and regeneration of native environment | Pursue grant funding for environmental projects | Council continues to seek new grant opportunities. During the period, three grant applications were submitted (one unsuccessful, one pending and one joint application with Landcare). | Progressing |
| Support National Tree Day | Facilitate National Tree Day activities | National Tree Day was unable to be delivered due to COVID-19. Funds were diverted to assist with a joint Landcare Project to provide trees to bushfire affected landholders. | Completed |

| DP Action | Action Name | Comments | Status |
|---|-------------------|--|-----------|
| Work with schools to promote environmental awareness amongst students | Support Green Day | Green Day was cancelled by Landcare due to COVID-19. | Completed |

Control invasive plant and animal species

| DP Action | Action Name | Comments | Status |
|---|---|--|-------------|
| Effective weeds management | Effective monitoring and management of noxious weeds across region | Council's weed inspection program continues to meet targets. | Progressing |
| | Ongoing community education on noxious weeds | Education continues as part of the inspection program. In addition, roadside signage on serrated tussock has been installed. New rural property owner information packs have been developed and are being sent out to new property owners. Information packs are being sent to landholders in areas with problem weeds prior to the control period to remind them of the obligations and provide information on control. | Progressing |
| | Undertake weed control on roadsides and MWRC land | Council's roadside spraying program is underway with staff spraying occurring daily (depending on weather conditions). 892km were sprayed by the end of December. | Progressing |
| Collaborate with agencies to manage feral animals | Support relevant agencies with community education and awareness programs | Council's Weeds team undertakes regular surveillance activities and compliance functions. | Progressing |

Provide total water cycle management

Identify and implement innovative water conservation and sustainable water usage management practices

| DP Action | Action Name | Comments | Status |
|---|---|--|-------------|
| Encourage reduced water consumption through Best Practice Pricing | Maintain Best Practice water supply, sewerage and trade waste tariffs | Best practice water pricing structure is being maintained. The implementation of liquid trade waste charges is in the final year of staged implementation. | Progressing |
| Implement water conservation and reuse programs | Ongoing community education on water conservation | Council continues to provide information to the community in relation to Water Conservation levels. Signage for Water Restriction levels has been procured and is awaiting TfNSW approval in regards to signage locations. | Progressing |
| Work to secure water for agriculture and urban use | Work with State Government to secure domestic water supply | Council maintains ongoing dialogue with the State Government regarding water security. | Progressing |

| DP Action | Action Name | Comments | Status |
|---|--|---|-------------|
| Play an active role in the Cudgegong Valley and Macquarie Valley User Group | Represent community at Customer Service Committee meetings for the Cudgegong Valley and Macquarie Valley User Groups | Council continues to represent community interests at meetings. | Progressing |

Maintain and manage water quantity and quality

| DP Action | Action Name | Comments | Status |
|---|--|---|-------------|
| Achieve NSW Government Best Practice Management of Water Supply and Sewerage | Implement an Integrated Water Cycle Management Strategy | The Orana Water Utilities Alliance received DPIE concurrence on a template scope document during late 2020. A consultant has been engaged to facilitate IWCM project program. | Progressing |
| | Ongoing implementation and review of the Drinking Water Management System | The Management System has been implemented. Ongoing operation of the Management System will involve continual review/improvement phase. | Progressing |
| Identify and plan future maintenance, renewals and upgrades for Council's water supply infrastructure | Water Supply infrastructure renewals and new works undertaken as per Capital Works Program 2020/21 | Works are occurring in line with the Capital Works program. The majority of projects are in the planning and procurement phase. | Progressing |

Protect and improve catchments across the region by supporting relevant agencies

| DP Action | Action Name | Comments | Status |
|---|---|---|-------------|
| Support relevant agencies with implementation of regional plans | Represent MWRC interests as appropriate | Council is an active participant in the Central Tablelands Environment and Waterways Alliance including having access to regionally based programs and funding opportunities. | Progressing |
| Continue riparian rehabilitation program along waterways | Continue riverbed regeneration | Contractors have been engaged to carry out weed control works. This work will be completed by the end of March. | Progressing |
| | Maintenance and promotion of Putta Bucca Wetlands | All scheduled maintenance has been completed at Putta Bucca Wetlands, including mowing and weed control. | Progressing |
| Provide education to the community of the importance of waterways | Ongoing community education on protecting waterways | Carp Muster will not be held this year due to COVID-19 restrictions. Alternate projects are being investigated. | Progressing |

Maintain and manage waste water quality to meet Environmental Protection Agency standards

| DP Action | Action Name | Comments | Status |
|---|---|---|-------------|
| Identify and plan future maintenance, renewals and upgrades for Council's sewerage treatment infrastructure | Sewer Infrastructure renewals and new works undertaken as per Capital Works Program 2020/21 | Works are occurring in line with the Capital Works program. The majority of projects are in the planning and procurement phase. | Progressing |
| Improve and develop treatment options to ensure quality of waste water meets EPA standards | Continue to improve outgoing water quality at all sewerage treatment plants across the region | Council continues to work with NSW EPA and NSW DPIE to meet standards at all sewerage treatment plants. | Progressing |
| Achieve NSW Government Best Practice Management of Water Supply and Sewerage | Implement Liquid Trade Waste Policy and Pricing as per 4 year rollout program | The program is now in the operational phase. | Completed |

Provide a water and sewer network that balances asset conditions with available resources and community needs

| DP Action | Action Name | Comments | Status |
|---|--|---|-------------|
| Identify and plan future maintenance, renewals and upgrades for Council's stormwater assets | Drainage renewal and new works undertaken as per Capital Works Program 2020/21 | Works continue throughout the financial year. | Progressing |
| | Effectively maintain existing drainage network including built infrastructure and overland drainage reserves | Monitor and action Works Requests related to drainage issues. Visual inspections undertaken of known assets to identify any necessary and significant works requirements. | Progressing |
| | Identify and undertake culvert replacement and causeway improvement program | Two Causeways have been programmed for replacement in February/March. Numerous stormwater culverts have been replaced throughout the year based on defects identified. | Progressing |
| | Update Mudgee Flood Study and Flood Management Plan | Draft Flood Study is in review stage with consultant providing additional comments and identification of flood affected properties. | Progressing |

Live in a clean and environmentally sustainable way

Educate, promote and support the community in implementing waste minimisation strategies

| DP Action | Action Name | Comments | Status |
|---|--|---|-------------|
| Promote a philosophy of Reduce, Reuse, Recycle | Provide education on waste minimisation | Recycling education is provided in conjunction with Dubbo Regional Council and Narromine Council. This includes production of TV commercials, a schools waste education program, brochures and short clips for social media. | Progressing |
| Provide a domestic recycling and waste services for all residents through kerbside collection and rural waste transfer stations | Provide kerbside services and local recycling facilities | Kerbside services and waste/recycling facilities have been provided at the agreed level of service. | Progressing |
| Promote home composting initiatives for green waste | Provide education on managing green waste | Education continues on managing food organics and green waste. Council works with Dubbo Regional Council and Narromine Council to produce community education including TV advertisements, brochures, radio advertisements and the schools waste education program. | Progressing |

Work regionally to implement strategies that will enhance environmental outcomes in regards to waste management and minimisation

| DP Action | Action Name | Comments | Status |
|--|--|---|-------------|
| Participate in regional procurement contracts for waste services that provided added value | Provide regional scrap steel, green waste processing, used motor oil, household chemical collection and e-waste services | Council participates in regional contracts and tenders that provide best value and service to the region. | Progressing |
| Participate in regional investigations for collaborative solutions to problem wastes types | Participate in NetWaste steering committee for strategic direction of the group | Quarterly regional meetings are attended, and ongoing input provided into regional waste plan and strategies. | Progressing |
| Apply for available grants under the NSW Government 'Waste Less Recycle More' package | Apply for grants to upgrade or introduce services to the community that reduce landfill tonnes and Co2 emissions | No appropriate grants under WLRM have been identified during the period. Education on waste management and waste minimisation is being delivered by the three Council group (Mid-Western, Dubbo and Narromine). This group was formed when the three Councils received grant funding for FOGO collection. | Progressing |

Support programs that create environmental awareness and promote sustainable living

| DP Action | Action Name | Comments | Status |
|---|--|--|-----------|
| Build community awareness through environmental education | Provide education to the community on environmental issues | Council partnered with Lifeskills Plus to make and distribute reusable shopping bags as part of "Plastic Free July". Council continues to provide community education on waste and recycling, including the schools education program. | Completed |
| | Facilitate and promote community garden programs | No action currently due to lack of community requests for program. | Completed |

Consider technologies in Council's facilities, infrastructure and service delivery to reduce ecological footprint

| DP Action | Action Name | Comments | Status |
|--|---|--|-------------|
| Implement alternative energy and sustainable technologies in physical works and service delivery | Consider opportunities for alternative energy and sustainable technologies (such as green energy programs or solar panel installation) as part of the capital works program | Council has continued planning and feasibility work on the establishment of a solar array in the region. Solar panels are considered with each new building construction or upgrade. | Progressing |
| | Work with Essential Energy to obtain funds for LED Street Lighting Retrofit | Council continues to work with Essential Energy to upgrade LED lighting in the Mudgee and Gulgong areas. Upgrades are anticipated to occur in 2020/21. | Progressing |

Building a strong local economy

A prosperous and diversified economy delivering lifestyle benefits to the community through employment, income and sustainable economic growth

A prosperous and diversified economy

Support the attraction and retention of a diverse range of businesses and industries

| DP Action | Action Name | Comments | Status |
|--|---|---|-------------|
| Promote the region to target businesses that complement key local industries | Conduct 2-3 marketing activities, conferences or events where the region can be promoted | Council is undertaking a number of marketing initiatives to promote the region to live, work, invest and visit including a digital marketing campaign and social media marketing. New content has been produced in recent months and will be leveraged across a range of markets over coming months. | Progressing |
| Work with business and industry groups to facilitate business development workshops for existing businesses in the region | Support the business chambers and industry groups by attendance at meetings as required | Council representatives participated in meetings as required and continue to support initiatives of local business chambers. | Progressing |
| Establish a process of capturing and monitoring relevant economic data to identify opportunities, trends and needs of local businesses | Produce annual update to Economic and Business Profile booklet | The Economic and Business profile continues to be updated. Statistics are collected on a monthly and quarterly basis to ensure relevant data available. | Progressing |
| Work with the community to identify economic development opportunities | Be aware of new business investors coming to the region and work with them to promote benefits | Council utilises ABR data to track new businesses opening in the region and continues to provide information to encourage new investment including updating data in Economic and Business Profile. The launch of Mudgee Region Business provides a platform to identify new businesses and continue to engage with existing businesses. | Progressing |
| | Conduct annual think tank forum to encourage business leaders to participate in local economic development | Annual Think Tank was delivered engaging a range of business leaders. | Completed |
| | Identify opportunities to invest in infrastructure which attracts new business investors to the region | Council engages with local business leaders and the broader community to identify infrastructure gaps and opportunities to support new investment. The community is able to put forward new ideas to Council as part of the annual budgeting process. | Progressing |
| Work with Mudgee Region Tourism Inc (MRTI) to identify target markets and promote the region | Work with MRTI to identify visitor trends and marketing initiatives | MRTI has a contract with Council to undertake tourism marketing on behalf of the region. Council staff meet with MRTI on a quarterly basis to ensure alignment between organisational objectives. Additional meetings are held to discuss joint activities and new plans and activities. | Progressing |
| Develop existing events in the region and attract new event proponents to hold major events and festivals in the region | Submit bids for new events and conferences and support event proponents holding or seeking to hold events in the region | Continuing to submit bids for relevant conferences and events. Council Events team continue to liaise with event producers investigating opportunities in the region. | Progressing |

| DP Action | Action Name | Comments | Status |
|-----------|--|---|-----------|
| | Deliver Flavours of Mudgee in September 2020 | Flavours of Mudgee 2020 event was cancelled due to COVID-19. An alternative activity was undertaken to promote local businesses and encourage residents and visitors to shop local, utilising Flavours of Mudgee glasses as an incentive. | Completed |

Encourage the development of a skilled and flexible workforce to satisfy local industry and business requirements

| DP Action | Action Name | Comments | Status |
|---|--|--|-------------|
| Work with business and industry groups to identify the main skills shortage areas | Encourage business leaders to provide feedback on skills issues | Regular meetings undertaken with industry groups across region. | Progressing |
| Encourage workers to move to the region for employment opportunities where skills shortages exist | Conduct 2-3 marketing activities, conferences or events where the region can be promoted | Council is undertaking a number of marketing initiatives to promote the region to live, work, invest and visit including a digital marketing campaign and social media marketing. New content has been produced in recent months and will be leveraged across a range of markets over coming months. The Mudgee Region Jobs website platform has been launched and Council will continue to engage with businesses to better promote existing job opportunities. | Progressing |

An attractive business and economic environment

Promote the region as a great place to live, work, invest and visit

| DP Action | Action Name | Comments | Status |
|---|--|--|-------------|
| Provide brand leadership, market the region's competitive advantages and investment opportunities | Conduct 2-3 marketing activities, conferences or events where the region can be promoted | Council is undertaking a number of marketing initiatives to promote the region to live, work, invest and visit including a digital marketing campaign and social media marketing. New content has been produced in recent months and will be leveraged across a range of markets over coming months. | Progressing |

Provide leadership on economic development initiatives and identify resources and infrastructure required to drive investment and economic growth in the region

| DP Action | Action Name | Comments | Status |
|---|--|--|-------------|
| Promote the development of infrastructure at the Mudgee Airport as an opportunity for business expansion in the aviation industry | Deliver infrastructure upgrades at Mudgee Airport Precinct in accordance with Restart NSW funding | The Mudgee Airport Precinct project has been completed. | Completed |
| | Review airport development strategy and promotional opportunities in the future | The Mudgee Airport Master Plan was adopted in 2015. Council continues to pursue opportunities in accordance with the plan. | Progressing |
| Lobby State and Federal Government on infrastructure needs of local businesses including transport and communications linkages | Lobby government agencies and departments on the provision of infrastructure to meet community needs | Council continues to identify issues with local MPs and relevant government ministers. | Progressing |

Support the expansion of essential infrastructure and services to match business and industry development in the region

| DP Action | Action Name | Comments | Status |
|---|--|--|-------------|
| Lobby State and Federal Government for expanded health and education services | Lobby government agencies and departments on the provision of infrastructure to meet community needs | Council continues to identify issues with local MPs and relevant government ministers. | Progressing |

Develop tools that simplify development processes and encourage high quality commercial and residential development

| DP Action | Action Name | Comments | Status |
|--|--|--|-------------|
| Provide information to assist potential investors understand local development controls and assessment processes | Provide an overview of local development controls and assessment processes in a fact sheet | Work has commenced on the development of a fact sheet. | Progressing |

A range of rewarding and fulfilling career opportunities to attract and retain residents

Support projects that create new jobs in the Region and help to build a diverse and multi-skilled workforce

| DP Action | Action Name | Comments | Status |
|---|--|---|-------------|
| Work with lead agencies for employment to identify trends and discuss issues impacting employment | Work with major employers to identify trends and develop strategies to create employment opportunities across the region | Council continues to review trends and report statistics through the Economic and Business Profile booklet. | Progressing |

Build strong linkages with institutions providing education, training and employment pathways in the region

| DP Action | Action Name | Comments | Status |
|---|---|---|-------------|
| Work with lead agencies for education in the region to identify opportunities for economic growth | Pursue opportunities to develop a university outreach campus with offerings aligned to local industries | Council continues to explore the opportunity to introduce a Country University Centre campus in Mudgee. Ongoing engagement with universities continues. | Progressing |
| | Work with education providers on the provision of services to meet community needs | Council continues to work with education providers across the region including TAFE NSW, Skillset and local schools. | Progressing |

Connecting our region

Vibrant towns and villages with a rich history, a safe and healthy community, and a strong sense of community pride – a great place for families

High quality road network that is safe and efficient

Provide traffic management solutions that promote safer local roads and minimise traffic congestion

| DP Action | Action Name | Comments | Status |
|---|---|--|-------------|
| Work with the RMS to improve road safety | Liaise with the RMS on road safety matters | Council continues to raise road safety issues with RMS through regular meetings including the Local Traffic Committee. A road safety officer has been jointly funded to further improve this. | Progressing |
| Regulate effective and appropriate user activities on the road network | Provide local assessments to the National Heavy Vehicle Regulator as required | Council continues to assess applications received through the NHVR for the movement of oversize and overmass vehicles through the region on the local and regional road network. Applications are reviewed as received. | Progressing |
| | Review speed limits and traffic management | Speed and traffic management reviews are undertaken by Council in conjunction with RMS as required. | Progressing |
| Participate in relevant regional transport committees and working parties | Facilitate the Local Traffic Committee | Regular Traffic Committee meetings held throughout the year and attended by NSW Police, Transport for NSW, Councillor Karavas and Community representatives. Recommendations for traffic improvements are reported and adopted by Council. | Progressing |

Provide a roads network that balances asset conditions with available resources and community needs

| DP Action | Action Name | Comments | Status |
|--|---|---|-------------|
| Review the Roads Asset Management Plan | Update data for Asset Management Plans in line with Fair Value reporting requirements | Asset data continues to be updated and reviewed to ensure the most accurate information is available. Fair Value for Roads was also completed in 2019/20. | Progressing |
| Implement the works program in accordance with the Roads Asset Management Plan | Manage State Roads in accordance with RMS contracts | Council continues to maintain the state road network under the Council Routine Maintenance Contract with RMS. Council are carrying out road widening projects on Goolma Road and have completed works on the Castlereagh Hwy at Gulgong under an ordered works arrangement. | Progressing |
| | Ongoing maintenance and upgrades of Regional Roads network | Council is currently carrying out widening work on Hill End Road under the Safer Roads Program, rehabilitation work on Bylong Valley Way utilising Resources for Regions funding, and will commence a 1.2km rehabilitation project on Hill End Road in March at Grattai. Maintenance works continue through the year including heavy patching of pavement failures. | Progressing |
| | Maintain local road network in accordance with established levels of service | Local road maintenance continues throughout the year. Significant gravel re-sheeting has been completed and maintenance grading continues in line with the program, with resources allocated to suit conditions and other works. | Progressing |

| DP Action | Action Name | Comments | Status |
|---|--|--|-------------|
| | Upgrade, renewal and extension of local roads in accordance with Capital Works Program 2020/21 | Capital works projects are progressing as planned. The urban and rural reseals are largely complete with any remaining programmed for March. Cudgegong Rd and Barneys Reef Rd rehabilitation projects are planned for Q3 and Q4. Coxs Creek Rd Seal extension is complete. Mebul Rd and Pyramul Rd seal extensions are programmed for Q4, while Council is working with the Crudine Ridge Wind farm developer to prepare the Aarons Pass Rd pavement ready for seal through Q3 and Q4. | Progressing |
| | Upgrade and renewal of local bridges in accordance with Capital Works Program 2020/21 | Goulburn River Bridge replacement is currently being tendered for construction to be completed by December 2021. Maintenance and inspections continue throughout the year. Preliminary work for Dixons Long Point Bridge are being undertaken with expressions of interest for the construction project currently being requested. | Progressing |
| | Upgrade to Wollar Road in accordance with Restart NSW funding agreement | The Wollar Road upgrade project was completed in May 2020. | Completed |
| | Implementation of the Ulan Road Strategy | While the major upgrade works are complete, additional upgrade work to the Ulan Rd will commence in March between Blacksprings Rd intersection and Buckaroo Lane. Rehabilitation of the pavement between the Holyoake Bridge and Lue Rd roundabout will also occur this financial year. | Progressing |
| Pursue additional funding for upgrading of roads infrastructure | Lobby for additional funding for roads | Council continues to identify and pursue new funding for additional road projects. | Progressing |
| | Ensure major developers contribute to local road upgrades for the impact of additional development | Funding committed through Ulan Road Strategy and Resources for Regions program. | Progressing |

Efficient connection of the region to major towns and cities

Develop a regional network in partnership with government agencies, that grows with the needs of residents and businesses

| DP Action | Action Name | Comments | Status |
|--|--|---|-------------|
| Support the continuation of commercial passenger services at Mudgee Airport | Work with operator to maintain regular passenger services to and from Sydney | FlyPelican commenced services in June 2015. In response to the significant impact of COVID-19 on the aviation sector, Council has provided a regional aviation support subsidy to support the continuation of the FlyPelican service. The service remained operational at 31 December 2020. | Progressing |
| | Operation and maintenance of Mudgee Airport in accordance with agreed service levels | Mudgee Airport meets current safety and security requirements. | Progressing |
| Lobby for improved highway linkages along the Great Western Highway and Bells Line | Lobby for improved access to Western NSW from Sydney | Council continues to participate in transport infrastructure planning groups and meetings with relevant government agencies. | Progressing |

Create a communication network that services the needs of residents and businesses

| DP Action | Action Name | Comments | Status |
|--|--|--|-------------|
| 4.2.2.1: Pursue improved broadband and mobile coverage with Government and major service providers | Lobby for improved internet speeds and mobile coverage throughout the region | Council continues to pursue grant opportunities and lobby for improved mobile coverage and internet speeds. Council receives regular updates and raises issues relating to NBN rollout and coverage. | Progressing |

An active travel network within the region

Develop and enhance walking and cycling networks across the region

| DP Action | Action Name | Comments | Status |
|---|--|--|-------------|
| Implement the Pedestrian Access Mobility Plan | Upgrade and renewal of footpaths and cycleways in accordance with Capital Works Program 2020/21 | Council has renewed numerous footpaths that were in poor condition and is currently extending the footpath/cycle-way network in all four town centres utilising both Council allocated funds and significant grant funding received. | Progressing |
| | Maintain existing footpath and cycleway network in accordance with established levels of service | Footpath maintenance is ongoing through the year where hazards are identified. Council has renewed numerous footpaths that were in poor condition as well as extended the footpath/cycle-way network in all four of the major centres throughout the year utilising both Council allocated funds and significant grant funding received. This included works identified in the PAMP. | Progressing |
| | Extension of Cudgegong River shared pathway to Glen Willow/Putta Bucca | Council continues to develop the shared pathway. | Progressing |

Support viable public transport options across the region

| DP Action | Action Name | Comments | Status |
|--|--|--|-------------|
| Examine opportunities to develop viable public transport options | Investigate the demand for public transport with the community | NSW State Government continuing to undertake a trial of a Mudgee - Gulgong - Dubbo On Demand bus service. Awaiting feedback from State Government. No Council action required. | Progressing |

Good Government

A strong council that is representative of our community and effective in meeting the needs of the community

Strong civic leadership

Provide clear strategic direction through the Community Plan, Delivery Program and Operational Plan

| DP Action | Action Name | Comments | Status |
|---|---|--|-------------|
| Ensure actions of the Operational Plan and Delivery Program are completed on time, on budget and meets performance criteria | Successful delivery of 2020/21 Operational Plan | Progress is being made on the projects and initiatives identified in the 2020/21 Operational Plan. | Progressing |
| | Six monthly progress reporting against Delivery Program and comprehensive Quarterly Budget Reviews against Operational Plan | Six monthly progress reported to February Council meeting. | Progressing |

Provide accountable and transparent decision making for the community

| DP Action | Action Name | Comments | Status |
|--|---|--|-------------|
| Ongoing review and enhancement of governance framework | Continue to hold "Open Day" prior to Council Meetings | Due to COVID-19 public health orders, Council meetings have been closed to the public during the six month period. In the absence of Open Day, members of the public have been able to provide written submissions which are distributed to Council. | Progressing |
| | Promotion of upcoming Council meetings | Council meetings continue to be advertised in local media and on Council's website. | Progressing |
| | Webcast of Council Meetings | Council continues to webcast Council meetings which can be accessed via Council's website. | Progressing |
| Provide professional development opportunities to support elected members in fulfilling their obligations as Councillors | Provide access to professional development programs for elected members | Professional development opportunities are regularly promoted to Councillors via email. The professional development program forms a part of the Payment of Expenses and Provision of Facilities to Councillors Policy. | Progressing |
| Hold awareness sessions for potential candidates in the six months leading up to each Council election and ensure information packages are available | Develop program for candidate awareness sessions (next election due in 2021, or in case of a by-election) | The awareness sessions planned for 2020 were postponed due to deferral of local government elections to August 2021. The candidate awareness program will commence March 2021. | Progressing |

Provide strong representation for the community at Regional, State and Federal levels

| DP Action | Action Name | Comments | Status |
|---|--|--|-------------|
| Continue to lobby State and Federal Government on all matters that are of relevance to the region | Work with the Mayor to access Local Members and Ministers on relevant issues | Regular meetings held with local members and access provided to various ministers for specific issues. | Progressing |
| | Strengthen relationships with local State and Federal members | Regular meetings held with local members and access provided to various ministers for specific issues. | Progressing |
| | Engage with Regional Directors of State Government agencies | Regular meetings held with Regional Directors to discuss regional priorities. | Progressing |

Good communications and engagement

Improve communications between Council and the community and create awareness of Council's roles and responsibilities

| DP Action | Action Name | Comments | Status |
|---|--|---|-------------|
| Publish monthly editions of Community News | Community News distributed monthly to every household in the region | Community News has been delivered monthly in print, EDM and video format. | Progressing |
| Provide an up to date and functional web interface | Ensure web content is kept up to date and relevant | The Council website is currently being updated with a view to going live in 2021. | Progressing |
| Regularly report to the community in a variety of interesting ways | Increased use of all media avenues including social media, radio and television to communicate Council initiatives | Continuing to increase reach and engagement across all social media platforms including Facebook and Instagram. | Progressing |
| Operate and maintain a community works request system that provides timely and accurate information and responses | Maintain Works Request System and produce regular reporting on response times | Staff continue to monitor overdue works requests and strive to achieve a 100% completion within 14 days. A monthly report is prepared for the management team. | Progressing |
| | Promote use of works request system for community to submit works requests | Council continues to maintain a website to support online works requests. Development of a new Council website will improve the customer experience and provide an easy to use platform for the community to lodge works requests for Council action. | Progressing |

| DP Action | Action Name | Comments | Status |
|--|---|---|-------------|
| Ensure the community has clear information about who to contact in Council | Provide a customer focused website | Council is currently undertaking a complete redesign of the Council website and subsites, including the staff intranet site. The project has been in progress for the past 12 months and is targeted for completion by the end of 2021. Once completed it will provide a greatly improved user experience with easy search functionality, new and simpler content and logical website architecture. | Progressing |
| Educate the community on Council's roles and responsibilities | Provide access to Council's corporate documents both through the website and Administration Centres | Council continues to ensure all required open access Council documents are updated and available in person in the administration centres or on Council's public website. The new Council website will provide improved access and ease when searching for open access Council documents and documents on exhibition. | Progressing |

Encourage community access and participation in Council decision making

| DP Action | Action Name | Comments | Status |
|--|---|---|-------------|
| Seek feedback on policy development and local issues | Ensure policies, strategies and proposals impacting the community are placed on exhibition for public comment | Utilised Yoursay.midwestern.nsw.gov.au as a dedicated platform for community engagement across a range of issues and strategies. | Progressing |
| | Utilise a range of formal and informal engagement tools to seek community feedback on a broad range of issues | Council continues to promote opportunities for the community to contribute to Council's decision making process through a range of platforms including Yoursay.midwestern.nsw.gov.au, Council's website forms, social media and face to face contribution and feedback sessions. | Progressing |
| Provide opportunities and make it easy for the community to participate in and influence decision making | Encourage attendance at Council Meetings in person and via webcast | Attendance at Council meetings was suspended in the last 6 months due to COVID-19 public health orders. Council continues to provide live access to meetings via webcast. | Progressing |
| | Investigate and consult with the community on high priority projects as defined in the community consultation report for the Community Strategic Plan | Council continues to promote opportunities for the community to contribute to Council's planning and budgeting process through a range of platforms, including Yoursay.midwestern.nsw.gov.au, Council's website forms, PR and advertising, social media and face to face contribution and feedback. | Progressing |

An effective and efficient organisation

Pursue excellence in service delivery

| DP Action | Action Name | Comments | Status |
|---|--|---|-------------|
| Benchmark Council's service delivery against relevant organisations | Provide Planning and Building Statistics to Department of Planning | Reports are completed and submitted to the NSW Department of Planning Industry and Environment as required. | Progressing |
| | Participate in NSW LGPA, LGNSW, JO and other industry body surveys and benchmarking exercises | Staff continue to participate in relevant activities. | Progressing |
| | Desktop analysis of annual financial results against other NSW councils | Desktop analysis of Council's financial results for the 2019/20 year has started through 2019/20 Annual Financial Statements assessment and historical analysis of Council's performance through 2020/21 Operational Plan workshops. Comparative Group 4 Councils will be analysed and assessed in the second half of the year. | Progressing |
| | Report on OLG group comparative data | Comparative Group 4 Councils will be analysed and presented to Council in the second half of the year, with all Council Financial Statement data being collated in the first half. | Progressing |
| Conduct biennial community surveys | Undertake community surveys in 2018/19 and 2020/21 | Planning has commenced for the next community survey to determine Council's service delivery performance and identify areas of improvement. | Progressing |
| Monitor community expectations regarding service delivery | Engage with the community on desired levels of service across Council functions | Continued use of YourSay communications tool to support community engagement activities and provide a forum to receive community feedback. | Progressing |
| | Develop program of internal service reviews | The Audit, Risk & Improvement Committee has completed reviews of Council's Business Continuity/Disaster Recovery Plans and legislative compliance functions. | Progressing |
| Provide a responsive customer service function | Reply to all correspondence within 14 days | Staff continue to monitor and follow up on correspondence received and strive to achieve a 100% response within 14 days. A monthly report is prepared for the management team. | Progressing |
| | Review Customer Service Charter and deliver positive, informative, and professional front-of-house and phone customer service function | Staff are currently reviewing existing Service Level Agreements between customer service and relevant departments connected with service delivery and administrative functions. The development of a Customer Service charter is targeted for completion by June 2021. | Progressing |

Provide a positive and supportive working environment for employees

| DP Action | Action Name | Comments | Status |
|--|--|--|-------------|
| Attract, retain and develop a skilled workforce | Implement a Leadership Program that includes merit based recruitment, performance management and legal responsibilities | Leadership training has been undertaken internally, addressing topics such as social media, financial delegations, merit based recruitment and incident reporting. Further training is scheduled for the coming months. | Progressing |
| | Develop a Learning and Development program targeted towards achievement of Delivery Program and areas of risk identified in Workforce Plan | The Learning and Development Program is being implemented throughout the year focussing on individual and group training opportunities. | Progressing |
| | Provide a Leadership Capability Framework to develop current and future leaders which is linked to Learning and Development Plans | A Leadership Development Framework has been developed that links to position descriptions, performance appraisals and learning and development. | Completed |
| | Ensure all employees have clearly articulated accountabilities against which they will be assessed annually | All employees have position descriptions which detail key accountabilities. Performance reviews were undertaken in September 2020. | Completed |
| Provide a safe, healthy and non-discriminatory working environment | Establish a culture of workplace safety which includes daily pre-start meetings for outdoor staff and monthly Safety Toolbox Talks | Daily pre-start meetings form part of the daily risk assessment process for outdoor workers. Monthly safety talks are forwarded to Department Managers for inclusion at Department meetings. | Progressing |
| | Implement and embed a WHS Management System that reflects AS4801 requirements | Council's WHS Management system continues to be reviewed and updated where required to reflect Australian Standard requirements. | Progressing |
| | Align workplace behaviour with core values of Respect, Integrity and Recognition | Behaviours aligned to core values are included in position descriptions, induction and orientation and measured during annual performance reviews. They are promoted and reinforced via staff update meetings, department meetings and the fortnightly GM's newsletters. | Progressing |
| | Implement and review the Equal Employment Opportunity Management Plan | The Equal Employment Opportunity Management Plan was reviewed and updated and a new plan in place for 2020/21. Implementation of the plan is continuing. | Progressing |

| DP Action | Action Name | Comments | Status |
|---|--|--|------------------|
| Conduct biennial employee opinion surveys | Seek staff feedback via Employee Opinion Survey 2018/19 and 2020/21 | Survey will be undertaken in March 2021. | Not Due To Start |
| | Identify and implement improvement strategies based on feedback from Employee Opinion Survey | Survey will be undertaken in March 2021. | Not Due To Start |

Prudently manage risks associated with all Council activities

| DP Action | Action Name | Comments | Status |
|---|--|--|-------------|
| Monitor and review Council's policies and strategies | Provide up to date Policy Register | Register of Council policies is reviewed monthly by the Executive. Policy managers are prompted with regular emails informing managers of Policy review due dates. | Progressing |
| | Identify and resolve existing policy gaps | Ongoing review and reporting of the policy register to the Executive and Policy Managers. | Progressing |
| | Education program to ensure staff understand policy requirements | Routine reminder emails are issued to responsible policy managers. Regular manager meetings are utilised to introduce relevant changes to policy procedures. | Progressing |
| Monitor and review Council's risks | Develop an enterprise risk management (ERM) framework relevant to Council's activities | Council adopted an Enterprise Risk Management Framework in June 2020. | Completed |
| Provide long term financial sustainability through sound financial management | Examine opportunities to raise additional revenue | Council is pursuing commercial property and development opportunities to raise additional revenue, and has an improvement plan in place for the management of these functions. Council continues to ensure Fees and Charges are appropriate for all services and has introduced new software to improve and monitor the process this year. | Progressing |
| | Explore a special rate variation with the community | A material increase in rating revenue was achieved through revised land valuations, especially in the mining category. A special rate variation is no longer required. | Completed |
| | Identify opportunities to increase revenue from property related investments | Council continues to identify and investigate commercial opportunities to support revenue growth. | Progressing |
| | Update Long Term Financial Plan | The Long Term Financial Plan for 2020/2030 was adopted on 21 October 2020. | Completed |

| DP Action | Action Name | Comments | Status |
|---|---|--|-----------------|
| | Monthly reporting against budget and schedule for major works programs/strategic projects | All monthly budget reports were prepared for Council in accordance with the schedule. | Progressing |
| | Comprehensive Quarterly Budget Review reporting | All Quarterly Budget Review Statements were completed within schedule and in accordance with the Office of Local Government Guidelines. | Progressing |
| | Development of Rating Strategy to support LTFP | At the May 2017 Council meeting a Supplementary Motion concerning a proposal to adopt a Rating Strategy for the term of Council was put and lost. | Not Progressing |
| | Integration of long term impacts on financial sustainability indicators incorporated into Council decision making process | A reporting template was introduced in August 2017 which includes Fit For The Future sustainability ratio impacts of Council recommendations and options, with Long Term Financial Planning and Asset Management impacts included. | Completed |
| Comply with relevant accounting standards, taxation legislation and other financial reporting obligations | To achieve a high standard of financial management | Council received an unqualified audit report for the financial year ended 30 June 2020, within the legislated time frames. All taxation legislation and other reporting obligations have been met, to date. | Progressing |
| | All rating, taxation, statutory, and grant reporting obligations satisfied in an accurate and timely manner | All statutory reporting obligations have been completed on time, to date this financial year. | Progressing |

Pursue efficiencies and ongoing business improvement

| DP Action | Action Name | Comments | Status |
|--|---|---|-------------|
| Provide effective and efficient internal support functions | Conduct quarterly Council Staff Updates across all work sites | Quarterly staff update meetings were held. | Progressing |
| | Effective capture and management of corporate records | A recent upgrade to ELO Version 12 provides an improved user experience and greater functionality for records management. Staff continue to monitor and revise processes and systems to ensure compliance with State Records Act and other related regulations. | Progressing |
| | Ongoing enhancements to Council procurement including Roadmap Best Practice Procurement project | Council has commenced development of a procurement framework and contract management framework inclusive of the implementation of a contract management system. | Progressing |
| | Provide effective Workshop services for Council fleet | Council continues to ensure that Council fleet meets the requirements of the RMS and that servicing and maintenance is maintained for all fleet. | Progressing |

| DP Action | Action Name | Comments | Status |
|---|---|---|-------------|
| Enhance the information systems that support delivery of Council activities | Investigate options to increase speed and reliability of Council's network | Council is currently undergoing a refresh of switching infrastructure to ensure all services are supported and secure. This includes centralised management and access control systems. | Progressing |
| | Continued investment in existing information systems to delivery productivity enhancements | Council continues to invest in systems and applications to increase productivity and create efficiencies. A change management committee has been formed to ensure all changes to systems and applications are updated and configured, ensuring increased efficiency and less downtime. Centralised billing and reporting tools for telecommunications are being piloted to streamline processes between the ordering and billing of services. Exception reporting will allow Council to achieve greater value for money and utilisation trends will be easily identified. | Progressing |
| | Implementation of mobility solutions for integrated asset management | Asset management mobility is fully developed. Delays have been experienced with integration of the mapping system which is anticipated to be ready for field use in 2021. | Progressing |
| Ensure strategic and asset management plans are underpinned by sound financial strategies | Consider the full life cycle costs associated with the investment in new assets, with a focus on capital investment and existing assets | Full life cycle costs of new assets are considered through preparation of a business plan for new Community Plan Proposals, ratio reporting in Council Business Paper reports and Quarterly Business Reviews. Improvements in Project Management to create consistent methodologies across Council are planned over the next 12 months. As shown in the September 2019 Quarterly Budget Review, Council is forecast to exceed the infrastructure renewals ratio benchmark in 2020/21. | Progressing |
| | Review depreciation methodology and process | Depreciation methodology is reviewed as a part of the Fair Value process for assets each year. For 2020/21 the revaluation of Community Land and Other Structures is being undertaken. | Progressing |
| | Ongoing improvements to asset data and asset system capabilities | Data cleansing is progressing for Community Land and Other infrastructure as part of the fair value process. | Progressing |
| | Integrate long term asset management considerations into Council decision making process | A reporting template was introduced in August 2017, which includes Fit For Future sustainability ratio impacts of Council recommendations and options, with Long Term Financial Planning and Asset Management impacts included. | Completed |
| | Improved integration of Asset Management Plans and Long Term Financial Plan | Financial data within Asset Management Plans (AMPs) has been updated, in line with Long Term Financial Plan (LTFP) data. Progress continues as AMPs are scheduled for review. Further work is to be completed linking AMP data into LTFP sensitivity analysis - the LTFP is scheduled for development in the second half of the year. | Progressing |



*Good
Government*

QUARTERLY BUDGET
REVIEW STATEMENT
DECEMBER 2020

ATTACHMENTS

17 FEBRUARY 2021

MID-WESTERN REGIONAL COUNCIL
CORPORATE: FINANCE

■ ■ ■ ■ ■ TOWARDS 2030



THIS DOCUMENT HAS BEEN PREPARED BY NEIL BUNGATE, MANAGER FINANCIAL PLANNING FOR MID-WESTERN REGIONAL COUNCIL.

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1. Proposed Budget Variations

Approval of the proposed budget variations in this report will have the following impact on Council's funding sources:

| Fund | Funding Source | 20/21 | 21/22 | 22/23 | Grand Total |
|------------------------|---|--------------------|------------------|------------------|--------------------|
| General | ASSET REPLACEMENT RESERVE | 75,000 | (75,000) | | 0 |
| | CAPITAL PROGRAM RESERVE | (144,000) | | | (144,000) |
| | GRT - BUSHFIRE & EMERGENCY SERVICES - CAPITAL | (94,700) | | | (94,700) |
| | GRT - FOOTPATHS & CYCLEWAYS - CAPITAL | 50,000 | | | 50,000 |
| | GRT - OTHER GRANT INCOME | 10,000 | | | 10,000 |
| | GRT - RECREATION - CAPITAL | (10,000) | (40,000) | | (50,000) |
| | GRT - RECREATION & CULTURE | (2,600) | | | (2,600) |
| | GRT - ROADS & BRIDGES OTHER CAPITAL | 1,019,230 | (139,772) | (150,000) | 729,458 |
| | GRT - ROADS TO RECOVERY | 120,644 | | | 120,644 |
| | GRT - RURAL FIRE SERVICE | 46,567 | | | 46,567 |
| | LAND DEVELOPMENT RESERVE | (60,000) | | | (60,000) |
| | OTR - COUNCIL PROPERTY RENTAL | (50,000) | | | (50,000) |
| | RMS CONTRIBUTIONS - BLOCK | 139,489 | 263,730 | 0 | 403,219 |
| | RMS CONTRIBUTIONS - CAPITAL | | (55,000) | | (55,000) |
| | RMS CONTRIBUTIONS - OPERATING | 18,000 | | | 18,000 |
| | S93F PLANNING AGREEMENTS | (540,000) | 300,000 | | (240,000) |
| | UCF - CONSTRUCTION CERTIFICATES | (35,000) | | | (35,000) |
| | UCF - PLUMBING, DRAINAGE & SEPTIC | (17,000) | | | (17,000) |
| | Unrestricted Cash | 72,480 | (80,000) | | (7,520) |
| | Depreciation (Non-cash adjustment) | (1,900,900) | | | (1,900,900) |
| | UNSPENT GRANTS | 0 | | | 0 |
| | VPA | (290,000) | (300,000) | | (590,000) |
| General Total | | (1,592,790) | (126,042) | (150,000) | (1,868,832) |
| Saleyards | Depreciation (Non-cash adjustment) | (9,400) | | | (9,400) |
| Saleyards Total | | (9,400) | | | (9,400) |
| Sewer | Depreciation (Non-cash adjustment) | (2,900) | | | (2,900) |
| Sewer Total | | (2,900) | | | (2,900) |
| Waste | Unrestricted Cash | (2,469) | | | (2,469) |
| | Depreciation (Non-cash adjustment) | (26,100) | | | (26,100) |
| Waste Total | | (28,569) | | | (28,569) |
| Water | Unrestricted Cash | 0 | | | 0 |
| Water Total | | 0 | | | 0 |
| Grand Total | | (1,633,659) | (126,042) | (150,000) | (1,909,701) |

1.1 2020/2021

| Fund | Variation | Expenditure Budget Variation \$ | Revenue Funding Source 1 | Revenue Funding Source 1 Variation \$ | Revenue Funding Source 2 | Revenue Funding Source 2 Variation \$ | Restricted Funding Source 1 | Restricted Funding Source 1 Variation\$ | Unrestricted Cash Variation \$ |
|---------|---|---------------------------------|-----------------------------------|---------------------------------------|--------------------------|---------------------------------------|-----------------------------|---|--------------------------------|
| General | Rural Sealed Regional Road Admin - Depreciation budget review | -739,400 | - | 0 | - | 0 | - | 0 | 739,400 |
| General | Covid19 Response - 0 | -200,000 | - | 0 | - | 0 | - | 0 | 200,000 |
| General | Drainage Maintenance - Culvert Replacement - Reallocate budgeted funds to drainage maintenance across the unsealed network as this is priority. | -100,000 | - | 0 | - | 0 | - | 0 | 100,000 |
| General | Building Regulatory Services - Increase due to the increase in the volume of building work as a result of the COVID pandemic and decrease in salaries due to the Senior H&B position still vacant. | -89,400 | UCF - CONSTRUCTION CERTIFICATES | (35,000) | - | 0 | - | 0 | 124,400 |
| General | Public Health Registrations & Inspections - Increase due to the increase in the volume of residential work as a result of the COVID pandemic and a decrease in the salaries expense due to the EHO position still being vacant. | -89,000 | UCF - PLUMBING, DRAINAGE & SEPTIC | (17,000) | - | 0 | - | 0 | 106,000 |
| General | Red Hill Capital Works - Defer \$80k to 21/22 | -80,000 | GRT - RECREATION - CAPITAL | 40,000 | - | 0 | - | 0 | 40,000 |
| General | Mudgee Showgrounds - Road Rehab And Fencing - Defer road rehab to 21/22 | -75,000 | - | 0 | - | 0 | ASSET REPLACEMENT RESERVE | 75,000 | 0 |
| General | Reseal - Gundowda Rd Seg 10-30,70 - Project completed with savings | -50,575 | GRT - ROADS TO RECOVERY | 35,575 | - | 0 | - | 0 | 15,000 |

| Fund | Variation | Expenditure Budget Variation \$ | Revenue Funding Source 1 | Revenue Funding Source 1 Variation \$ | Revenue Funding Source 2 | Revenue Funding Source 2 Variation \$ | Restricted Funding Source 1 | Restricted Funding Source 1 Variation\$ | Unrestricted Cash Variation \$ |
|---------|---|---------------------------------|--------------------------|---------------------------------------|--------------------------|---------------------------------------|-----------------------------|---|--------------------------------|
| General | Strategic Initiatives - Savings used in other budgets to reduce negative impact to unrestricted cash. | -50,000 | - | 0 | - | 0 | - | 0 | 50,000 |
| General | Reseal - Henry Lawson Dr Seg 130-160 - Project completed with savings | -49,611 | GRT - ROADS TO RECOVERY | 29,415 | - | 0 | - | 0 | 20,196 |
| General | Financial Services - Reduce budget as the System Accountant position is still vacant. | -44,700 | - | 0 | - | 0 | - | 0 | 44,700 |
| General | Rural Fire Service - Vehicles - Funds transfer from RFS general operations budget fund to cover vehicle costs | -43,468 | - | 0 | - | 0 | - | 0 | 43,468 |
| General | Members Expenses - Savings LGNSW membership not taken up for 2019/20. Savings used in other budgets to reduce negative | -40,000 | - | 0 | - | 0 | - | 0 | 40,000 |
| General | Weeds Inspection - Savings in internal plant hire reallocated to reduce negative impact to unrestricted cash. | -40,000 | - | 0 | - | 0 | - | 0 | 40,000 |
| General | Environment - Projects - Roadside vegetation mapping and management plan deferred to 21/22 to source required funds to complete | -40,000 | - | 0 | - | 0 | - | 0 | 40,000 |
| General | Mudgee Stores Building - Mudgee stores building works cancelled. | -31,000 | - | 0 | - | 0 | - | 0 | 31,000 |
| General | Mudgee Cbd Parking Improvement - Reduce grant funding due to duplication of budget. Grant received is \$30k. | -30,000 | - | 0 | - | 0 | - | 0 | 30,000 |
| General | Art Gallery Operations - Depreciation budget review | -25,700 | - | 0 | - | 0 | - | 0 | 25,700 |

| Fund | Variation | Expenditure Budget Variation \$ | Revenue Funding Source 1 | Revenue Funding Source 1 Variation \$ | Revenue Funding Source 2 | Revenue Funding Source 2 Variation \$ | Restricted Funding Source 1 | Restricted Funding Source 1 Variation \$ | Unrestricted Cash Variation \$ |
|---------|---|---------------------------------|--------------------------|---------------------------------------|--------------------------|---------------------------------------|-----------------------------|--|--------------------------------|
| General | Reseal - Henry Lawson Dr Seg 80-90,120 - Project completed with savings. | -24,398 | GRT - ROADS TO RECOVERY | 5,398 | - | 0 | - | 0 | 19,000 |
| General | Reseal - Craigmoor Rd Seg 10 - Project completed with savings and reallocate Roads to Recovery grant to fund this project | -20,507 | GRT - ROADS TO RECOVERY | (29,493) | - | 0 | - | 0 | 50,000 |
| General | Mudgee Valley Park Upgrade - Reallocate budget to 75105 for operating | -19,000 | - | 0 | - | 0 | - | 0 | 19,000 |
| General | Urban Reseals - Norman Rd Seg 10-30 - Reallocate savings to other priorities. | -18,736 | - | 0 | - | 0 | - | 0 | 18,736 |
| General | Urban Reseals - Bayly St Seg 10-60 - Reallocate savings to other priorities. | -15,000 | - | 0 | - | 0 | - | 0 | 15,000 |
| General | Reseal - Craigmoor Rd Seg 20 - Project completed with savings and reallocate Roads to Recovery grant to fund this project | -14,195 | GRT - ROADS TO RECOVERY | (25,806) | - | 0 | - | 0 | 40,001 |
| General | Reseal - Edgell Lane Seg 10 - Reallocate savings to other priorities. | -12,013 | - | 0 | - | 0 | - | 0 | 12,013 |
| General | Reseal - Tip Rd Gulgong Seg 10 - Reallocate savings to other priorities. | -11,001 | - | 0 | - | 0 | - | 0 | 11,001 |
| General | Purchase Of Mobile Devices - Transfer of budget to IT Operations as devices are leased | -9,997 | - | 0 | - | 0 | UNSPENT GRANTS | 9,997 | 0 |
| General | Reseal - Green Gully Rd Seg 15 - To reallocate savings to other priorities. | -7,361 | - | 0 | - | 0 | - | 0 | 7,361 |
| General | Urban Reseals - Cox St Seg 10 - Reallocate savings to other priorities. | -7,004 | - | 0 | - | 0 | - | 0 | 7,004 |
| General | Urban Reseals - Cedar Ave Seg 10-20 - Reallocate savings to other priorities. | -6,983 | - | 0 | - | 0 | - | 0 | 6,983 |

| Fund | Variation | Expenditure Budget Variation \$ | Revenue Funding Source 1 | Revenue Funding Source 1 Variation \$ | Revenue Funding Source 2 | Revenue Funding Source 2 Variation \$ | Restricted Funding Source 1 | Restricted Funding Source 1 Variation\$ | Unrestricted Cash Variation \$ |
|---------|---|---------------------------------|--------------------------|---------------------------------------|--------------------------|---------------------------------------|-----------------------------|---|--------------------------------|
| General | Urban Reseals - Wyaldra St Seg 10 - Reallocate savings to other priorities. | -6,068 | - | 0 | - | 0 | - | 0 | 6,068 |
| General | Urban Reseals - Robert Jones St Seg 10 - Reallocate savings to other priorities. | -4,531 | - | 0 | - | 0 | - | 0 | 4,531 |
| General | Rural Fire Service - Fire Fighting Fund - Budget revision following 20/21 fund allocation | -2,909 | - | 0 | - | 0 | - | 0 | 2,909 |
| General | Urban Reseals - Bellevue Rd Seg 30-60 - Reallocate savings to other priorities. | -2,886 | - | 0 | - | 0 | - | 0 | 2,886 |
| General | Reseal - Durridgerie Rd Seg 10 - Reallocate savings to other priorities. | -2,555 | - | 0 | - | 0 | - | 0 | 2,555 |
| General | Urban Reseals - Glenmore St Seg 10 - Reallocate savings to other priorities. | -2,080 | - | 0 | - | 0 | - | 0 | 2,080 |
| General | Reseal - Bonds Rd Seg 10 - Reallocate savings to other priorities. | -1,954 | - | 0 | - | 0 | - | 0 | 1,954 |
| General | Urban Reseals - Cox St Seg 15-20 - Reallocate savings to other priorities. | -1,582 | - | 0 | - | 0 | - | 0 | 1,582 |
| General | Reseal - Pound Rd Seg 10 - Reallocate savings to other priorities. | -1,486 | - | 0 | - | 0 | - | 0 | 1,486 |
| General | Reseal - Riverlea Rd Seg 10 - Reallocate savings to other priorities. | -1,215 | - | 0 | - | 0 | - | 0 | 1,215 |
| General | Reseal - Green Gully Rd Seg 105 - Reallocate savings to other priorities. | -1,028 | - | 0 | - | 0 | - | 0 | 1,028 |
| General | Rural Fire Service - Stations & Sheds - To reallocate funds within the project | -190 | - | 0 | - | 0 | - | 0 | 190 |

| Fund | Variation | Expenditure Budget Variation \$ | Revenue Funding Source 1 | Revenue Funding Source 1 Variation \$ | Revenue Funding Source 2 | Revenue Funding Source 2 Variation \$ | Restricted Funding Source 1 | Restricted Funding Source 1 Variation \$ | Unrestricted Cash Variation \$ |
|---------|---|---------------------------------|-------------------------------------|---------------------------------------|--------------------------|---------------------------------------|-----------------------------|--|--------------------------------|
| General | S94 General Fund Contributions - Moolarben underground revenue received in 20/21 transferred from 21/22. Wollar Solar VPA expected in 20/21. | 0 | S93F PLANNING AGREEMENTS | (540,000) | - | 0 | VPA | 540,000 | 0 |
| General | Rural Unsealed Roads Administration - Depreciation budget review | 1,120,200 | - | 0 | - | 0 | - | 0 | (1,120,200) |
| General | Airport - Operations & Maintenance - Depreciation budget review | 567,700 | - | 0 | - | 0 | - | 0 | (567,700) |
| General | Resheeting - Allocate additional funding to resheeting as highly beneficial work occurring through this budget on unsealed roads. | 270,000 | - | 0 | - | 0 | - | 0 | (270,000) |
| General | Plant Operations Fund - Depreciation budget review | 221,000 | - | 0 | - | 0 | - | 0 | (221,000) |
| General | Active Parks - Administration - Depreciation budget review | 134,100 | - | 0 | - | 0 | - | 0 | (134,100) |
| General | Community Buildings Administration - Depreciation budget review | 123,600 | - | 0 | - | 0 | - | 0 | (123,600) |
| General | Corporate Buildings Admin - Depreciation budget review | 120,400 | - | 0 | - | 0 | - | 0 | (120,400) |
| General | Backup Disaster Recovery Upgrade - Additional funds required for 5 year solution based on RFQ responses and business requirements. | 110,000 | - | 0 | - | 0 | CAPITAL PROGRAM RESERVE | (110,000) | 0 |
| General | Munghom Gap Realignment & Upgrade - Recognise funding changes due to unsuccessful industry funding and change in timing of grant income. Increase in project spend of \$110k. In 21/22 revised project spend and funding source | 110,000 | GRT - ROADS & BRIDGES OTHER CAPITAL | 869,230 | - | 0 | VPA | (830,000) | (149,230) |

CORPORATE: FINANCE |

| Fund | Variation | Expenditure Budget Variation \$ | Revenue Funding Source 1 | Revenue Funding Source 1 Variation \$ | Revenue Funding Source 2 | Revenue Funding Source 2 Variation \$ | Restricted Funding Source 1 | Restricted Funding Source 1 Variation\$ | Unrestricted Cash Variation \$ |
|---------|--|---------------------------------|-------------------------------|---------------------------------------|--------------------------|---------------------------------------|-----------------------------|---|--------------------------------|
| General | Drainage Maintenance - Reallocate budget from Culvert replacement to drainage maintenance as the council is currently carrying out significant maintenance across the unsealed network to avoid ongoing drainage issues such as shoulder scours. | 100,000 | - | 0 | - | 0 | - | 0 | (100,000) |
| General | Carparking - Administration - Depreciation budget review | 95,600 | - | 0 | - | 0 | - | 0 | (95,600) |
| General | Caravan Park - Mudgee Valley Park - Occupancy rates higher than originally forecasted \$50k. These higher rates are expected to continue. Reallocate \$19k budget from capital budget. \$24.6k depreciation budget review | 93,600 | OTR - COUNCIL PROPERTY RENTAL | (50,000) | - | 0 | - | 0 | (43,600) |
| General | Grimshaw Lane/Welcome Reef Lane - Grimshaw Land and Welcome Reef Lane have been added to the maintenance list. These roads require works to bring up to standard. | 80,000 | - | 0 | - | 0 | - | 0 | (80,000) |
| General | Lgrs Road Safety Program - LG Road Safety Program Funding and management costs | 60,100 | RMS CONTRIBUTIONS - OPERATING | (28,000) | - | 0 | - | 0 | (32,100) |

| Fund | Variation | Expenditure Budget Variation \$ | Revenue Funding Source 1 | Revenue Funding Source 1 Variation \$ | Revenue Funding Source 2 | Revenue Funding Source 2 Variation \$ | Restricted Funding Source 1 | Restricted Funding Source 1 Variation\$ | Unrestricted Cash Variation \$ |
|---------|---|---------------------------------|--------------------------|---------------------------------------|--------------------------|---------------------------------------|-----------------------------|---|--------------------------------|
| General | Passive Parks - MWRC Operations - Major safety repairs required at the Mudgee Robertson Park playground. Repairs are required on several platforms for 9k and the shade sail for 2.5k. Increase in workload within parks and garden activities due to the recent weather during the growing season. It is envisaged that the casual staff will need to continue to be utilised to ensure that service standards can be maintained over the coming months. | 51,500 | - | 0 | - | 0 | - | 0 | (51,500) |
| General | Community Centre - Court Street Capital Works - New capital budget for costs including subdivision, master planning, fencing and asbestos reporting for the new Community Centre at 70 Court Street | 50,000 | - | 0 | - | 0 | - | 0 | (50,000) |
| General | Glen Willow Sports Ground Upgrades - For the purchase of a new shed at Glen Willow. The shed is expected to cost 60k. | 50,000 | - | 0 | - | 0 | - | 0 | (50,000) |
| General | Glen Willow Shed - To move budget of \$50k for the purchase of a new shed at Glen Willow to Glen Willow Stage 2 project as the shed fits in the scope | -50,000 | - | 0 | - | 0 | - | 0 | 50,000 |
| General | Footways - Administration - Depreciation budget review | 44,700 | - | 0 | - | 0 | - | 0 | (44,700) |

CORPORATE: FINANCE |

| Fund | Variation | Expenditure Budget Variation \$ | Revenue Funding Source 1 | Revenue Funding Source 1 Variation \$ | Revenue Funding Source 2 | Revenue Funding Source 2 Variation \$ | Restricted Funding Source 1 | Restricted Funding Source 1 Variation\$ | Unrestricted Cash Variation \$ |
|---------|--|---------------------------------|--------------------------|---------------------------------------|--------------------------|---------------------------------------|-----------------------------|---|--------------------------------|
| General | Community Centres - 70 Court Street - Budget for operating expenses such as cleaning, repairs, maintenance, rates, water and electricity for the new Community Centre at 70 Court Street | 40,000 | - | 0 | - | 0 | - | 0 | (40,000) |
| General | Customer Services - Depreciation budget review | 38,000 | - | 0 | - | 0 | - | 0 | (38,000) |
| General | Capital Works Pitts Lane - Upgrade works to Pitts Lane property | 34,000 | - | 0 | - | 0 | CAPITAL PROGRAM RESERVE | (34,000) | 0 |
| General | Library Building - Mudgee - Depreciation budget review | 31,900 | - | 0 | - | 0 | - | 0 | (31,900) |
| General | Information Technology Operations - Additional required for existing staff wages and transfer of mobile devices budget in | 29,997 | - | 0 | - | 0 | UNSPENT GRANTS | (9,997) | (20,000) |
| General | Council Works Depots - Buildings - Additional \$9k required for building maintenance urgently required during the year. Depreciation budget review \$18.2k | 27,200 | - | 0 | - | 0 | - | 0 | (27,200) |
| General | IT Corporate Software - For the implementation of the PULSE modules which is expected to commence in February/ March | 27,000 | - | 0 | - | 0 | - | 0 | (27,000) |
| General | Corporate Development - For the new Digital Communications Officer role expected to start in April. | 24,420 | - | 0 | - | 0 | - | 0 | (24,420) |
| General | Caravan Park - Cudgong Waters - \$1.5k for unforeseen maintenance work required. Depreciation review \$22.6k | 24,100 | - | 0 | - | 0 | - | 0 | (24,100) |

| Fund | Variation | Expenditure Budget Variation \$ | Revenue Funding Source 1 | Revenue Funding Source 1 Variation \$ | Revenue Funding Source 2 | Revenue Funding Source 2 Variation \$ | Restricted Funding Source 1 | Restricted Funding Source 1 Variation\$ | Unrestricted Cash Variation \$ |
|---------|---|---------------------------------|-------------------------------|---------------------------------------|--------------------------|---------------------------------------|-----------------------------|---|--------------------------------|
| General | Commercial Prop - Administration - Depreciation budget review | 19,000 | - | 0 | - | 0 | - | 0 | (19,000) |
| General | Rural Fire Service - General Operations - \$46.5 k. To reallocate funds to be used specifically for RFS vehicles, station and sheds and the firefighting funds. Depreciation budget review \$16.3k | 16,300 | GRT - RURAL FIRE SERVICE | 46,567 | - | 0 | - | 0 | (62,867) |
| General | Active Parks - Glen Willow Building Maintenance - To purchase a defibrillator for the Rugby Union and Junior Rugby League buildings, partly grant funded. Additional \$10k maintenance required. | 15,350 | GRT - RECREATION & CULTURE | (2,600) | - | 0 | - | 0 | (12,750) |
| General | Property - Income - Depreciation budget review | 14,900 | - | 0 | - | 0 | - | 0 | (14,900) |
| General | Public Toilets - General Operations - Additional \$5k required for unexpected maintenance required. Depreciation budget review \$9.6k | 14,600 | - | 0 | - | 0 | - | 0 | (14,600) |
| General | Mid-Western Operations Administration - Operations admin employee savings due to vacancies, offset by additional expenditure on contract labour and contractors to fill vacancies. Transfer employee costs and grant to Road Safety Program | 13,000 | RMS CONTRIBUTIONS - OPERATING | 46,000 | - | 0 | - | 0 | (59,000) |
| General | Local Emergency Management Committee - For the Senior Works Engineer's time for the Local Emergency Management Committee. | 12,000 | - | 0 | - | 0 | - | 0 | (12,000) |
| General | Pool Operations - Kandos - Depreciation budget review | 9,700 | - | 0 | - | 0 | - | 0 | (9,700) |

| Fund | Variation | Expenditure Budget Variation \$ | Revenue Funding Source 1 | Revenue Funding Source 1 Variation \$ | Revenue Funding Source 2 | Revenue Funding Source 2 Variation \$ | Restricted Funding Source 1 | Restricted Funding Source 1 Variation\$ | Unrestricted Cash Variation \$ |
|---------|---|---------------------------------|--------------------------|---------------------------------------|--------------------------|---------------------------------------|-----------------------------|---|--------------------------------|
| General | Passive Parks - Building Maintenance - Additional funds required for building maintenance urgently required during the year. | 8,000 | - | 0 | - | 0 | - | 0 | (8,000) |
| General | Human Resources - PULSE module annual license fees for onboarding which is expected to commence in March 2021 and PULSE module annual fees for e-recruitment which is expected to commence in May/June 2021. | 7,450 | - | 0 | - | 0 | - | 0 | (7,450) |
| General | Active Parks - Building Maintenance - To repair substantial vandalism including fire and graffiti which has occurred at the Billy Dunn Oval in Gulgong. Requirements to make an insurance claim were not met. | 7,000 | - | 0 | - | 0 | - | 0 | (7,000) |
| General | Caravan Park - Rylstone - Depreciation budget review | 6,700 | - | 0 | - | 0 | - | 0 | (6,700) |
| General | Reseal - Nullo Mountain Rd Seg 110 - Minor overspend reallocated from other savings. | 5,910 | - | 0 | - | 0 | - | 0 | (5,910) |
| General | State Emergency Services - Depreciation budget review | 5,800 | - | 0 | - | 0 | - | 0 | (5,800) |
| General | Passive Parks - Administration - Depreciation budget review | 5,500 | - | 0 | - | 0 | - | 0 | (5,500) |
| General | Caravan Park - Riverside - Depreciation budget review | 5,100 | - | 0 | - | 0 | - | 0 | (5,100) |
| General | Lgrs Road Safety Campaigns - RSO campaigns to be fully funded by RMS. | 5,000 | - | 0 | - | 0 | - | 0 | (5,000) |
| General | Pool Operations - Mudgee - Depreciation budget review | 4,900 | - | 0 | - | 0 | - | 0 | (4,900) |

CORPORATE: FINANCE |

| Fund | Variation | Expenditure Budget Variation \$ | Revenue Funding Source 1 | Revenue Funding Source 1 Variation \$ | Revenue Funding Source 2 | Revenue Funding Source 2 Variation \$ | Restricted Funding Source 1 | Restricted Funding Source 1 Variation\$ | Unrestricted Cash Variation \$ |
|---------|---|---------------------------------|---------------------------|---------------------------------------|-------------------------------------|---------------------------------------|-----------------------------|---|--------------------------------|
| General | Street Sign Replacements - Reallocate additional budget from savings in reseals | 4,000 | - | 0 | - | 0 | - | 0 | (4,000) |
| General | Corporate - Administration Centre Gulgong - To replace old air-con which no longer works. | 3,600 | - | 0 | - | 0 | - | 0 | (3,600) |
| General | Pool Operations - Gulgong - Depreciation budget review | 3,200 | - | 0 | - | 0 | - | 0 | (3,200) |
| General | Public Toilets - Mudgee Baby Change Room - Additional funds required for unexpected maintenance required | 3,000 | - | 0 | - | 0 | - | 0 | (3,000) |
| General | Cemetery Mtce - Administration - Depreciation budget review | 2,700 | - | 0 | - | 0 | - | 0 | (2,700) |
| General | Reseal - Old Grattai Rd Seg 5 - Minor overspend reallocated from other savings. | 2,351 | - | 0 | - | 0 | - | 0 | (2,351) |
| General | Corporate - Key & Lock Maintenance - Additional key and maintenance costs. | 1,000 | - | 0 | - | 0 | - | 0 | (1,000) |
| General | Aged Care Units - Louee Street Rylstone - Additional funds required for unexpected maintenance required. | 1,000 | - | 0 | - | 0 | - | 0 | (1,000) |
| General | Rural Sealed Regional Road Maintenance - Reduce Block Grant funding as no indexation was applied for 20/21 and recover unspent funds in 19/20 | 0 | RMS CONTRIBUTIONS - BLOCK | 89,489 | - | 0 | - | 0 | (89,489) |
| General | BVW Upgrade Rnsw 2080 - Current year project savings. Reallocate to final year of project in 22/23. | -200,000 | RMS CONTRIBUTIONS - BLOCK | 50,000 | GRT - ROADS & BRIDGES OTHER CAPITAL | 150,000 | - | 0 | 0 |

CORPORATE: FINANCE |

| Fund | Variation | Expenditure Budget Variation \$ | Revenue Funding Source 1 | Revenue Funding Source 1 Variation \$ | Revenue Funding Source 2 | Revenue Funding Source 2 Variation \$ | Restricted Funding Source 1 | Restricted Funding Source 1 Variation\$ | Unrestricted Cash Variation \$ |
|---------|---|---------------------------------|---|---------------------------------------|--------------------------|---------------------------------------|-----------------------------|---|--------------------------------|
| General | Streetscape - Rfs Hazard Reduction - New grant received for Hazard reduction | 65,700 | GRT - BUSHFIRE & EMERGENCY SERVICES - CAPITAL | (65,700) | - | 0 | - | 0 | 0 |
| General | Reseal - Queens Pinch Rd Seg 70,110-120 - Project completed with savings | -64,103 | GRT - ROADS TO RECOVERY | 64,103 | - | 0 | - | 0 | 0 |
| General | Mudgee Dog Park Relocation & Upgrade - Funding reallocated from the Walkers Oval Pathway project. The Mudgee Dog Park project falls under the same funding agreement. Additional funding is required to ensure that the relocation can be completed to a high standard. There is a high level of community interest which has highlighted the need to increase the fence height and quality, the size and layout of the park and the desire for the park to be irrigated. | 50,000 | GRT - RECREATION - CAPITAL | (50,000) | - | 0 | - | 0 | 0 |
| General | Footpath - Walkers Oval To Cultural Precinct - To move the funding to the Mudgee Dog Park project. The Mudgee Dog Park project falls under the same funding agreement. | -50,000 | GRT - FOOTPATHS & CYCLEWAYS - CAPITAL | 50,000 | - | 0 | - | 0 | 0 |
| General | Reseal - Queens Pinch Rd Seg 50 - Project complete with savings | -41,452 | GRT - ROADS TO RECOVERY | 41,452 | - | 0 | - | 0 | 0 |
| General | Rural Fire Service - Olinda Station (Capital) - RFS Capital works. Council will be reimbursed | 29,000 | GRT - BUSHFIRE & EMERGENCY SERVICES - CAPITAL | (29,000) | - | 0 | - | 0 | 0 |

| Fund | Variation | Expenditure Budget Variation \$ | Revenue Funding Source 1 | Revenue Funding Source 1 Variation \$ | Revenue Funding Source 2 | Revenue Funding Source 2 Variation \$ | Restricted Funding Source 1 | Restricted Funding Source 1 Variation \$ | Unrestricted Cash Variation \$ |
|-----------|--|---------------------------------|--------------------------|---------------------------------------|--------------------------|---------------------------------------|-----------------------------|--|--------------------------------|
| General | Flavours Of Mudgee - Reduce grant funding due to duplication of budget. Grant received will be \$20k. | -20,000 | GRT - OTHER GRANT INCOME | 20,000 | - | 0 | - | 0 | 0 |
| General | Bushfire Green Waste - Grant received for the assessment of bushfire green waste. | 10,000 | GRT - OTHER GRANT INCOME | (10,000) | - | 0 | - | 0 | 0 |
| General | Gulgong Hall - Change project scope to internal improvement and painting \$34k. Original plumbing works were able to be rectified through operational costs. | 0 | - | 0 | - | 0 | - | 0 | 0 |
| General | Property - Ex Saleyards Stage I - Increase transfer from land development reserve for Saleyards Lane. | 0 | - | 0 | - | 0 | LAND DEVELOPMENT RESERVE | (60,000) | 60,000 |
| Saleyards | Saleyards Administration - Depreciation budget review | 9,400 | - | 0 | - | 0 | - | 0 | (9,400) |
| Sewer | Sewer Management & Administration - Depreciation budget review | 2,900 | - | 0 | - | 0 | - | 0 | (2,900) |
| Waste | Waste - General Operations - Depreciation budget review | 26,100 | - | 0 | - | 0 | - | 0 | (26,100) |
| Waste | Weighbridge Software Upgrade - Components of the weighbridge system have increased in costs since the original quote was obtained for budgeting purposes | 2,469 | - | 0 | - | 0 | - | 0 | (2,469) |
| Water | Water River Intakes Ops & Maint - Reallocation of savings to Raw Water Systems. | -35,000 | - | 0 | - | 0 | - | 0 | 35,000 |

CORPORATE: FINANCE |

| Fund | Variation | Expenditure Budget Variation \$ | Revenue Funding Source 1 | Revenue Funding Source 1 Variation \$ | Revenue Funding Source 2 | Revenue Funding Source 2 Variation \$ | Restricted Funding Source 1 | Restricted Funding Source 1 Variation\$ | Unrestricted Cash Variation \$ |
|--------------|---|---------------------------------|--------------------------|---------------------------------------|--------------------------|---------------------------------------|-----------------------------|---|--------------------------------|
| Water | Raw Water Systems Ops & Maint - Reallocation from Water River Intakes so additional pumps can be recommissioned in existing wells to establish higher level of service for Glen Willow. | 35,000 | - | 0 | - | 0 | - | 0 | (35,000) |
| Total | | 1,633,659 | | 504,630 | | 150,000 | | (419,000) | (1,869,289) |

| Fund | Variation | Expenditure Budget Variation \$ | Revenue Funding Source 1 | Revenue Funding Source 1 Variation \$ | Revenue Funding Source 2 | Revenue Funding Source 2 Variation \$ | Restricted Funding Source 1 | Restricted Funding Source 1 Variation \$ | Unrestricted Cash Variation \$ |
|--------------|--|---------------------------------|----------------------------|---------------------------------------|-------------------------------------|---------------------------------------|-----------------------------|--|--------------------------------|
| General | Red Hill Capital Works - Defer \$80k to 21/22 | 80,000 | GRT - RECREATION - CAPITAL | (40,000) | - | 0 | - | 0 | (40,000) |
| General | Mudgee Showgrounds - Road Rehab And Fencing - Defer road rehab to 21/22 | 75,000 | - | 0 | - | 0 | ASSET REPLACEMENT RESERVE | (75,000) | 0 |
| General | Munghorn Gap Realignment & Upgrade - Recognise funding changes due to unsuccessful industry funding and change in timing of grant income. Increase in project spend of \$110k. In 21/22 revised project spend and funding source | -68,958 | RMS CONTRIBUTIONS - BLOCK | 263,730 | GRT - ROADS & BRIDGES OTHER CAPITAL | (194,772) | - | 0 | 0 |
| General | Environment - Projects - Roadside vegetation mapping and management plan deferred to 21/22 to source required funds to complete | 40,000 | - | 0 | - | 0 | - | 0 | (40,000) |
| General | S94 General Fund Contributions - Moolarben underground revenue received in 20/21 transferred from 21/22. Wollar Solar VPA expected in 20/21. | 0 | S93F PLANNING AGREEMENTS | 300,000 | - | 0 | VPA | (300,000) | 0 |
| Total | | 126,042 | | 523,730 | | (194,772) | | (375,000) | (80,000) |

1.3 2022/2023

| Fund | Variation | Expenditure Budget Variation \$ | Revenue Funding Source 1 | Revenue Funding Source 1 Variation \$ | Revenue Funding Source 2 | Revenue Funding Source 2 Variation \$ | Restricted Funding Source 1 | Restricted Funding Source 1 Variation\$ | Unrestricted Cash Variation \$ |
|--------------|---|---------------------------------|---------------------------|---------------------------------------|-------------------------------------|---------------------------------------|-----------------------------|---|--------------------------------|
| General | BVW Upgrade Rnsw 2080 - Current year project savings. Reallocate to final year of project in 22/23. | 200,000 | RMS CONTRIBUTIONS - BLOCK | (50,000) | GRT - ROADS & BRIDGES OTHER CAPITAL | (150,000) | - | 0 | 0 |
| General | Rural Sealed Regional Road Capital - Allocate out \$50k Block Grant to Bylong Valley Way project | -50,000 | RMS CONTRIBUTIONS - BLOCK | 50,000 | - | 0 | - | 0 | 0 |
| Total | | 150,000 | | 0 | | (150,000) | | 0 | 0 |

2. Cash and Investment Summary

| RESERVE | Opening Balance | Current Budgeted Movement | Proposed Budgeted Changes | Revised Budget Movement | Revised Budget Closing Balance | Actual Balance Year To Date |
|--------------------------------|-----------------|---------------------------|---------------------------|-------------------------|--------------------------------|-----------------------------|
| Internal Reserves | | | | | | |
| Employee Leave Entitlements | 2,895 | 500 | 0 | 500 | 3,395 | 3,145 |
| Land Development | 1,044 | 1,074 | (60) | 1,014 | 2,057 | 1,171 |
| Election | 220 | (183) | 0 | (183) | 37 | 229 |
| Plant Replacement | 5,467 | (1,849) | 0 | (1,849) | 3,618 | 6,314 |
| Asset Replacement | 2,718 | (584) | 75 | (509) | 2,208 | 3,307 |
| Capital Program | 667 | 2,317 | (144) | 2,173 | 2,840 | 2,061 |
| Livestock Exchange | 40 | (11) | 0 | (11) | 30 | 40 |
| State Roads Warranty | 400 | 0 | 0 | 0 | 400 | 400 |
| Future Fund | 520 | 300 | 0 | 300 | 820 | 670 |
| Community Plan | 0 | 0 | 0 | 0 | 0 | 0 |
| Seal Extension Program | 2,972 | (171) | 0 | (171) | 2,801 | 3,475 |
| Other Internal Restrictions | 3,483 | (3,483) | 0 | (3,483) | 0 | 1,742 |
| TOTAL INTERNAL RESERVES | 20,427 | (2,090) | (129) | (2,219) | 18,208 | 22,554 |

External Reserves

CORPORATE: FINANCE |

| RESERVE | Opening Balance | Current Budgeted Movement | Proposed Budgeted Changes | Revised Budget Movement | Revised Budget Closing Balance | Actual Balance Year To Date |
|---|-----------------|---------------------------|---------------------------|-------------------------|--------------------------------|-----------------------------|
| Waste | 3,909 | (648) | 0 | (648) | 3,260 | 3,863 |
| Sewer | 8,430 | 958 | 0 | 958 | 9,388 | 9,395 |
| Water | 7,119 | (798) | 0 | (798) | 6,321 | 7,081 |
| Community Services | 77 | 0 | 0 | 0 | 77 | 77 |
| Community Tenancy Scheme | 175 | 45 | 0 | 45 | 220 | 198 |
| Family Day Care | 176 | (84) | 0 | (84) | 93 | 142 |
| Bequest - Simpkins Park | 101 | 0 | 0 | 0 | 101 | 101 |
| Community Transport Vehicle Replacement | 238 | 95 | 0 | 95 | 333 | 298 |
| Public Road Closure Compensation | 860 | 0 | 0 | 0 | 860 | 860 |
| Other External Restrictions | 45 | 0 | 0 | 0 | 45 | 45 |
| Developer Contributions (VPA) | 3,801 | (633) | (290) | (923) | 2,878 | 4,486 |
| Developer Contributions (7.11 & 7.12) | 4,312 | (107) | 0 | (107) | 4,205 | 4,581 |
| Developer Contributions (S64 Water) | 5,747 | 235 | 0 | 235 | 5,981 | 6,046 |
| Developer Contributions (S64 Sewer) | 3,369 | 242 | 0 | 242 | 3,611 | 3,442 |
| Unspent Grants | 1,799 | (1,391) | 0 | (1,391) | 409 | 1,353 |
| Waste Fund Unrestricted Cash | 1,107 | 22 | (41) | (19) | 1,088 | 1,974 |

| RESERVE | Opening Balance | Current Budgeted Movement | Proposed Budgeted Changes | Revised Budget Movement | Revised Budget Closing Balance | Actual Balance Year To Date |
|--|-----------------|---------------------------|---------------------------|-------------------------|--------------------------------|-----------------------------|
| Sewer Fund Unrestricted Cash | 2,043 | (272) | (463) | (735) | 1,308 | 3,360 |
| Water Fund Unrestricted Cash | 2,358 | 312 | (348) | (36) | 2,322 | 2,396 |
| Contract Liabilities | 5,883 | 0 | 0 | 0 | 5,883 | 10,179 |
| Trust Deposits | 703 | 0 | 0 | 0 | 703 | 495 |
| TOTAL EXTERNAL RESERVES | 52,253 | (2,025) | (1,142) | (3,167) | 49,086 | 60,373 |
| TOTAL RESERVES | 72,679 | -4,115 | -1,271 | -5,386 | 67,293 | 82,927 |
| Unrestricted Cash | 14,344 | (6,446) | (431) | (6,877) | 7,467 | 16,076 |
| TOTAL RESTRICTED CASH, CASH EQUIVALENTS AND INVESTMENTS | 87,023 | (10,561) | (1,702) | (12,263) | 74,760 | 99,003 |

3. Unrestricted Cash by Fund

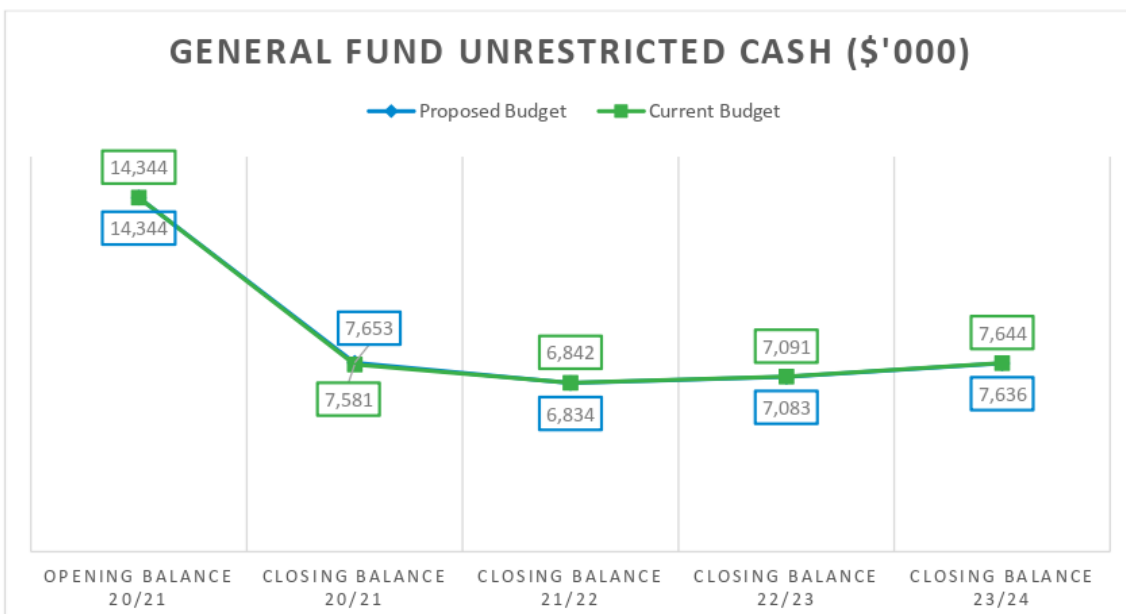
3.1 General Fund

Council finished the 2019/20 financial year with an unrestricted cash balance of \$14.344 million. As adopted by Council the Original Budget projected a decrease to 30 June 2021 of \$5.074 million. Council has since adopted the following budget movements, summarised below.

| Variation | Amount (\$'000) | Movement |
|---|-----------------|-----------------|
| Original Budget | (5,074) | Decrease |
| Revotes | (907) | Decrease |
| Approved variations | (782) | Decrease |
| QBR proposed variations | 72 | Increase |
| Estimated movement to 30 June 2021 | (6,691) | Decrease |
| Projected balance at 30 June 2021 | 7,653 | |

A projected unrestricted cash balance of \$7.653 million represents about 7 weeks of Council's 2020/21 operating expenditure budget. This is a high level of unrestricted cash and is adequate to ensure Council is able to meet its debts and obligations as they fall due.

The General Fund projected unrestricted cash balance over the next four years is shown below.



3.2 Water Fund

Council finished the 2019/20 financial year with a Water fund unrestricted cash balance of \$2.358 million. As adopted by Council the Original Budget projected an increase to 30 June 2021 of \$412k. The budget movements are summarised below.

| Variation | Amount (\$'000) | Movement |
|---|-----------------|-----------------|
| Original Budget | 412 | Increase |
| Revotes | 0 | Decrease |
| Approved variations | (448) | Decrease |
| QBR proposed variations | 0 | Decrease |
| Estimated movement to 30 June 2021 | (36) | Decrease |
| Projected balance at 30 June 2021 | 2,322 | |

3.3 Sewer Fund

Council finished the 2019/20 financial year with a Sewer Fund unrestricted cash balance of \$2.043 million. As adopted by Council the Original Budget projected a decrease to 30 June 2021 of \$172k. The budget movements are summarised below.

| Variation | Amount (\$'000) | Movement |
|---|-----------------|-----------------|
| Original Budget | (172) | Decrease |
| Revotes | 0 | Decrease |
| Approved variations | (563) | Decrease |
| QBR proposed variations | 0 | Decrease |
| Estimated movement to 30 June 2021 | (735) | Decrease |
| Projected balance at 30 June 2021 | 1,308 | |

3.4 Waste Fund

Council finished the 2019/20 financial year with a Waste Fund unrestricted cash balance of \$1.107 million. As adopted by Council the Original Budget projected an increase to 30 June 2021 of \$22k. The budget movements are summarised below.

| Variation | Amount (\$'000) | Movement |
|---|-----------------|-----------------|
| Original Budget | 22 | Increase |
| Revotes | 0 | Decrease |
| Approved variations | 71 | Increase |
| QBR proposed variations | (2) | Decrease |
| Estimated movement to 30 June 2021 | 91 | Increase |
| Projected balance at 30 June 2021 | 1,198 | |

3.5 Other Funds

Council maintains a number of other funds including:

- Private Works
- Saleyards
- Mudgee Sports Council
- Gulgong Sports Council
- Rylstone Sports Council

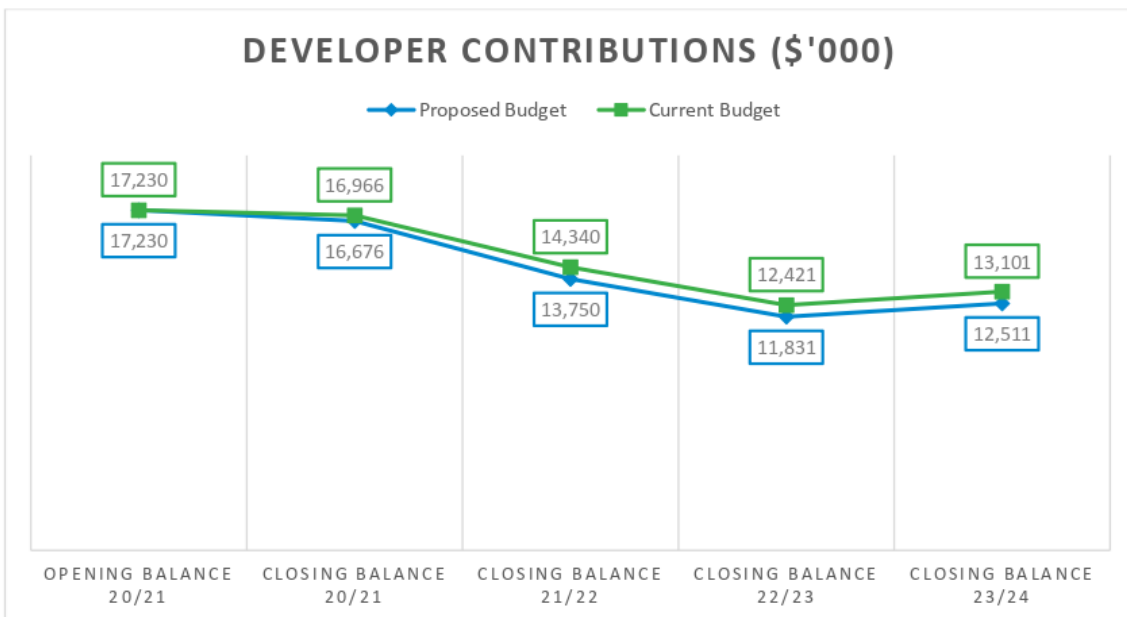
At 30 June of each financial year, the cash balance held in the above Funds forms part of the overall General Fund Unrestricted Cash Balance.

4. Developer Contributions – Section 64, 7.11 and 7.12

Council finished the 2019/20 financial year with a Developer Contributions balance of \$17.23 million. As adopted by Council the Original Budget projected a decrease to 30 June 2021 of \$2.493 million. The budget movements are summarised below.

| Variation | Amount (\$'000) | Movement |
|---|-----------------|-----------------|
| Original Budget | (2,493) | Decrease |
| Revotes | (79) | Decrease |
| Approved variations | 2,308 | Increase |
| QBR proposed variations | (290) | Decrease |
| Estimated movement to 30 June 2021 | (554) | Decrease |
| Projected balance at 30 June 2021 | 16,676 | |

The following chart shows the projected balances over a four year period.



Detailed Section 64, 7.11 & 7.12 movements and current balances are as follows:

| Plan Item | Opening Balance | Budget Transfers To | Budget Transfers From | Budget Closing Balance | Current Balance |
|---|-----------------|---------------------|-----------------------|------------------------|-----------------|
| Traffic Management | 738 | 13 | 20 | 731 | 825 |
| Open Space Community Facilities | 1,437 | 193 | 85 | 1,545 | 1,570 |
| Administration Civic Improvements | 672 | 32 | 12 | 692 | 689 |
| Car Parking | 402 | 45 | 40 | 407 | 414 |
| S94A Levies | 22 | - | - | 22 | 22 |
| Drainage – 2A | 261 | - | - | 261 | 261 |
| Total S94 Contributions | 623 | 51 | 310 | 364 | 636 |
| Total S94 Contributions | 157 | 26 | - | 183 | 163 |
| S64 Sewer | 4,312 | 360 | 467 | 4,205 | 4,580 |
| S64 Water Voluntary Planning Agreements | 3,369 | 240 | - | 3,609 | 3,442 |
| Total Developer Contributions | 5,747 | 480 | 245 | 5,982 | 6,046 |
| Total Developer Contributions | 3,801 | 1,436 | 2,357 | 2,880 | 4,486 |
| Total Developer Contributions | 17,229 | 2,516 | 3,069 | 16,676 | 18,554 |

5. Loan Borrowings

Council's 2020/21 Operational Plan includes the proposed borrowings below.

| Project | Fund | Original Budget \$'000 | Current Budget \$'000 | Proposed Variations \$'000 | Proposed Budget \$'000 | Actual YTD \$'000 |
|---------------------------|-------|---------------------------|--------------------------|-------------------------------|---------------------------|----------------------|
| New Tip Cell Construction | Waste | 2,000 | 2,000 | (2,000) | 0 | 0 |

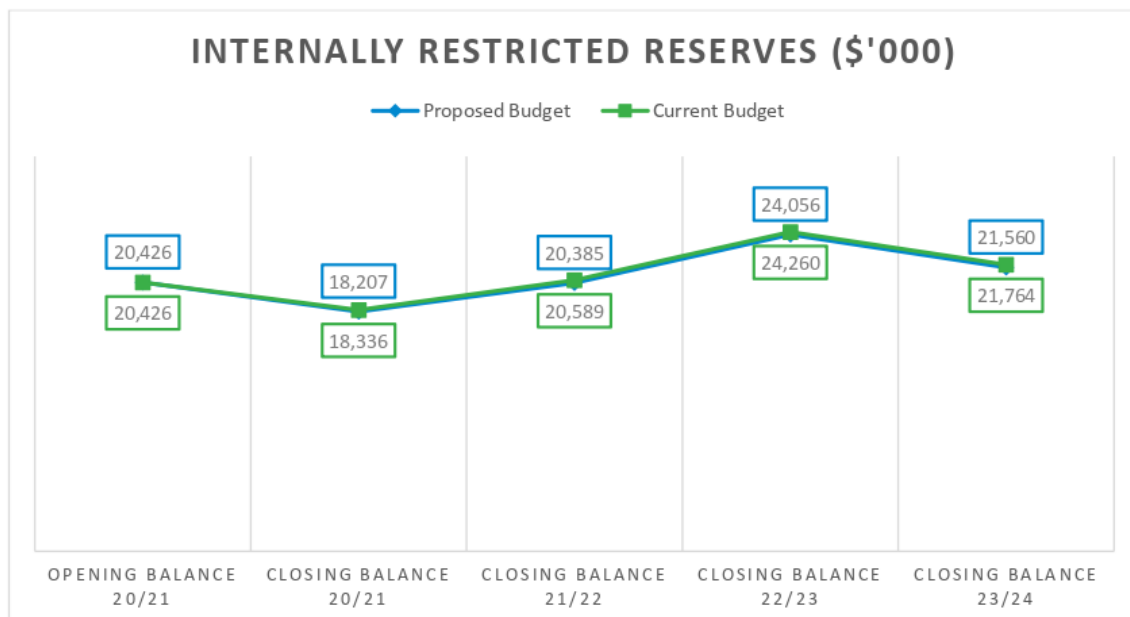
6. Reserves

6.1 Internally Restricted Reserves

Council finished the 2019/20 financial year with an Internally Restricted Reserve balance of \$20.426 million. As adopted by Council the Original Budget projected an increase to 30 June 2021 of \$3.634 million. The budget movements are summarised below.

| Variation | Amount (\$'000) | Movement |
|---|-----------------|-----------------|
| Original Budget | 3,634 | Increase |
| Revotes | (187) | Decrease |
| Approved variations | (5,537) | Decrease |
| QBR proposed variations | (129) | Decrease |
| Estimated movement to 30 June 2021 | (2,219) | Decrease |
| Projected balance at 30 June 2021 | 18,207 | |

The following chart shows the projected balances over a four year period.

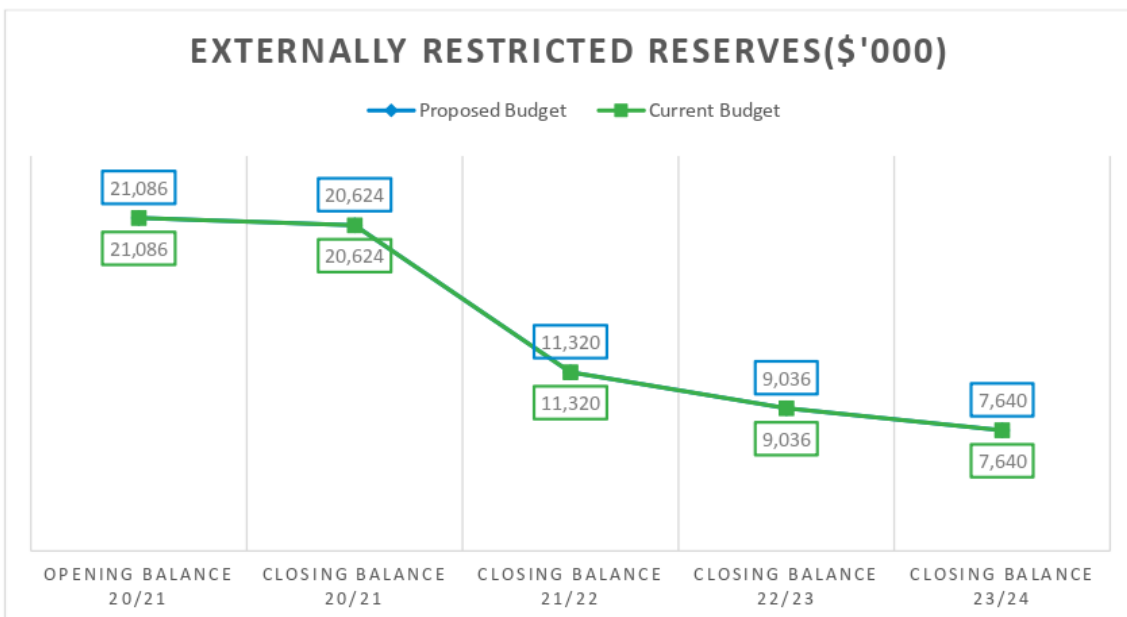


6.2 Externally Restricted Reserves

Council finished the 2019/20 financial year with an Externally Restricted Reserve balance of \$21.086 million. As adopted by Council the Original budget projected a decrease to 30 June 2021 of \$10.65 million. The budget movements are summarised below.

| Variation | Amount (\$'000) | Movement |
|---|-----------------|-----------------|
| Original Budget | (10,650) | Decrease |
| Revotes | (496) | Decrease |
| Approved variations | 10,684 | Increase |
| QBR proposed variations | 0 | Decrease |
| Estimated movement to 30 June 2021 | (462) | Decrease |
| Projected balance at 30 June 2021 | 20,624 | |

The following chart shows the projected balances over a four year period.



7. Unspent Grants and Contributions

7.1 Unspent Grants recognised as revenue

Council finished the 2019/20 financial year with unspent grants and contributions of \$1.8 million. As adopted by Council the Original Budget projected a decrease of \$1.37 million to 30 June 2021. The budget movements are summarised below.

| Variation | Amount (\$'000) | Movement |
|---|-----------------|-----------------|
| Original Budget | (1,370) | Decrease |
| Revotes | 0 | Decrease |
| Approved variations | (21) | Decrease |
| QBR proposed variations | 0 | Decrease |
| Estimated movement to 30 June 2021 | (1,391) | Decrease |
| Projected balance at 30 June 2021 | 409 | |

7.2 Unspent Grant recognised as contract Liabilities

Contract liabilities arise where Council has received grant funds in advance of completing the requirements of the funding. Therefore these fund are shown as an external restriction.

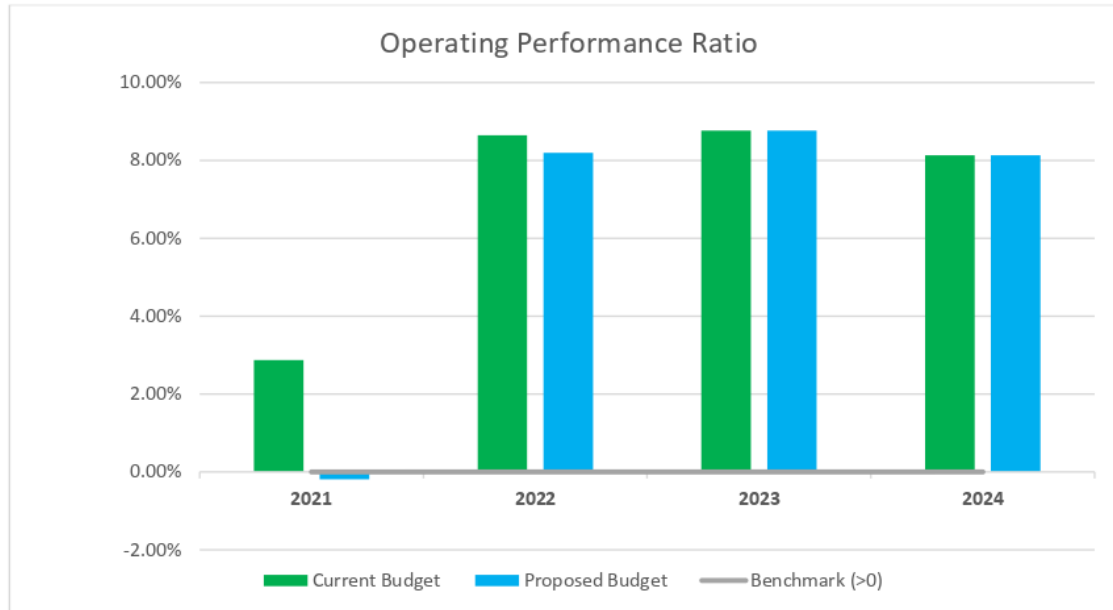
This quarter the balance of liabilities increased by \$4.29 million to \$10.18 million. This is mainly due to the receipt of grant funding payment in advance for the Fixing Local Roads Program \$3.48 million and the Local Roads and Community Infrastructure grant \$710k.

8. Consolidated Balance Sheet and Income Statement

| Balance Sheet | | |
|---|------------------|---------------------|
| \$'000 | ACTUAL YTD | ACTUAL 30 JUNE 2020 |
| ASSETS | | |
| Current Assets | | |
| Cash & Cash Equivalents | 5,871 | 6,029 |
| Investments | 58,420 | 70,150 |
| Receivables | 13,908 | 8,468 |
| Inventories | 1,431 | 1,372 |
| Contract Assets | 6,542 | 6,542 |
| Other | 26 | 26 |
| Total Current Assets | 86,198 | 92,587 |
| Non-Current Assets | | |
| Investments | 34,800 | 10,800 |
| Receivables | - | - |
| Infrastructure, Property, Plant & Equipment | 1,009,235 | 1,002,780 |
| Investment Property | 7,440 | 7,440 |
| Intangible Assets | 223 | 271 |
| Right of use assets | 150 | 150 |
| Total Non-Current Assets | 1,051,848 | 1,021,441 |
| TOTAL ASSETS | 1,138,046 | 1,114,028 |
| LIABILITIES | | |
| Current Liabilities | | |
| Payables | 2,954 | 9,293 |
| Income received in advance | 68 | 68 |
| Contract liabilities | 10,318 | 6,113 |
| Lease liabilities | 38 | 38 |
| Borrowings | 762 | 1,482 |
| Provisions | 7,834 | 7,850 |
| Total Current Liabilities | 21,974 | 24,844 |
| Non-Current Liabilities | | |
| Lease liabilities | 111 | 111 |
| Borrowings | 10,441 | 10,441 |
| Provisions | 5,507 | 5,507 |
| Total Non-Current Liabilities | 16,059 | 16,059 |
| Total LIABILITIES | 38,033 | 40,903 |
| Net Assets | 1,100,013 | 1,073,125 |
| EQUITY | | |
| Retained Earnings | 494,229 | 467,189 |
| Revaluation Reserves | 605,784 | 605,936 |
| Other Reserves | - | - |
| Total Equity | 1,100,013 | 1,073,125 |

| Income Statement | | | | | | | | |
|--|------------------------|---------------------|-----------------------|---------------|-----------------|---------------------|-------------------------|---------------------------|
| \$'000 | ORIGINAL ANNUAL BUDGET | APPROVED VARIATIONS | REVISED ANNUAL BUDGET | ACTUAL YTD | % REMSED BUDGET | PROPOSED VARIATIONS | PROJECTED ANNUAL BUDGET | % PROJECTED ANNUAL BUDGET |
| INCOME | | | | | | | | |
| Rates & Annual Charges | 43,639 | - | 43,639 | 43,691 | 100% | (4) | 43,635 | 100% |
| User Charges & Fees | 12,819 | 3,026 | 15,845 | 4,524 | 29% | 32 | 15,877 | 28% |
| Interest & Investment Revenue | 2,097 | - | 2,097 | 1,003 | 48% | - | 2,097 | 48% |
| Other Revenues | 1,596 | 1 | 1,597 | 580 | 36% | 46 | 1,643 | 35% |
| Grants & Contributions Operating | 18,033 | (3,901) | 14,132 | 6,436 | 46% | (332) | 13,800 | 47% |
| Grants & Contributions Capital | 32,513 | 724 | 33,237 | 5,117 | 15% | (425) | 32,812 | 16% |
| Rental Income | 2,010 | - | 2,010 | 1,041 | 52% | 50 | 2,060 | 51% |
| Total Income | 112,707 | (150) | 112,557 | 62,392 | 55% | (633) | 111,924 | 56% |
| EXPENDITURE | | | | | | | | |
| Employee Benefits & Oncosts | 28,984 | 27 | 29,011 | 12,700 | 44% | (166) | 28,845 | 44% |
| Borrowing Costs | 777 | (22) | 755 | 353 | 47% | - | 755 | 47% |
| Materials & Contracts | 16,053 | 6,129 | 22,182 | 7,606 | 34% | 64 | 22,246 | 34% |
| Depreciation & Amortisation | 15,931 | - | 15,931 | 9,070 | 57% | 1,939 | 17,870 | 51% |
| Other Expenses | 8,572 | 125 | 8,697 | 3,804 | 44% | (74) | 8,623 | 44% |
| Loss on Disposal of Assets | 654 | (48) | 606 | (1,719) | 0% | - | 606 | -284% |
| Total Expenditure | 70,971 | 6,211 | 77,182 | 31,814 | 41% | 1,763 | 78,945 | 40% |
| Net Result | 41,736 | (6,361) | 35,375 | 30,578 | | (2,396) | 32,979 | |
| Net Result before Capital Items | 9,223 | (7,085) | 2,138 | 25,461 | | (1,971) | 167 | |

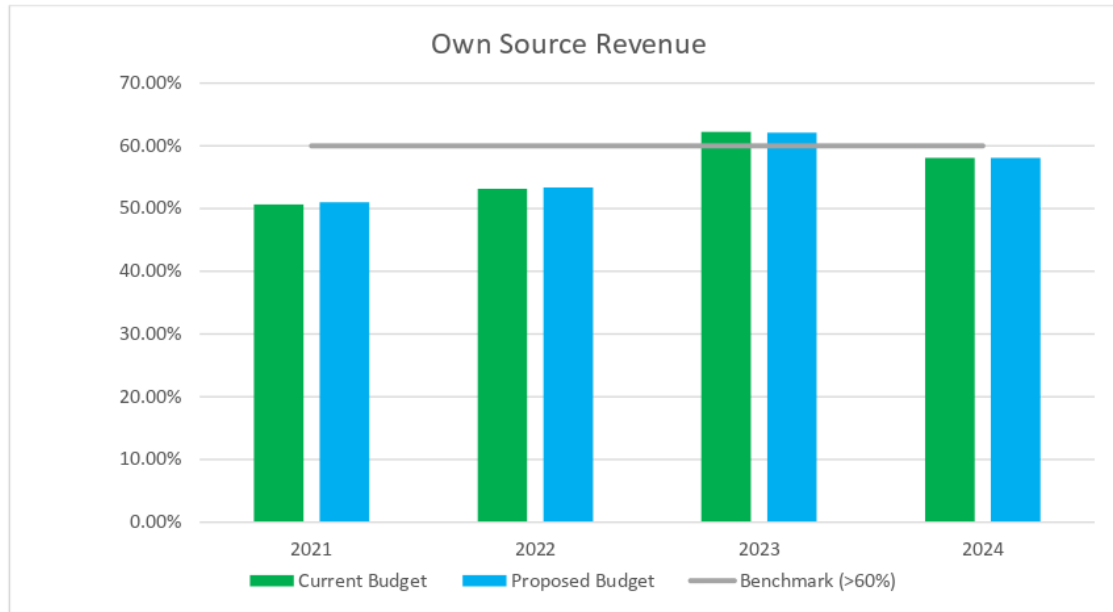
Key Financial Indicators



Note: Excludes Water & Sewer Fund

Measures Council's ability to keep operating expenses, including depreciation, within its continuing revenue.

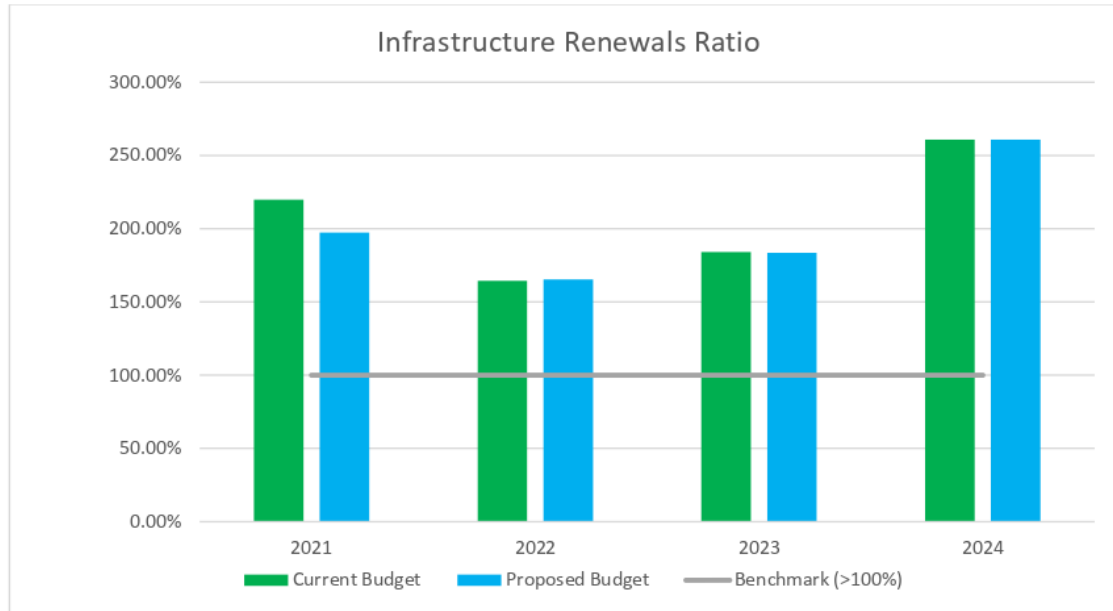
The main reason for a decline in this ratio is due to an increase in forecast depreciation in the asset class of Roads \$1million and Buildings \$550k. This reflects changes in asset life and revaluation increase of Roads following asset revaluations in 2019/20. The buildings increase is due to new buildings and correction of depreciation rates.



Note: Excludes Water & Sewer Fund

Measures Council's degree of reliance on external funding

There is no material change in the ratio this quarter...



Note: Excludes Water & Sewer Fund

The rate at which assets are being renewed against the rate of depreciation

The increase to depreciation forecast is the main driver for deterioration in this ratio in 20/21.

Capital Budget Funding

| Capital Funding (\$ '000) | ORIGINAL ANNUAL BUDGET | APPROVED VARIATIONS | CURRENT ANNUAL BUDGET | PROPOSED VARIATIONS | PROPOSED ANNUAL BUDGET | ACTUAL YTD | ACTUAL YTD/ PROPOSED ANNUAL BUDGET |
|--|------------------------|---------------------|-----------------------|---------------------|------------------------|------------|------------------------------------|
| Capital Grants & Contributions | (34,707) | (1,067) | (35,774) | 1,230 | (34,544) | (7,534) | 22% |
| Loans | (2,000) | 2,000 | 0 | 0 | 0 | 0 | 0% |
| External Restrictions | | | | | | | |
| S94 Developer Contributions - General | (347) | (71) | (418) | 0 | (418) | (19) | 4% |
| S64 Developer Contributions - Water Fund | (1,380) | 1,134 | (245) | 0 | (245) | (8) | 3% |
| S64 Developer Contributions - Sewer Fund | (1,175) | 1,175 | 0 | 0 | 0 | 0 | 0% |
| S93F Developer Contributions | (1,463) | 0 | (1,463) | (830) | (2,293) | 0 | 0% |
| Specific Purpose Unexpended Grants | (995) | 696 | (299) | 0 | (299) | (95) | 32% |
| Specific Purpose Unexpended Grants - Water | (270) | 270 | 0 | 0 | 0 | 0 | 0% |
| Reserves - Water | (6,595) | 4,297 | (2,298) | 0 | (2,298) | (788) | 34% |
| Reserves - Sewerage Services | (7,206) | 5,964 | (1,242) | 0 | (1,242) | (134) | 11% |
| Reserves - Domestic Waste Management | (1,146) | 298 | (848) | 0 | (848) | (145) | 17% |
| Reserves - Ulan Road Strategy | (174) | 174 | 0 | 0 | 0 | 0 | 0% |
| Internal Restrictions | | | 0 | | 0 | | 0% |
| Reserves - Plant & Vehicle Replacement | (6,165) | (756) | (6,921) | 0 | (6,921) | (547) | 8% |
| Reserves - Asset Replacement | (3,084) | 664 | (2,420) | 75 | (2,345) | (352) | 15% |
| Reserves - Capital Program | (3,651) | (1,539) | (5,190) | (144) | (5,334) | (2,372) | 44% |
| Reserves - Land Development | 0 | (726) | (726) | 0 | (726) | (531) | 73% |
| Reserves - Saleyards | (10) | (1) | (11) | 0 | (11) | 0 | 0% |

| Capital Funding (\$ '000) | ORIGINAL ANNUAL BUDGET | APPROVED VARIATIONS | CURRENT ANNUAL BUDGET | PROPOSED VARIATIONS | PROPOSED ANNUAL BUDGET | ACTUAL YTD | ACTUAL YTD/ PROPOSED ANNUAL BUDGET |
|------------------------------|------------------------|---------------------|-----------------------|---------------------|------------------------|-----------------|------------------------------------|
| Income from Sale of Assets | | | 0 | | 0 | | |
| General Purpose Revenue | (7,644) | (249) | (7,893) | (177) | (8,070) | (6,727) | 83% |
| Total Capital Funding | (78,011) | 12,262 | (65,749) | 154 | (65,595) | (19,251) | 29% |

| Capital Expenditure (\$ '000) | ORIGINAL ANNUAL BUDGET | APPROVED VARIATIONS | CURRENT ANNUAL BUDGET | PROPOSED VARIATIONS | PROPOSED ANNUAL BUDGET | ACTUAL YTD | ACTUAL YTD/ PROPOSED ANNUAL BUDGET |
|-------------------------------|------------------------|---------------------|-----------------------|---------------------|------------------------|------------|------------------------------------|
|-------------------------------|------------------------|---------------------|-----------------------|---------------------|------------------------|------------|------------------------------------|

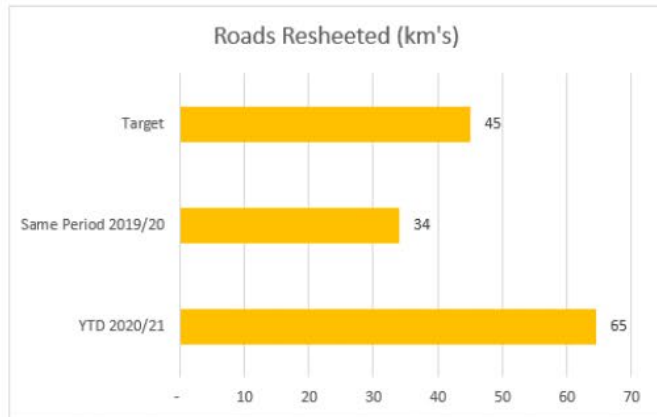
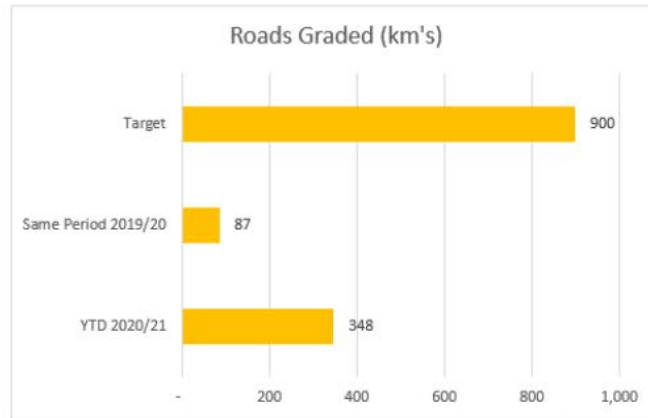
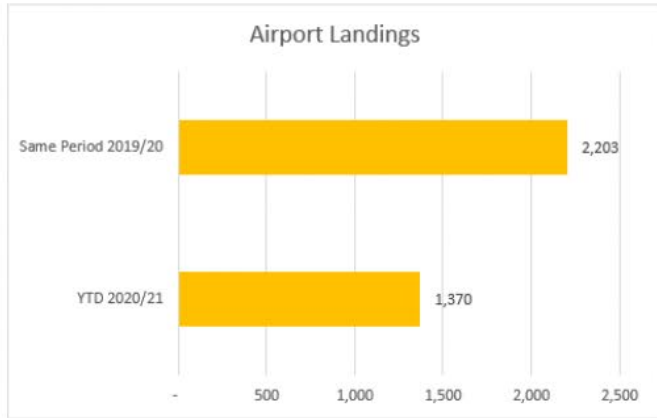
New Assets

| | | | | | | | |
|------------------------------------|-------|-------|-------|------|-------|-------|-----|
| Buildings | 7,621 | 1,249 | 8,870 | (80) | 8,790 | 2,206 | 25% |
| Roads | 1,031 | 520 | 1,552 | 0 | 1,552 | 99 | 6% |
| Bridges | 1,478 | (303) | 1,175 | 0 | 1,175 | 267 | 23% |
| Footpaths | 200 | 1,072 | 1,272 | (50) | 1,222 | 141 | 12% |
| Water Network Assets | 93 | 0 | 93 | 0 | 93 | 57 | 62% |
| Sewer Network Assets | 643 | (490) | 153 | 0 | 153 | 138 | 90% |
| Open space and recreational assets | 297 | 125 | 422 | 50 | 472 | 29 | 6% |
| Swimming Pools | 70 | 10 | 80 | 0 | 80 | 0 | 0% |
| Other Structures | 213 | 754 | 967 | 0 | 967 | 84 | 9% |
| Land - Operational | 0 | 2,031 | 2,031 | 34 | 2,065 | 2,036 | 99% |
| Land for resale | 0 | 200 | 200 | 0 | 200 | 4 | 2% |
| Office Equipment | 20 | 0 | 20 | 0 | 20 | 0 | 0% |

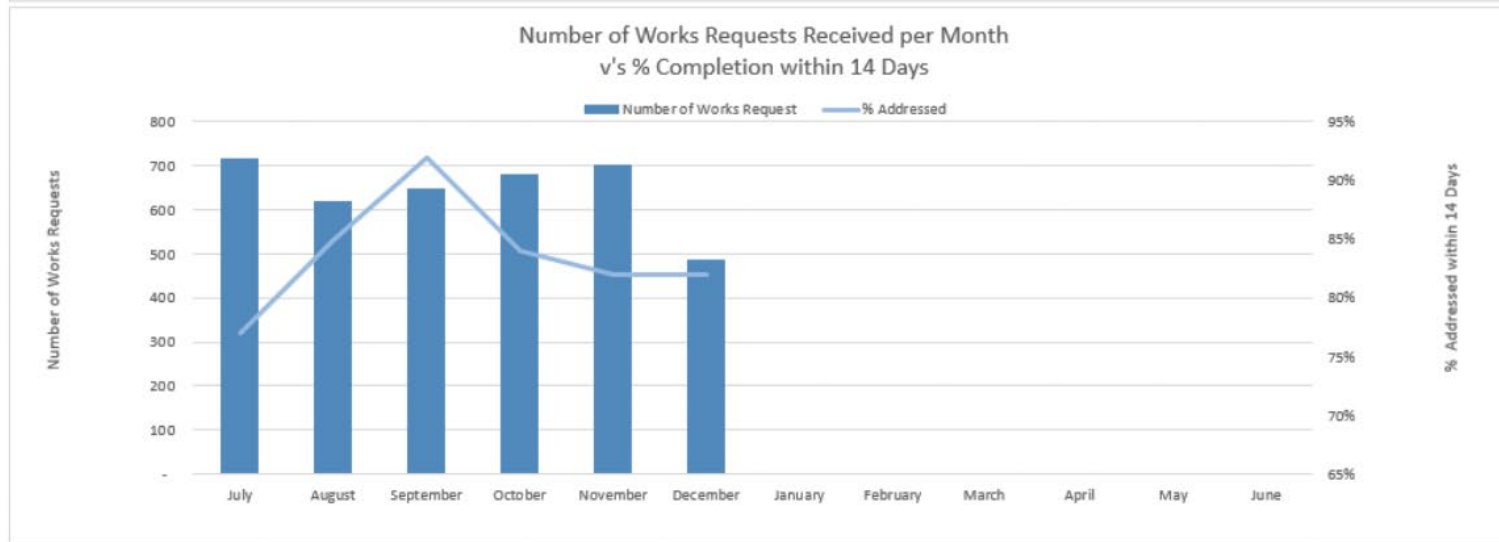
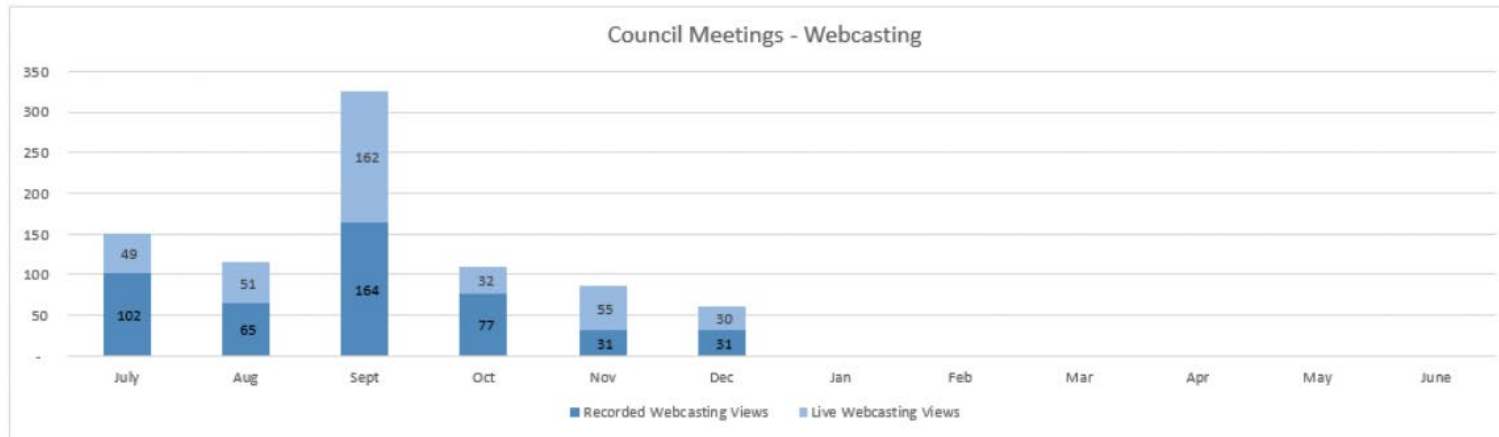
| Capital Expenditure (\$ '000) | ORIGINAL ANNUAL BUDGET | APPROVED VARIATIONS | CURRENT ANNUAL BUDGET | PROPOSED VARIATIONS | PROPOSED ANNUAL BUDGET | ACTUAL YTD | ACTUAL YTD/ PROPOSED ANNUAL BUDGET |
|--|------------------------|---------------------|-----------------------|---------------------|------------------------|---------------|------------------------------------|
| Total Capital Expenditure on New Assets | 11,666 | 5,168 | 16,835 | (46) | 16,789 | 5,062 | 30% |
| Renewal & Upgrade | | | | | | | |
| Plant and Equipment | 6,221 | 1,801 | 8,022 | 0 | 8,022 | 634 | 8% |
| Buildings | 3,356 | (1,310) | 2,046 | 0 | 2,046 | 581 | 28% |
| Roads | 14,724 | 2,366 | 17,090 | (172) | 16,918 | 6,731 | 40% |
| Bridges | 600 | (197) | 403 | 0 | 403 | 31 | 8% |
| Footpaths | 186 | 30 | 216 | 0 | 216 | 109 | 51% |
| Stormwater | 508 | 644 | 1,152 | 0 | 1,152 | 64 | 6% |
| Culvert and causeways | 65 | 0 | 65 | 0 | 65 | 0 | 0% |
| Water Network Assets | 11,592 | (8,695) | 2,897 | 0 | 2,897 | 817 | 28% |
| Sewer Network Assets | 8,538 | (7,425) | 1,113 | 0 | 1,113 | 83 | 7% |
| Open space and recreational assets | 15,773 | (3,592) | 12,181 | 0 | 12,181 | 4,064 | 33% |
| Swimming Pools | 286 | 5 | 291 | 0 | 291 | 91 | 31% |
| Other Structures | 2,190 | 249 | 2,438 | (48) | 2,390 | 334 | 14% |
| Tip remediation | 2,000 | (1,892) | 108 | 0 | 108 | 54 | 50% |
| Land for resale | 0 | 586 | 586 | 0 | 586 | 537 | 92% |
| Library | 91 | 0 | 91 | 0 | 91 | 59 | 65% |
| Intangible Assets | 41 | 0 | 41 | 2 | 43 | 0 | 0% |
| Office Equipment | 172 | 0 | 172 | 110 | 282 | 0 | 0% |
| Total Capital Expenditure on Renewal | 66,344 | (17,431) | 48,914 | (108) | 48,806 | 14,189 | 29% |
| Total Capital Expenditure | 78,011 | (12,262) | 65,749 | (154) | 65,595 | 19,251 | 29% |

9. Key Performance Indicators

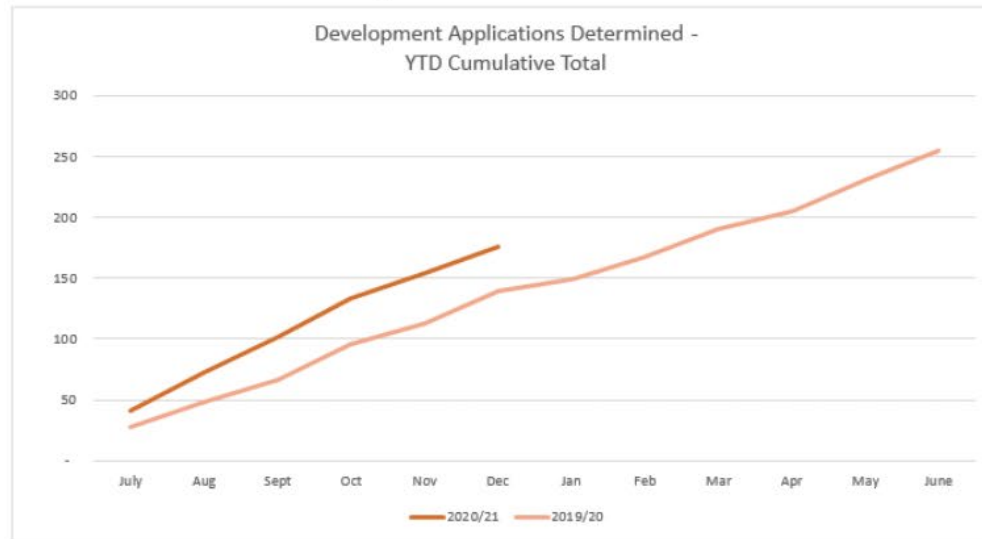
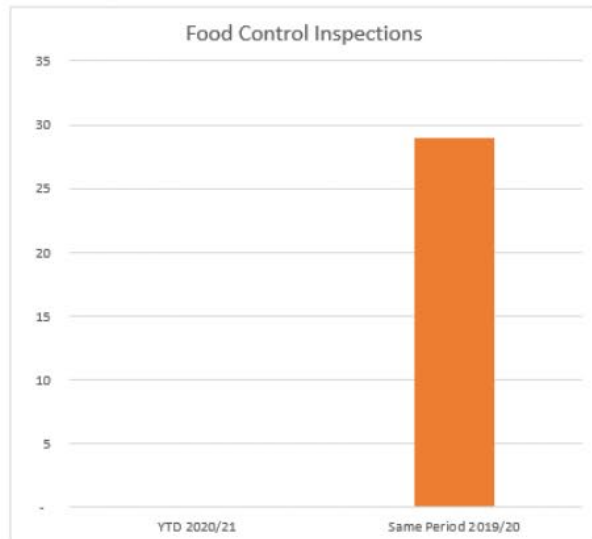
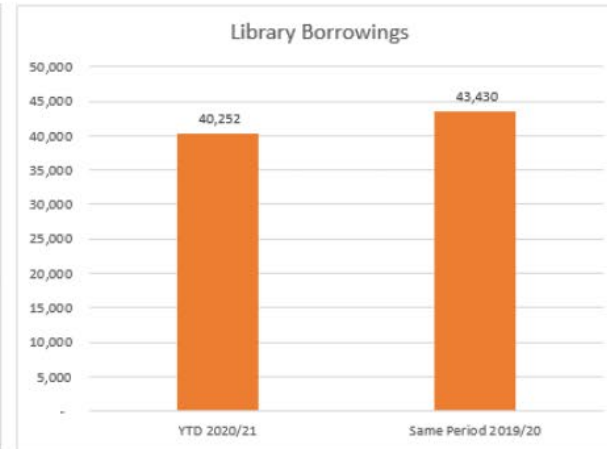
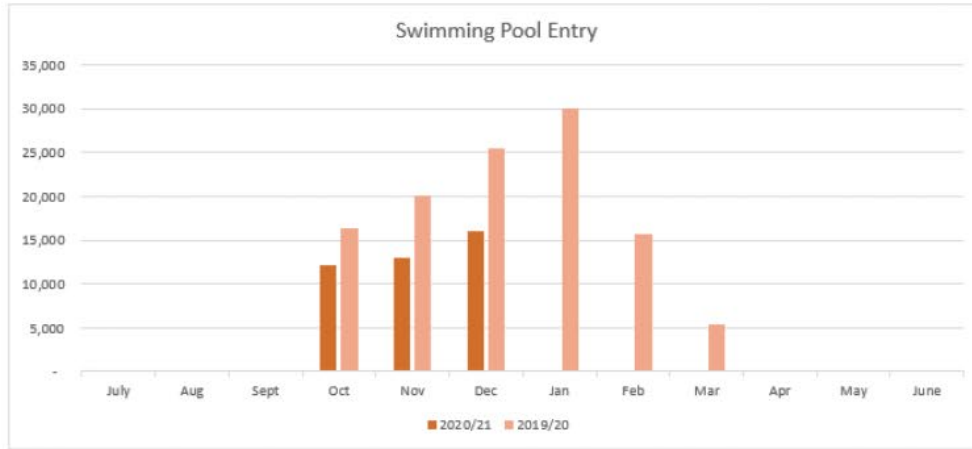
9.1 Connecting Our Region



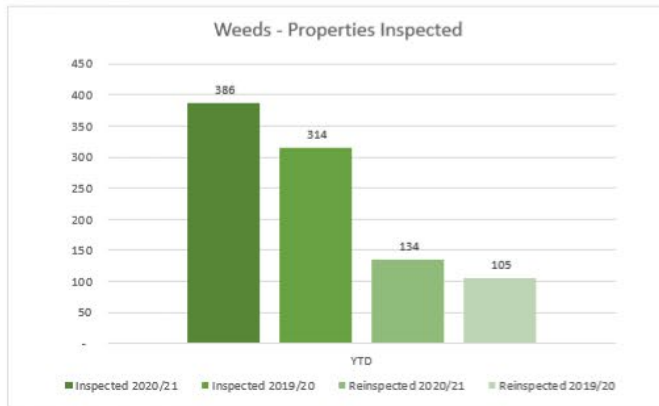
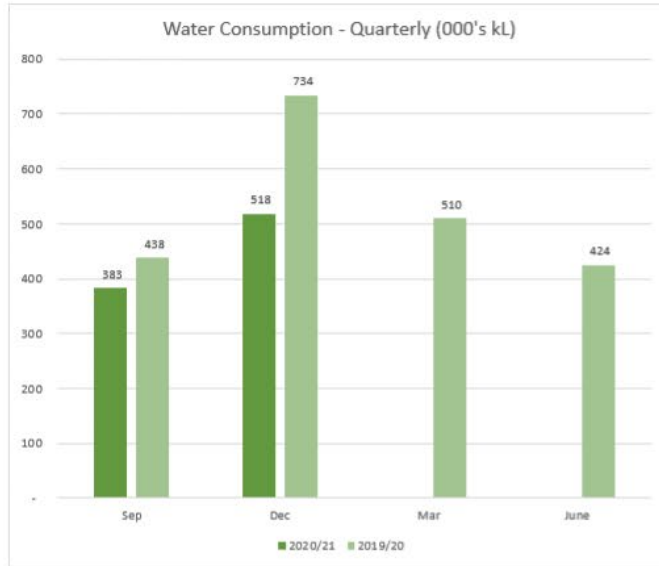
9.2 Good Government



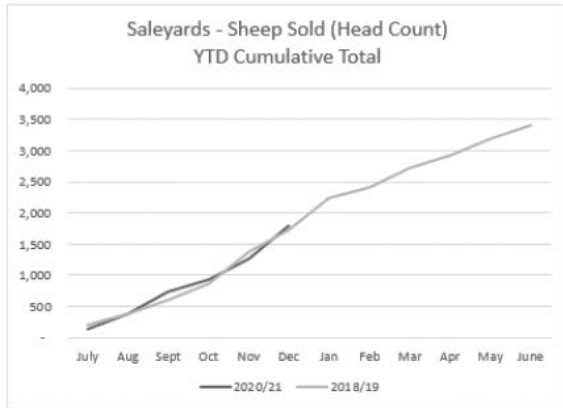
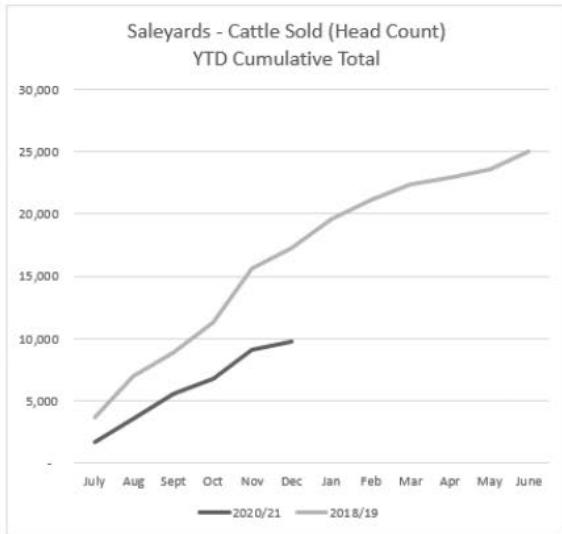
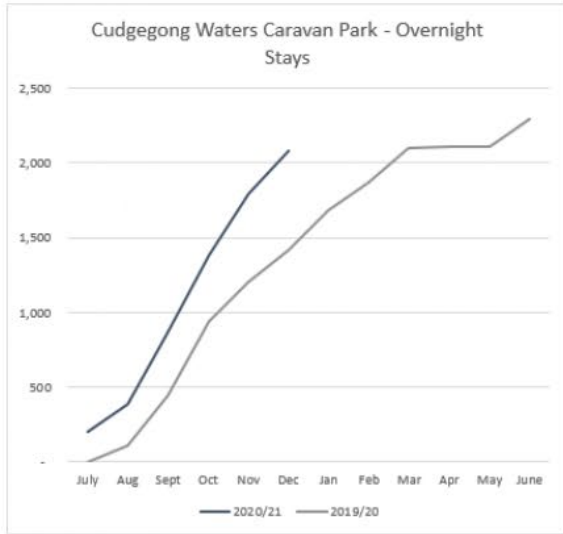
9.3 Looking after Our Community



9.4 Protecting our Natural Environment



9.5 Building a Strong Local Economy



10. Contract, Legal and Consultant Expenses

CONTRACTS > \$50,000

The following contracts with a value greater than \$50,000 were entered into during the quarter and have yet to be fully performed.

Note that individual Panel Tender appointments are not included in the table below. For example, provision of general contractor services. Council creates panels of preferred suppliers from the tender responses received. Purchases are then made from the preferred supplier lists, and purchase decisions may vary for particular works depending upon availability and location.

| Contractor | Contract Detail/Purpose | Contract Value (\$) | Commencement Date | Duration (Months) | Budgeted (Y/N) |
|--|---|---------------------|-------------------|-------------------|----------------|
| Wayfound | MWRC - Tourism Signage Strategy | 50,000 | 26/10/2020 | | Y |
| Washbay Specialists | Construction of Rylstone Depot Wash Bay | 159,978 | 26/10/2020 | | Y |
| Custom Commercial Services Pty Ltd | Contract - VP 123262 Supply of Debt Management and Recovery Services - Rates, General Debtors and Water Usage Charges | 240,000 | 22/10/2020 | 20 | Y |
| | Contract - RFQ 2020-84 Church St Roundabout - Surveying & Engineering Design Services | 73,920 | 22/10/2020 | 3 | Y |
| New England Surveying | Contract - Dixons Long Point Crossing Infrastructure Procurement Consultancy Services | 89,900 | 22/10/2020 | 6 | Y |
| ArcBlue Pty Ltd | Mudgee Airport Reseal | 594,592 | 22/10/2020 | 3 | Y |
| Fulton Hogan Industries Pty Ltd | Contract VP205764 - RFQ 2020/101 – Pathway & Refuge Pedestrian Works | 350,779 | 8/12/2021 | 3 | Y |
| PJL Constructions - Complete Mine Services & Solutions | Contract VP205764 - RFQ 2020/101 – Pathway & Refuge Pedestrian Works | 77,426 | 15/12/2021 | 3 | Y |
| T&K Jackson Pty Ltd | | | | | |

| Contractor | Contract Detail/Purpose | Contract Value (\$) | Commencement Date | Duration (Months) | Budgeted (Y/N) |
|------------------|---|---------------------|-------------------|-------------------|----------------|
| Essential Energy | Contribution to LED conversion of street lighting | \$989,762 | 14/12/2020 | 7 | Y |

LEGAL EXPENSES

This financial year to date, Council has incurred \$127,764 of legal expenses. The primary areas of expenditure are:

- Road closures & realignment
- Property sales and purchases
- Development Control
- Companion animal dispute
- Water supply
- Debt Recovery

CONSULTANCIES

A consultant is a person or organisation engaged under contract on a temporary basis to provide recommendations or high level specialist or professional advice to assist decision making by management. Generally, it is the advisory nature of the work that differentiates a consultant from other contractors.

This financial year to date, Council has incurred \$229,617 of consultancy expenses. The primary areas of expenditure are:

- Engineering services
- Airport Runway Surface
- Street lighting design
- Bridge Inspections
- Flood Study
- Kerb & Gutter design and survey
- Parking Study
- Streetscape design

11. Councillor Fees and Expenses Paid or Reimbursed as at 30 December 2020

| Councillor Expenses | | | | | | | | | | | |
|--|--------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-------------------|
| | General Operations | Cr Cavalier | Cr Holden | Cr Karavas | Cr Kennedy | Cr Martens | Cr O'Neill | Cr Paine | Cr Shelley | Cr Thompson | TOTAL |
| Councillor Fees | - | 11,830.00 | 11,830.00 | 11,830.00 | 11,830.00 | 11,830.00 | 9,830.00 | 11,830.00 | 11,830.00 | 11,830.00 | 104,470.00 |
| Mayoral Fees | - | - | - | - | 25,812.50 | - | - | - | - | - | 25,812.50 |
| Council Meeting Expenses (accommodation, travel and meals) | 2,500.40 | - | - | - | - | 770.46 | - | - | - | - | 3,270.86 |
| Conferences, Seminars and Representational/Lobbying Expenses (accommodation, travel and meals) | - | - | - | - | - | 628.32 | - | - | 514.80 | - | 1,143.12 |
| Provision of Vehicle | - | - | - | - | 2,541.63 | - | - | - | - | - | 2,541.63 |
| Memberships & Subscriptions | 30,323.13 | - | - | - | - | - | - | - | - | - | 30,323.13 |
| Miscellaneous expenses (meals, sundries, stationery, etc) | 272.73 | - | - | - | 169.16 | 10.87 | - | - | 38.48 | - | 491.24 |
| Provision of office equipment, such as laptop computer and telephones | 114.03 | 281.37 | 784.29 | 195.17 | 1,614.74 | 522.59 | 173.43 | 140.71 | 619.01 | 140.71 | 4,586.05 |
| Totals | 21,881.00 | 12,111.37 | 12,614.29 | 12,025.17 | 42,496.85 | 13,762.24 | 10,003.43 | 11,970.71 | 13,002.29 | 11,970.71 | 172,638.53 |



WILPINJONG COAL PTY LTD

ABN: 87 104 594 694

100 Melbourne Street,
South Brisbane QLD 4101

Locked Bag 2005
Mudgee, NSW 2850
Australia
Tel + 61 (0) 2 6370 2500
Fax + 61 (0) 2 6373 4524

1 July 2020

Mid-Western Regional Council
86 Market Street
Mudgee NSW 2850

Attention: Diane Sawyers, Ian Clayton

Re: Application to Close and Purchase Council Roads

Dear Diane and Ian,

On 24 April 2017, Wilpinjong Coal Pty Limited (WCPL) was granted Development Consent (SSD-6764) by the Minister for Planning, for the Wilpinjong Extension Project (WEP). The WEP provides for the continued operation of the Wilpinjong Coal Mine (the Mine) at rates of up to 16 million tonnes per annum (Mtpa) of run-of-mine (ROM) out to 2033, and access to approximately 800 hectares (ha) of open cut extensions (refer to **Enclosure 1**).

WCPL, in consultation with Mid-Western Regional Council (MWRC), are seeking this application to close and purchase several former MWRC public roads (the Roads) (refer to **Enclosure 2**) and (refer to **Enclosure 3**) within the now active mining area of the Mine. To support this application, MWRC requested WCPL to seek the following:

- Evidence the Roads were owned by MWRC (refer to **Enclosure 4** and **Enclosure 5**); and
- Evidence the Roads were historically maintained by MWRC (refer to **Enclosure 6**, **Enclosure 7** and **Enclosure 8**).

Further evidence of the Roads ownership by MWRC is provided in **Enclosure 9**.

WCPL understands if MWRC accept this application to close the Roads, a sale price offer for the Roads will be determined by MWRC and issued to WCPL in future correspondence to purchase the Roads.

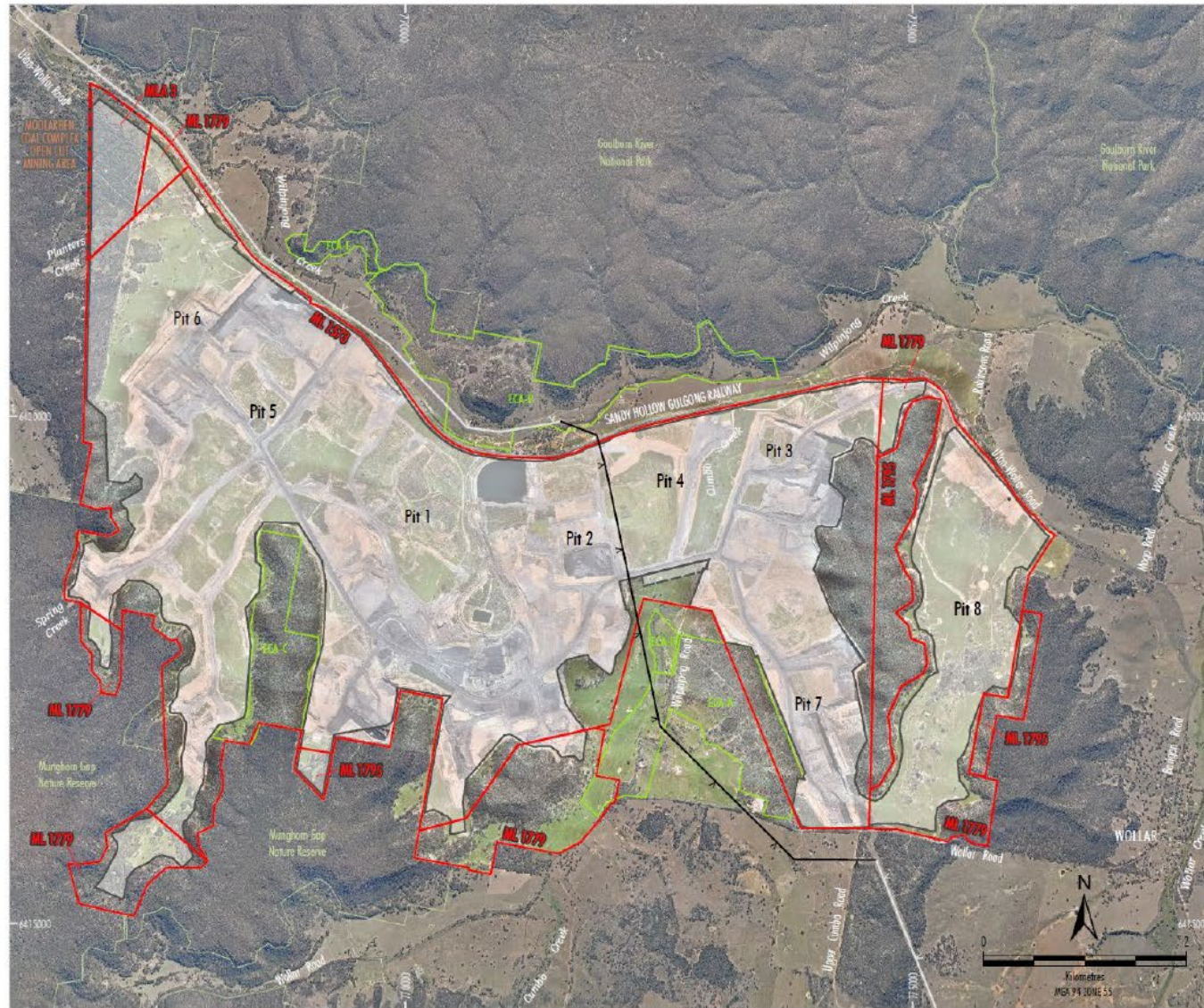
If the MWRC requires additional information or seeks further clarity in regards to this letter application to close the Roads, then please call or email on the details provided below.

Regards,

A handwritten signature in blue ink, appearing to read "Blair Jackson", is written over a light blue horizontal line.

Blair Jackson
General Manager
Wilpinjong Coal Pty Ltd
Peabody Energy Australia
Mobile: +61 (0)417 049 493 | iflood@peabodyenergy.com

Enclosure 1 The Approved Wilpinjong Coal Mine General Arrangement



- LEGEND**
- Mining Lease Boundary
 - Mining Lease Application Boundary
 - Approved/Existing Open Cut and Contained Infrastructure Area #
 - Relocated Block Bank and Combo Creek Disturbance Area
 - Enhancement and Conservation Area
 - Approved TransGrid 330 KV ETL Deviation
 - Existing TransGrid 330 KV ETL
- # Inclusive of the agreed minor change to the area confirmed by DPIE on 23rd August 2019.

Source: WCPL (2020); NSW Spatial Services (2020)
 Orthophoto Mosaic: WCPL (April 2020, March 2018)

Peabody
 WILPINJONG COAL MINE
 Wilpinjong Coal Mine
 General Arrangement

Enclosure 2 Proposed Closure of Council Owned Public Roads Diagram A

Case Officer: TERSTEJ Date: 15/10/2019 File ref:

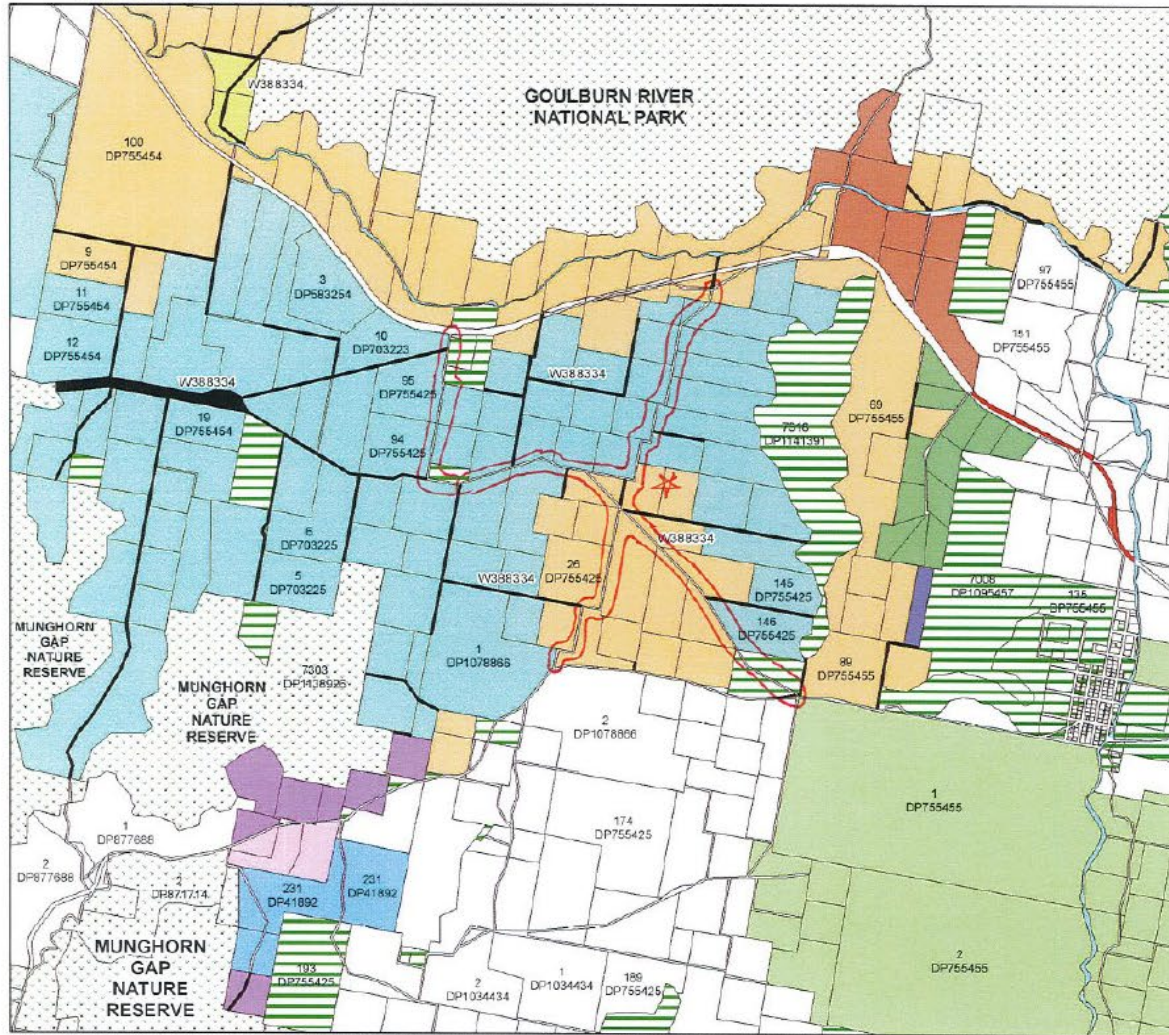
Diagram 'A'

Proposed Closure of Public Roads
 Cluster 524400

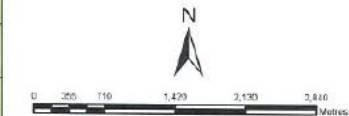
LGA: MID-WESTERN REGIONAL
 LOCALITY: WILPINJONG, CUMBO, WOLLAR
 PARISH: WILPINJONG, CUMBO, WOLLAR
 COUNTY: PHILLIP

Legend

- PEABODY PASTORAL HOLDINGS PTY LTD
- PEABODY PASTORAL HOLDINGS PTY LTD
- PEABODY PASTORAL HOLDINGS PTY LTD
- WILPINJONG COAL PTY LTD
- WILPINJONG COAL PTY LTD
- WILPINJONG COAL PTY LTD
- WILPINJONG COAL PTY LTD
- WILPINJONG COAL PTY LTD
- WILPINJONG COAL PTY LTD
- WILPINJONG COAL PTY LTD
- THE STATE OF NEW SOUTH WALES
- STATE RAIL AUTHORITY OF NSW
- CROWN ROADS UNDER APPLICATION & PROPOSED FOR CLOSURE
- NATIONAL PARK
- CROWN LAND



** Crown Public Road As Shown On Parish Map.*



**Planning,
 Industry &
 Environment**

Copyright Department of Planning, Industry and Environment - Crown Lands, 2019

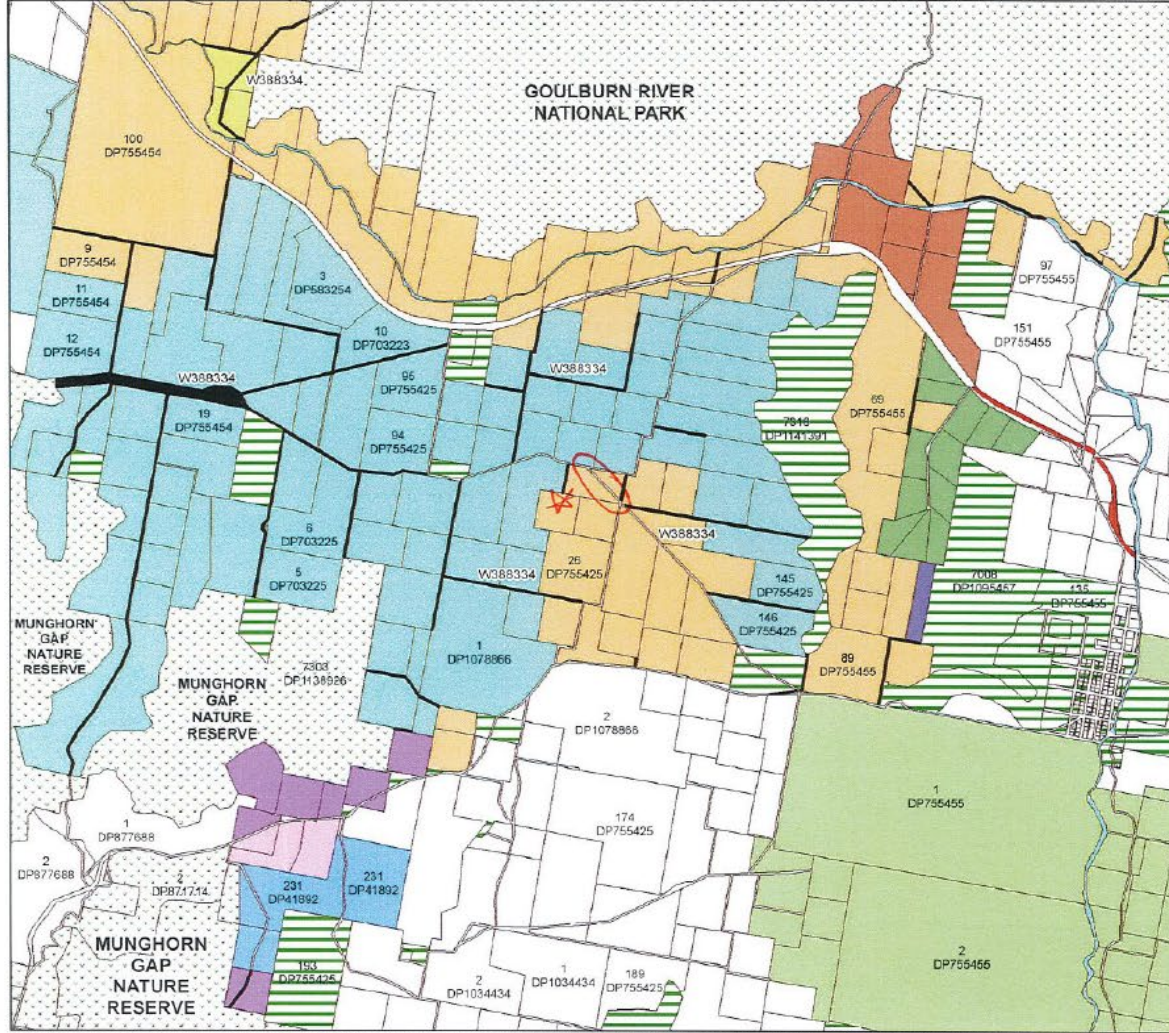
Disclaimer: The information contained in this map has been provided in good faith. Whilst efforts have been made to ensure the accuracy and completeness of this information, the data providers take no responsibility for errors or omissions nor any loss or damage that may result from the use of this information.

Enclosure 3 Proposed Closure of Council Owned Public Roads Diagram B

Diagram 'B'

Case Officer: TERSTEJ Date: 15/10/2019 File ref:

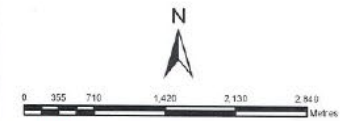
Proposed Closure of Public Roads Cluster 524400



LGA: MID-WESTERN REGIONAL
 LOCALITY: WILPINJONG, CUMBO, WOLLAR
 PARISH: WILPINJONG, CUMBO, WOLLAR
 COUNTY: PHILLIP

| Legend | |
|--------------------|--|
| [Green Box] | PEABODY PASTORAL HOLDINGS PTY LTD |
| [Light Green Box] | PEABODY PASTORAL HOLDINGS PTY LTD |
| [Orange Box] | PEABODY PASTORAL HOLDINGS PTY LTD |
| [Yellow Box] | WILPINJONG COAL PTY LTD |
| [Light Yellow Box] | WILPINJONG COAL PTY LTD |
| [Purple Box] | WILPINJONG COAL PTY LTD |
| [Light Blue Box] | WILPINJONG COAL PTY LTD |
| [Blue Box] | WILPINJONG COAL PTY LTD |
| [Dark Blue Box] | WILPINJONG COAL PTY LTD |
| [Pink Box] | WILPINJONG COAL PTY LTD |
| [Light Blue Box] | WILPINJONG COAL PTY LTD |
| [Dark Blue Box] | THE STATE OF NEW SOUTH WALES |
| [Red Box] | STATE RAIL AUTHORITY OF NSW |
| [Black Line] | CROWN ROADS UNDER APPLICATION & PROPOSED FOR CLOSURE |
| [Dotted Pattern] | NATIONAL PARK |
| [Green Line] | CROWN LAND |

* Act 4 William IV Road (2335-1602)
 Dec 1881.

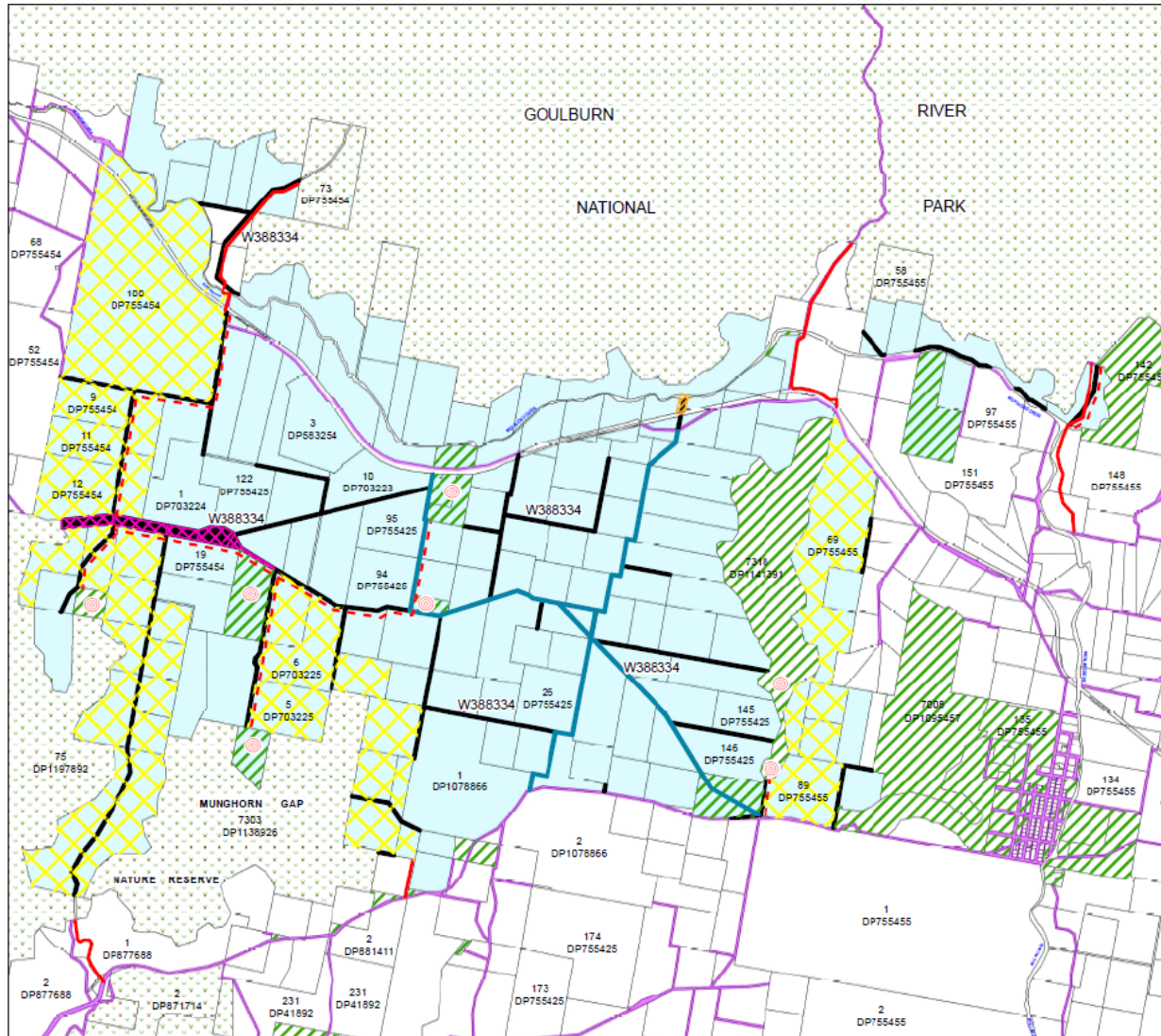


Planning,
 Industry &
 Environment

Disclaimer: The information contained in this map has been provided to good faith. Whilst all efforts have been made to ensure the accuracy and completeness of this information, the data providers take no responsibility for errors or omissions, nor any loss or damage that may result from the use of this information.

Copyright: Department of Planning, Industry and Environment - Crown Lands, 2019

Enclosure 4 Council Roads Under Application (DPI-Lands)



Proposed Easements

LGA: MID-WESTERN REGIONAL
 LOCALITY: WILPINJONG, CUMBO, WOLLAR
 PARISH: WILPINJONG, CUMBO, WOLLAR
 COUNTY: PHILLIP

Legend

- THE STATE OF NEW SOUTH WALES
- GENERAL WILPINJONG SITE
- NATIONAL PARK
- STATE FOREST
- ROAD
- CROWN ROADS UNDER APPLICATION W388334
- COUNCIL ROADS UNDER APPLICATION W389736
- Proposed Floating Right of Access (Freehold) to benefit NPWS
- Proposed Right of Access (Crown Road) to benefit NPWS
- Proposed Easement for Transmission (330 kV) to benefit Essential Energy
- Proposed Right of Access (over track in use) to benefit Office of Environment & Heritage
- Access Resolution Pending to benefit Crown land
- Proposed easement to benefit Crown land (over Crown road)

N

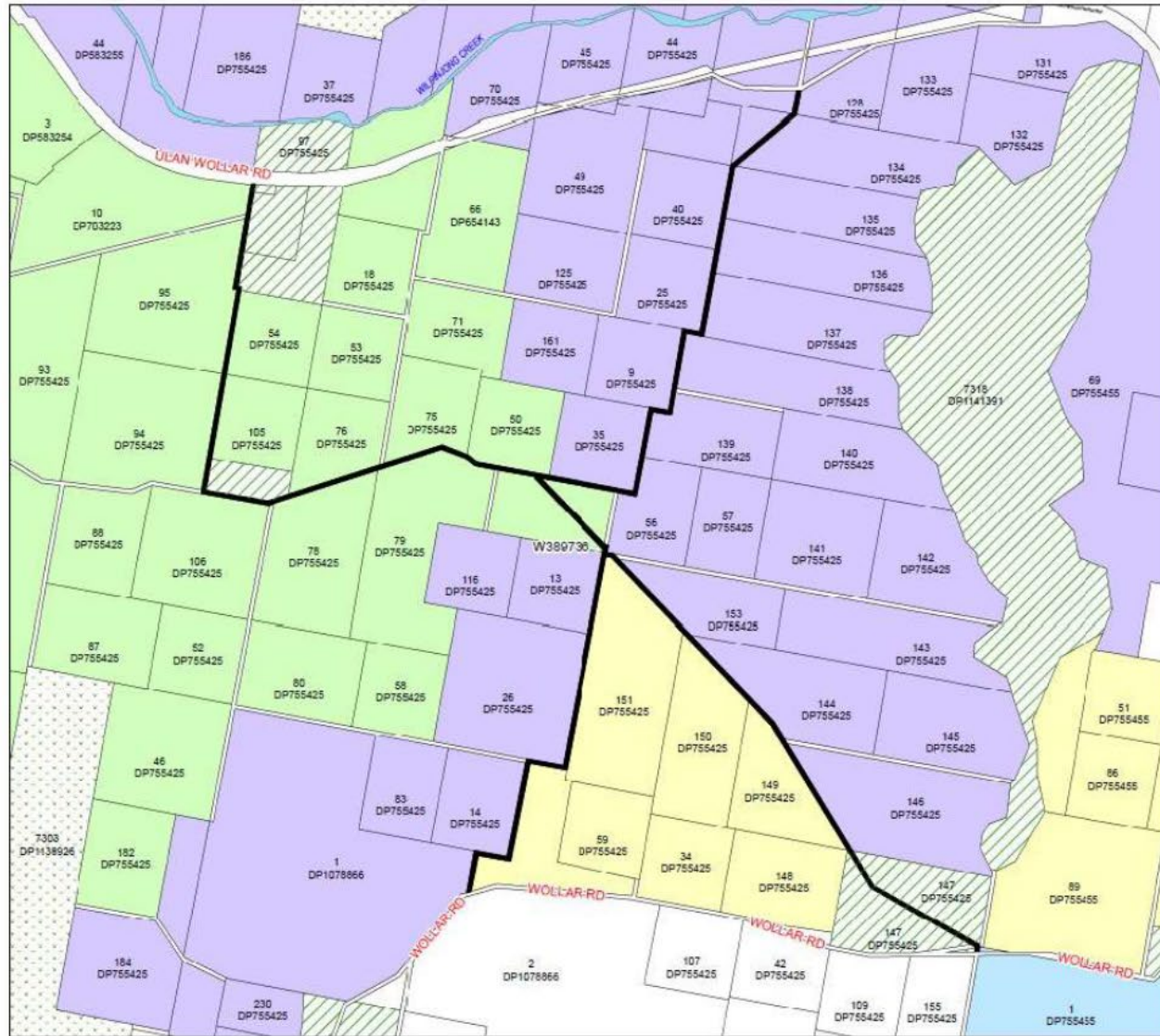
0 380 760 1,520 2,280 3,040
Meter

Department of Primary Industries
Lands

Disclaimer:
 The information contained in this map has been provided in good faith. Whilst all effort has been made to ensure the accuracy and completeness of this information, the data providers take no responsibility for errors or omissions or any loss or damage that may result from the use of this information.
 Copyright Crown Lands, 2019

User: JOCONNELL Date: 31/05/2016 Cluster Number: 524400 File ref: DB06H54

Enclosure 5 Council Roads Under Application (Trade & Investment – Crown Lands)



Proposed Closure of Council Roads

W389736 Ref: 08/10410

LGA: MID-WESTERN REGIONAL
 LOCALITY: WILPINJONG
 PARISH: CUMBO
 COUNTY: PHILLIP

Legend

- WILPINJONG COAL PTY LTD
- WILPINJONG COAL PTY LTD
- WILPINJONG COAL PTY LTD
- PEABODY PASTORAL HOLDINGS P/L
- THE STATE OF N.S.W.
- ROADS UNDER APPLICATION
- NATIONAL PARK

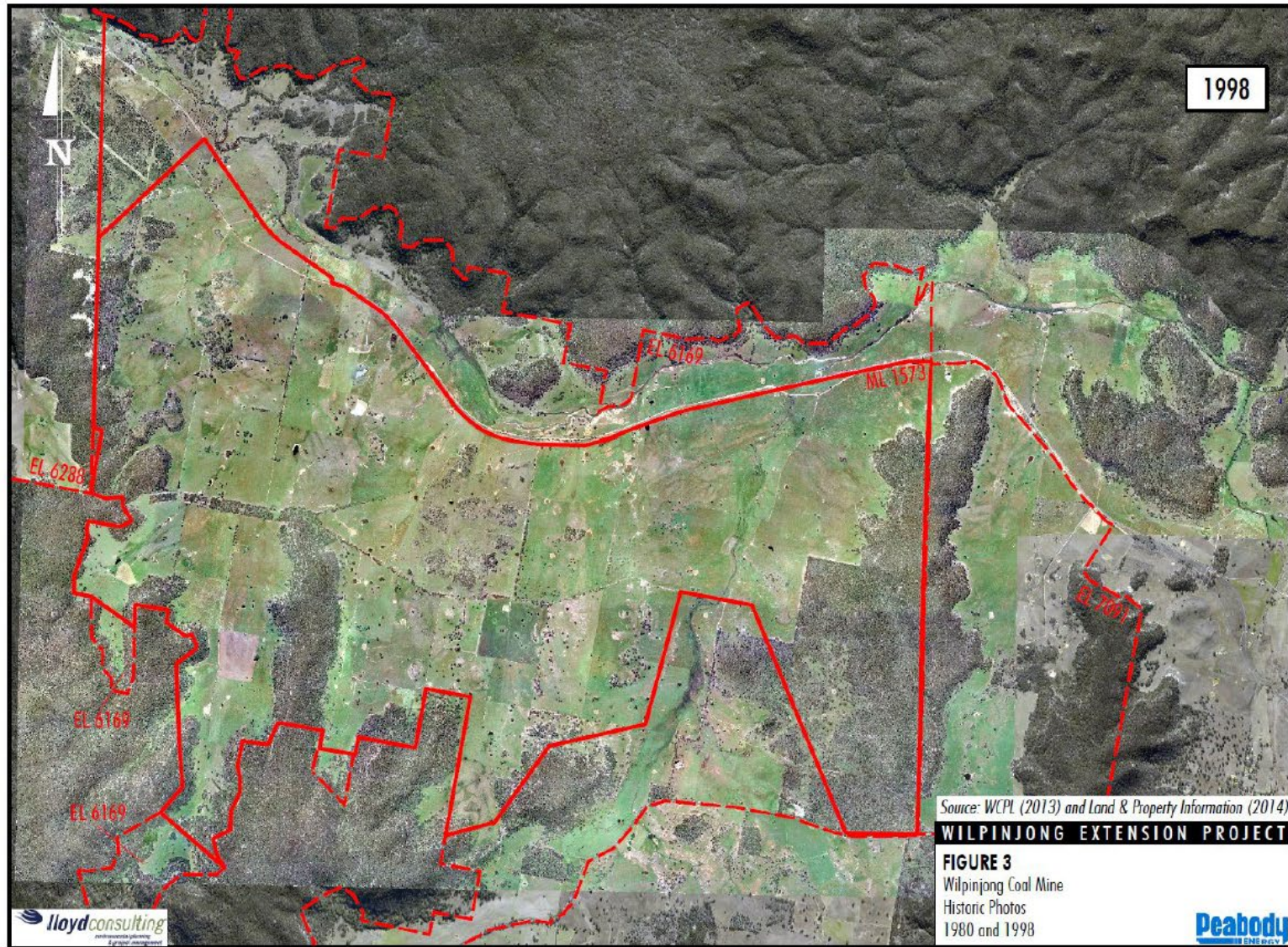


Disclaimer:
 The information contained in this map has been provided in good faith. Whilst all effort has been made to ensure the accuracy and completeness of this information, the data providers take no responsibility for errors or omissions nor any loss or damage that may result from the use of this information.
 Copyright Crown Lands 2015

Enclosure 6 Historical Aerial Image 1980



Enclosure 7 Historical Aerial Image 1998



Enclosure 8 Historical Aerial Image 2005



WIL-12-12_Wilpinjong Extension Project - Orthophoto - Aerial Image 2005

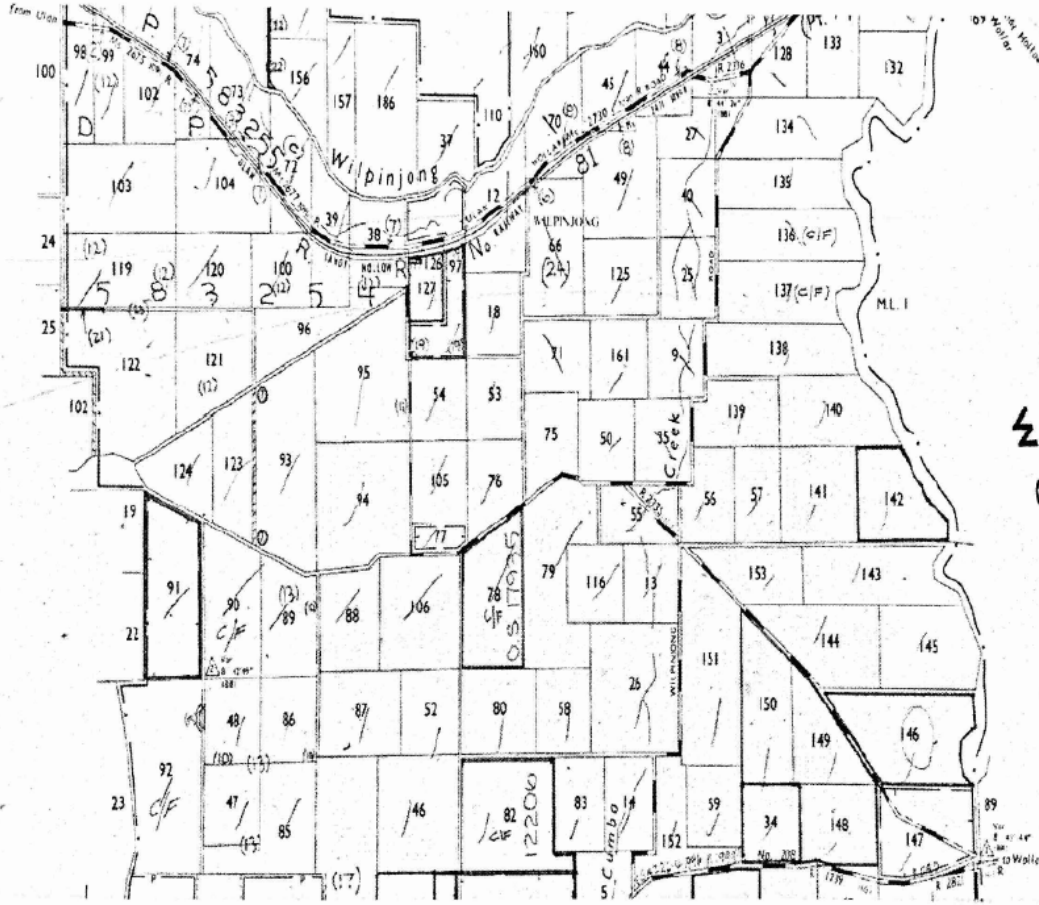
Enclosure 9 Parish and Cadastral Searches

PART PARISH COMBO
COUNTY PHILLIP

Image Viewer

ROAD

Handwritten notes:
WATER COURSE
SARLATON



WILPINJONG

Jump to image ^

Show image metadata

Image Viewer

65.6 m wide.
 55.3 m high.
 View from the centre of the map.
 Based on Australian Geodetic Survey.
 Height Datum:

933 – 11 & 111.
 Divisions of the Geographical Names Act.

49238

LEGEND

- State Coal Mine
- Catchment Area
- Irrigation Area
- Domestic & Stock Water Supply & Irrign. Dist.
- Water Trust District
- Survey Area
- State Recreation Area
- Occn. License and Pref. Occn. License
- Reserve from Sale or Lease or License
- Lands under Heritage Act.
- Fossicking Area
- Reserve from Occupation Under Mining Act
- Reserve from Mining Lease
- Public Road - Public Roads Act, 1902 as amended
- Private Subdivision Roads
- Horizontal Control Point - Landmark (with height)
- Horizontal Control Point - Other (with height)
- Observing Station
- Adjoining Parish Names

DP 208147
 Levee 612m
 75m
 Var 9° 15' 10" 1895

HARTLEY

FROM THE F
COVERED PARTITION
 - UPDATES

NOTICE TO PORTIONS

hectares unless otherwise shown
 number 2125 unless otherwise shown.

| Portion | Area | Purchaser |
|---------|------|-----------|
| | | |

82

88

Plan

showing the Survey of a

Road from Farms through Portion 55 to Wollair

Part of Curma County of Phillip

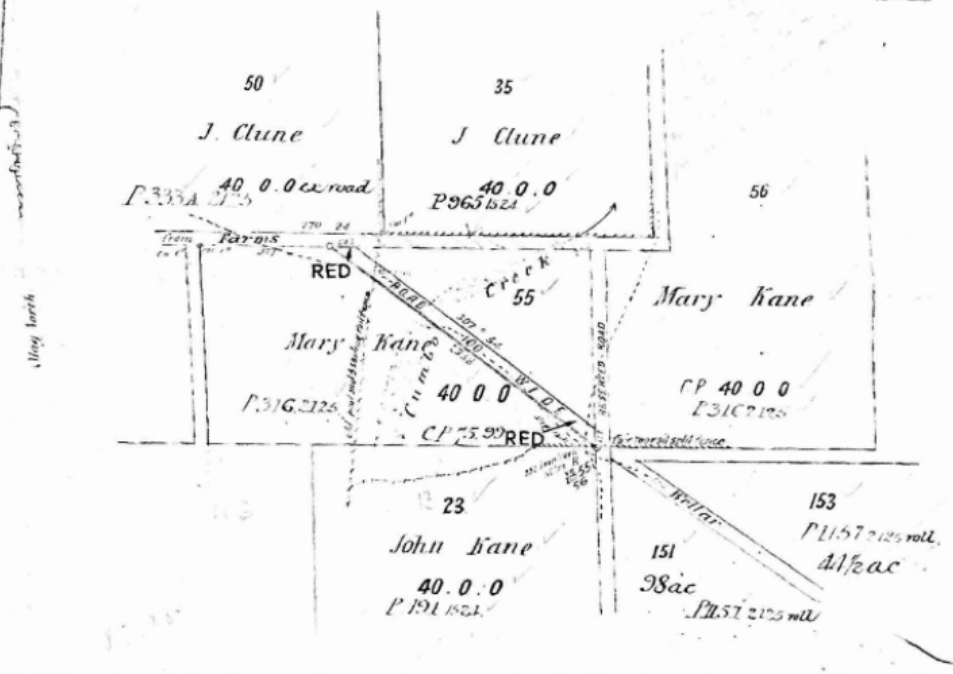
Proposed to be opened as a Parish road under the Act of Council 4 Willm N^o 11 and to be resumed under the 27th Clause of the Act 15th Victoria N^o 29
Road to be opened 200 Chains wide is shown by a red line

Scale 10 chains to an inch

1881

Preliminarily Notched in Gov: Gazette 10th August 1881 Vol 4303
Confirmed in Gov: Gazette 8th January 1884 Vol 184
Opened " " " 14th November 1884 " 1653

Handwritten signature
17th July 1883
Handwritten signature



Marked according to Regulations

Theolite used in Survey

Surveyed on the 24th October 1881

Total length of road 23 chains 38 links

transmitted to the Surveyor General with my letter of the 12th December 1881 N^o 68

PLAN MICROFILMED

NO ADDITIONS OR AMENDMENTS TO BE MADE

James Hunter
Licensed Surveyor

For SI 5th
where filed work
Office
1881

2335-1603

New South Wales Government Gazette (Sydney, NSW : 1832 - 1900), Friday 14 November 1884 (No.594), page 7653

| [7409] | | Department of Mines, Sydney, 14th November, 1884. | |
|---|--|--|--|
| FORMAL OPENING OF PARISH ROADS. | | | |
| <p>NOTICE is hereby given that the lines of Parish Road mentioned in the annexed Schedule have been formally marked and opened by the proper officer, and that the same are now open for public use.</p> <p style="text-align: right;">JOSEPH P. ABBOTT.</p> | | | |
| SCHEDULE. | | | |
| Roads No. | Description of Roads. | Date of Gazette of last Notice. | Place, &c., lodged at the Police Office at — |
| 84-4904 81-479-73 S.G. R. 22506 | Deviation in road from Skilling-street, town of Glen Innes, to the Big Ben Gate, near Vegetable Creek, viz. :—From the north boundary of T. Hatton's C.P. of 40 acres & roads 5 perches, portion No. 35, to the Severn River, at the north boundary of O. Blossom's 40 acres, portion No. 4, parish of Fladbury, county of Gough;—in lieu of part of road previously confirmed in Government Gazette of 5th September, 1882, folio 4608. | 17 June, 1884, folio 3502 | Glen Innes. |
| 84-4906 81-535-63 S.G. R. 25773 | *Part of the road from Glen Innes to Shannon's Vale, viz. :—From the Glen Innes and Grafton Road, within J. Mitchell's 19 acres, portion No. 191, to the left bank of the Brady Waters, within O. Blossom's 52 acres, portion No. 104, parish of Glen Innes, county of Gough. | 20 June, 1884, folio 3562 | do |
| 84-4901 83-331-12 S.G. R. 10504 | Deviation in the road from Cassella to W. Lamb's 40 acres C.P., on Ironbark Creek, viz. :—Within A. Busby's 60 acres, parish of Borambil, county of Bligh;—in lieu of part of road previously confirmed in Government Gazette of 15th March, 1872, folio 698. | 24 June, 1884, folio 4038 | Cassella. |
| 84-4905 81-723-13 S.G. R. 2356 | *Road from the reserved road at the south boundary of James Cronin's 40 acres C.P., portion No. 16, parish of Moan, to the south boundary of T. Dunn's (now James Dunn, junior's) 40 acres C.P., portion No. 2-1, parish of Bereedary, county of Bligh;—being part of the road down the right bank of Half-moon Creek. | 30 November, 1883, folio 650. | do |
| 84-4912 82-435-10 S.G. R. 2572 | Part of road from Loombah to Molong, viz. :—From the north boundary of Henry Birmingham's C.P. of 320 acres, portion No. 44, to the Obley and Molong Road, within that portion, parish of Burrawong, county of Gordon. | 20 June, 1884, folio 3561 | Obley. |
| 84-4921 81-281-15 S.G. R. 2207 | *Road from the Swatshfield and O'Connell Plains Road, at the north-west corner of H. Humphries, junior's, 40 acres C.P. No. 221, to a point in the Oberon and Swatshfield Road near the 3rd milestone, parishes of Joudyn, Oberon, and Creis, county of Westmoreland. | 15 May, 1883, folio 2712 | Oberon. |
| 84-4902 83-87-11 S.G. R. 2377 | *Part of the road from Glen Innes to Grafton, viz. :—From the south boundary of J. Mitchell's 19 acres, portion No. 187, parish of Glen Innes, to the bridge across the Brady Waters, near the south-east corner of D. Dunbar's C.P. of 100 acres, No. 55, parish of Beards Plains, county of Gough. | 20 June, 1884, folio 3562 | Glen Innes. |
| 84-4901 82-82-12 S.G. R. 2335 | Road from the north to the east boundary of portion No. 55, Mary Kane's 40 acres C.P., parish of Cumbe, county of Phillip. | 8 January, 1884, folio 184. | Wollar. |

* Costumed through alienated land only.

33-1524

PLAN MICROFILMED
NO ADDITIONS OR AMENDMENTS TO BE MADE

Country Lots
Police District - Mudgee
Place of Sale - Mudgee

PLAN of 2 portions of land of 30 acres each at Cumbo Creek in the County of Phillip

vide Mudgee Comd^r return of 23rd of 18 Sep 53 reporting lot 42 sold to Thomas Lee 's' lot 43 deposit forfeited

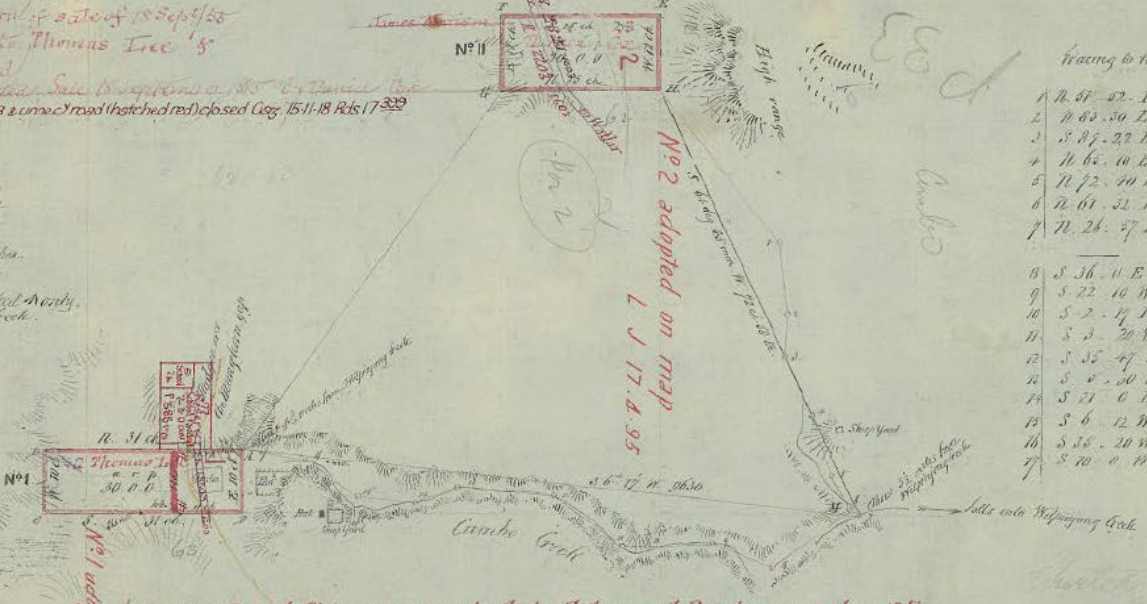
vide or 1852 map of 75 sections. See 18 sections on 1852 map. Land is Drop resumed for road R13503 1853 & unrec^d road (statched red) closed Aug. 15-11-18 Rts 17 329

| | | |
|---|-----|-----------------|
| 1 | 100 | Apple |
| 2 | 100 | Apple |
| 3 | 100 | Blue Gum |
| 4 | 100 | White Pine |
| 5 | 100 | Blue Gum |
| 6 | 100 | Do |
| 7 | 100 | Small white box |
| 8 | 100 | Blue Gum |

100 to 100 M. R. 78. 46 E. 100. See marked nearby at Cumbo Creek.

No 1 - A flat containing some soil capable of cultivation at the northern & western parts - the rest has a rising soil - takes in a small portion of a gravelly ridge at the South end, and of a rocky bank at the North West corner - no standing water.

No 2 - A flat of a middling quality, but fit for cultivation - some scrubby ground at the South West part - no water. Under Gum, Apple & Box.



Tracing to be

| | | |
|----|---------------|-------|
| 1 | N. 87. 52. E. | 5000 |
| 2 | N. 85. 50 E. | 1100 |
| 3 | S. 87. 22 E. | 175 |
| 4 | N. 62. 10 E. | 1000 |
| 5 | N. 72. 40 E. | 1000 |
| 6 | N. 61. 32 E. | 600 |
| 7 | N. 26. 27 E. | 165 |
| 8 | S. 36. 11 E. | 1500 |
| 9 | S. 22. 10 W. | 1000 |
| 10 | S. 2. 17 E. | 1000 |
| 11 | S. 2. 20 W. | 400 |
| 12 | S. 35. 47 W. | 1500 |
| 13 | S. 2. 50 W. | 1500 |
| 14 | S. 21. 0 E. | 700 |
| 15 | S. 6. 12 W. | 900 |
| 16 | S. 55. 20 W. | 1000 |
| 17 | S. 70. 0 W. | 950 |
| | | 17000 |

No 1 adopted on map L. J. 17. 4. 95

No 2 adopted on map L. J. 17. 4. 95

Unrec^d Road Pt 1a 2r granted to Edward Barton under 124 Sec P Act 1902 Vide Roads Compⁿ 19347 See also P. 567 1524 R. 988 205 Exmd. for Dept. 28-4-12-19

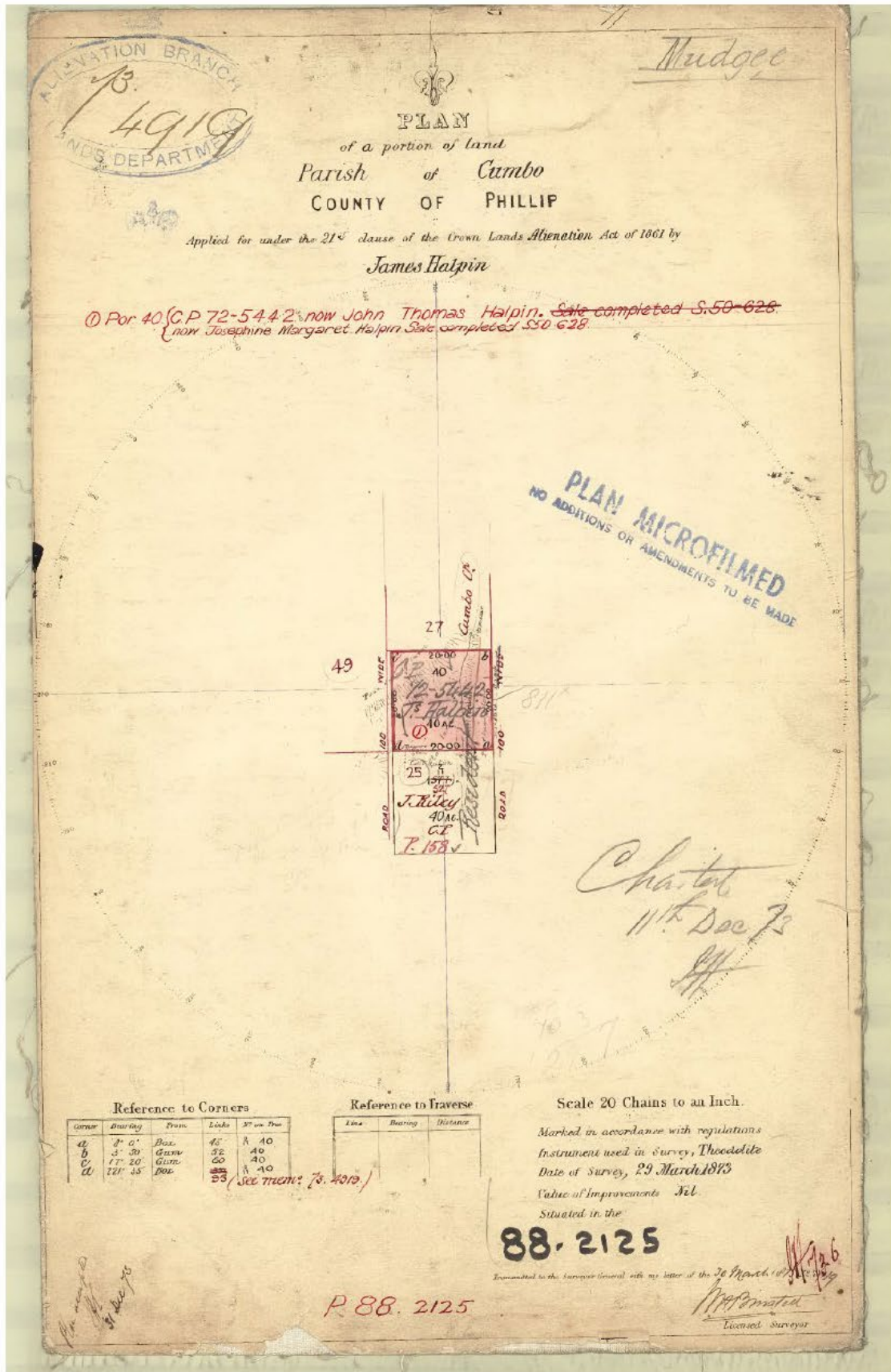
TRADED FOR D. S. O.

21 Aug. 06

Transmitted to the Surveyor General with description in my letter of the 30th of April 1855 No 15719

Wm Armstrong

Req:R743512 /Doc:CP 00088-2125 P /Rev:28-Nov-2012 /NSW LRS /Prt:05-Mar-2020 11:36 /Seq:1 of 1
 * Office of the Registrar-General /Src:INFOTRACK /Ref:20 382



SURVEYOR GENERAL'S OFFICE
 4835

Mungce

67
 PLAN of a portion of land containing 10 acres,
 numbered 7/4, in the Locality of Wallar Creek,
 in the County of Phillip; applied for by Patrick
 Mara as a conditional purchase under the 21st
 Section of the Crown Lands Alienation Act.

P^{ts} of Cumbo

*Area 24 a
 + Charles 21/4
 11/3 20/4*



PLAN MICROFILMED
 NO ADDITIONS OR AMENDMENTS TO BE MADE

| Corners | | | | |
|---------|-------------|-------|--------|-------|
| Cr | Bearing | From | Inches | Parts |
| A | N 16° 30' E | Stump | 37 1/2 | 1/4 |
| B | S 53° E | Quin | 40 | 1/4 |
| C | S 53° W | Quin | 26 | 1/4 |
| D | S 16° W | Quin | 7 | 1/4 |

Surveyed by circumferenter.
 Marked in accordance with Regulations.
 Scale twenty chains to one inch.

*Transmitted to the Surveyor General
 with my letter of the 27th August, 1855*
James Loudon

492-1524

P 492-1524

Req:R743511 /Doc:CP 00408-1524 P /Rev:24-Nov-2012 /NSW LRS /Prt:05-Mar-2020 11:36 /Seq:1 of 1
 Office of the Registrar-General /Src:INFOTRACK /Ref:20 382

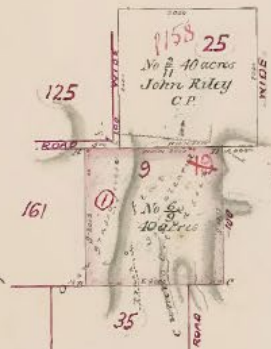
19045 66

MODULIF

PLAN of a portion of land containing 40 acres, numbered 69, in the Locality of Cumbo Creek, in the County of Phillip, applied for by John Riley as a conditional purchase under the 21st Section Crown Lands Alienation Act.

PH OF CUMBO

① Por 9 C.P. 64-1723. ~~Now John Thomas Halpin. Sale completed \$50 625.~~
~~Now Josephine Margaret Halpin. Sale completed \$50 625.~~



PLAN MICROFILMED

NO ADDITIONS OR AMENDMENTS TO BE MADE

| CORNERS | | | | |
|---------|-------------|-------|--------|--------|
| Cor | Bearing | From | Length | Number |
| A | S 69° 45' W | box | 61 | 18 |
| B | S 8° W | box | 16 | 18 |
| C | S 20° W | box | 8 | 18 |
| D | N 67° W | apple | 28 | 18 |

Surveyed by Circumferentor,
 Marked in accordance with Regulations
 Scale twenty chains to one inch

Transmitted to the Registrar General with my letter
 of the 15th October No 66/47

P 408. 1524

James Gordon
 P. S.

66-347

19055
 1366
 SYDNEY

TRACES FOR D.S.O.

PLAN of a portion of land containing
 10 acres, numbered 60, in the Parish of
 Tongbong, in the County of Phillip; applied
 for by Joseph Sheumack to purchase at
 Auction.

Sale at Rylstone on 27th April 1863
 Country lot Y
 Portion 60.

Vide A: 68/1483 above lot deposit forfeited.
 Vide A: 68/9066 " " selected by T. K. Cox.



| Corners | | | |
|---------|---------|---------------|----------------|
| Cor | Bearing | From | Links & Inches |
| G | West | Apple | 11 1 X |
| H | S 30° E | Apple & Sheep | 25 1 X |
| I | E 25° N | Cum | 39 1 X |
| K | N 15° E | Cum | 31 1 X |

Surveyed by Circumferator.
 Marked in accordance with Regulations.
 Scale twenty chains to one inch.

Transmitted to the Surveyor General
 with my letter of the 15th October, No 467/34

James Hudson
 S.S.

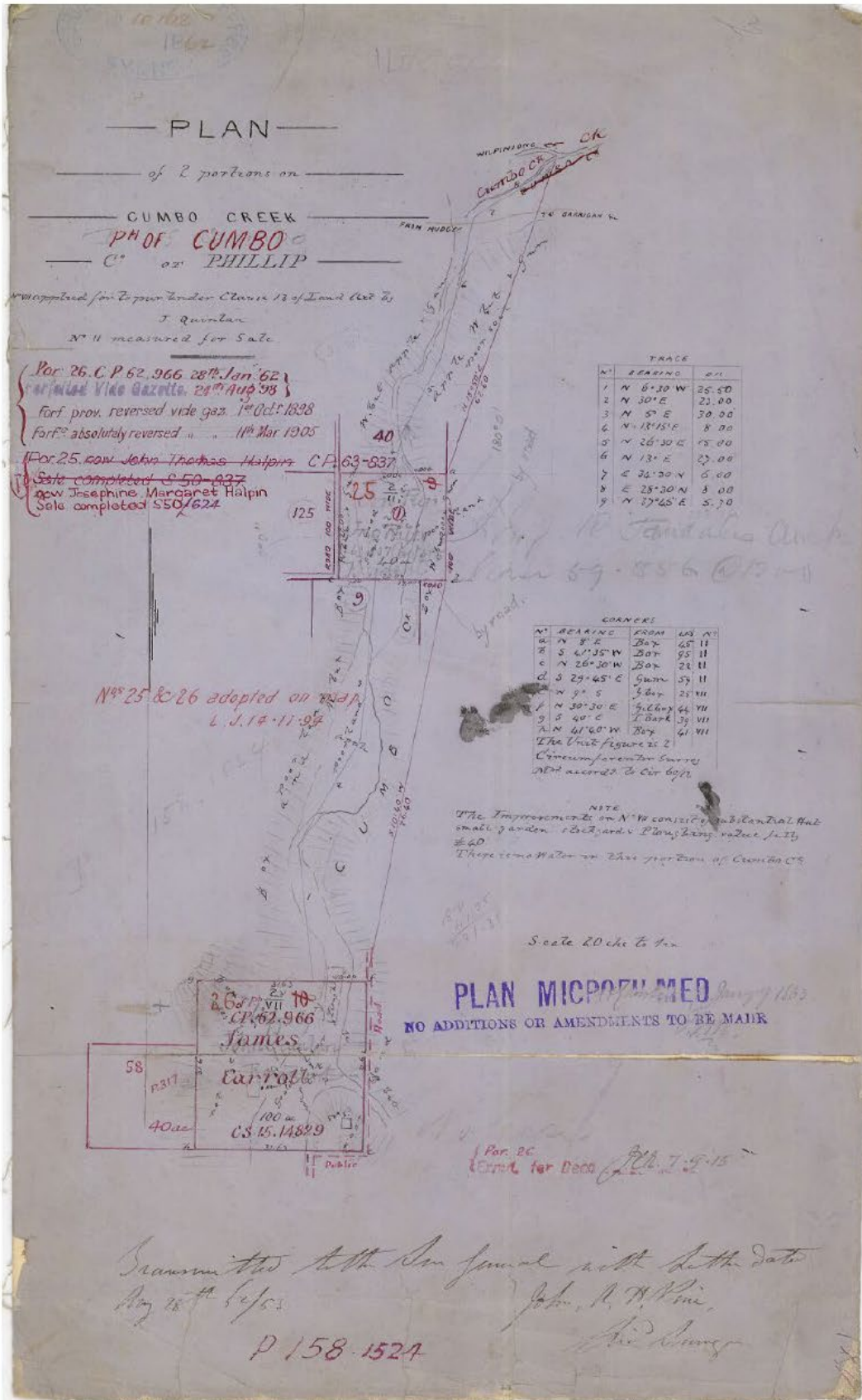
PLAN MICROFILMED
 NO ADDITIONS OR AMENDMENTS TO BE MADE

419-1524

419-1524

6. 3874
 12. 24

Reg:R335970 /Doc:CP 00158-1524 P /Rev:25-Nov-2012 /Sts:OK,OK /Prt:10-Sep-2017 11:58 /Seq:1 of 1
 Ref:cumbo /Src:Q



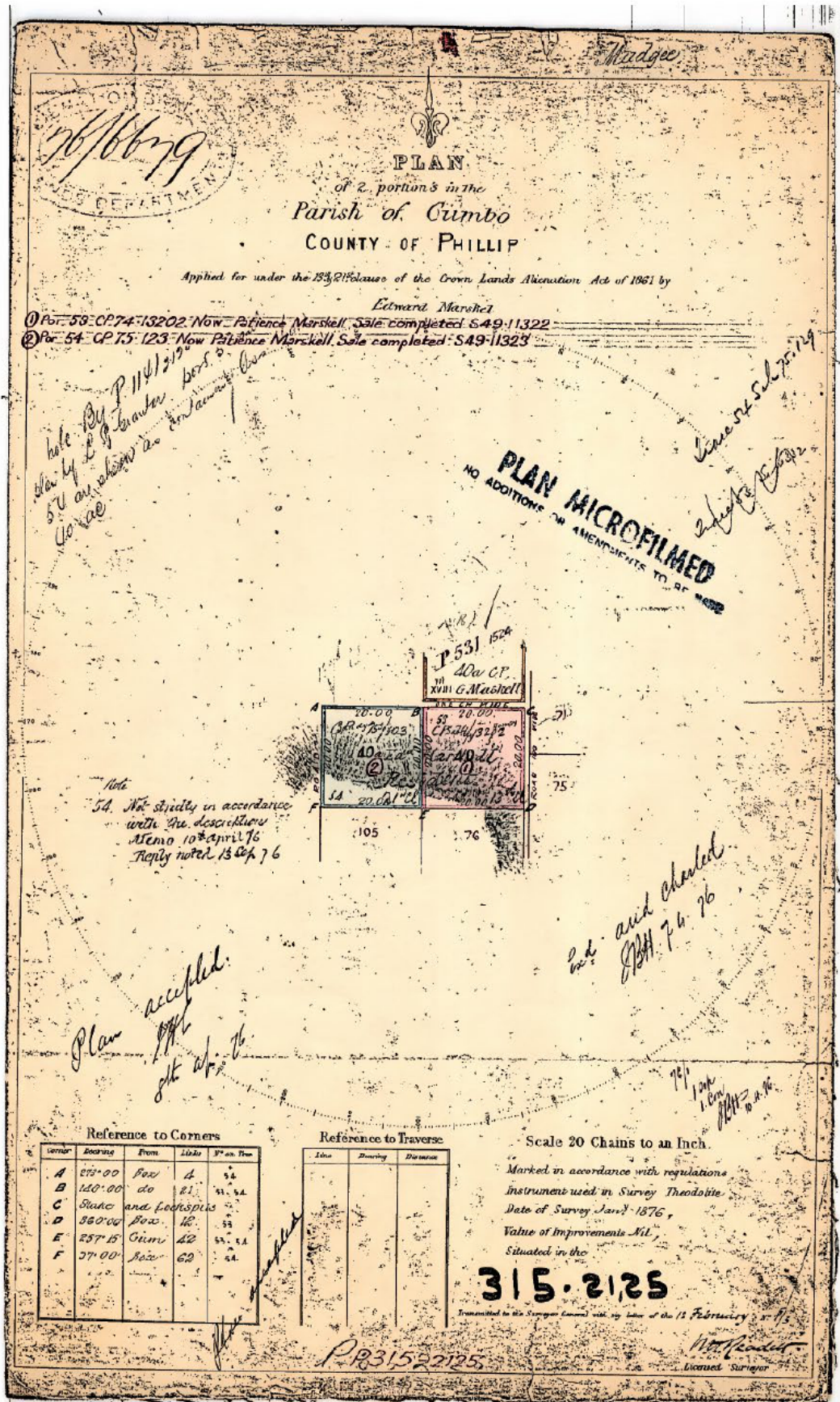


19/07/2019 11:12 AM

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Reg:R679249 /Doc:CP 00315-2125 P /Rev:28-Nov-2012 /NSW LRS /Prt:19-Jul-2019 11:11 /Seq:1 of 1
 © Office of the Registrar-General /Src:DIRECTINFO /Ref:Wilpy



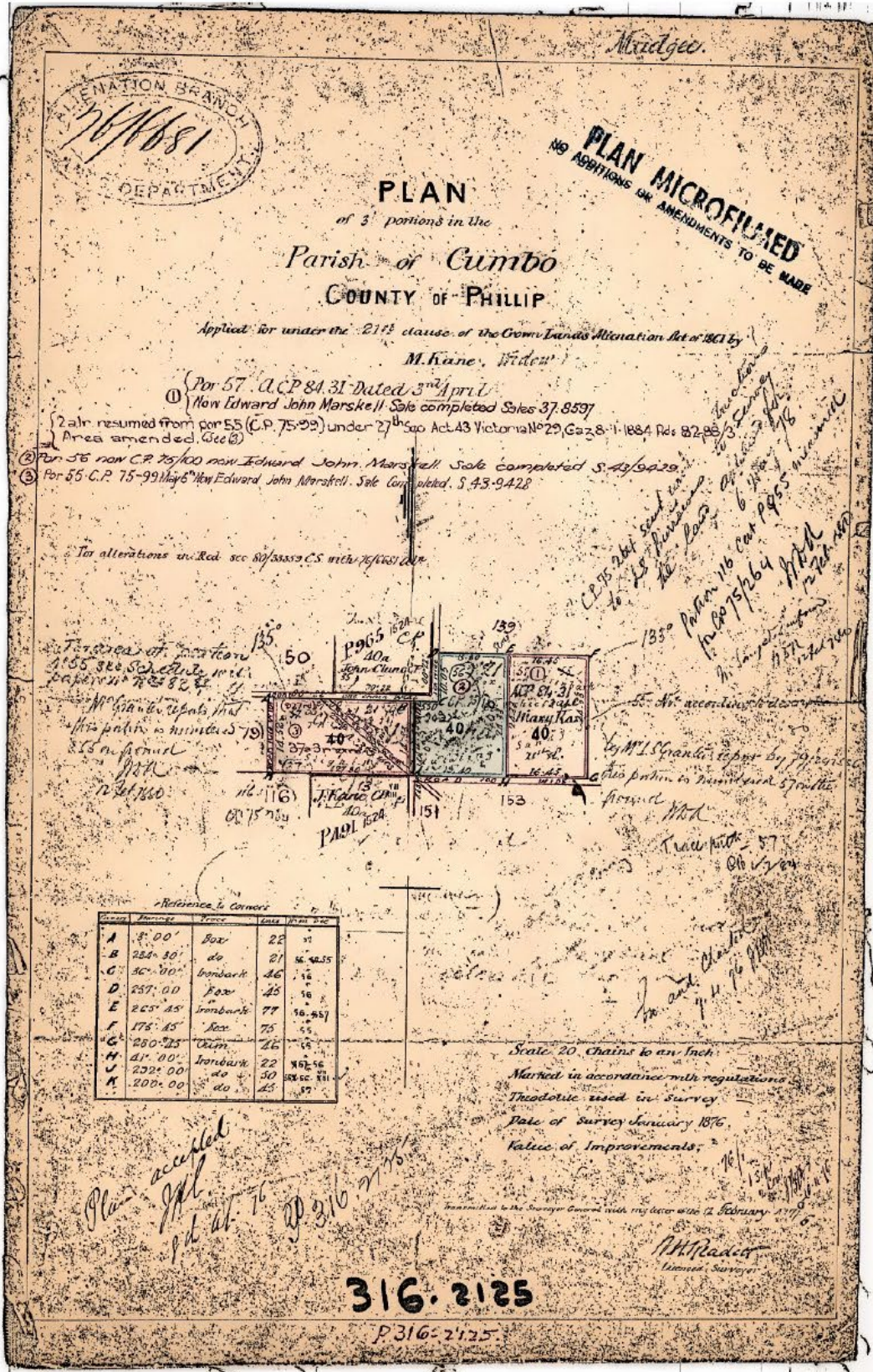


06/05/2019 10:09 AM

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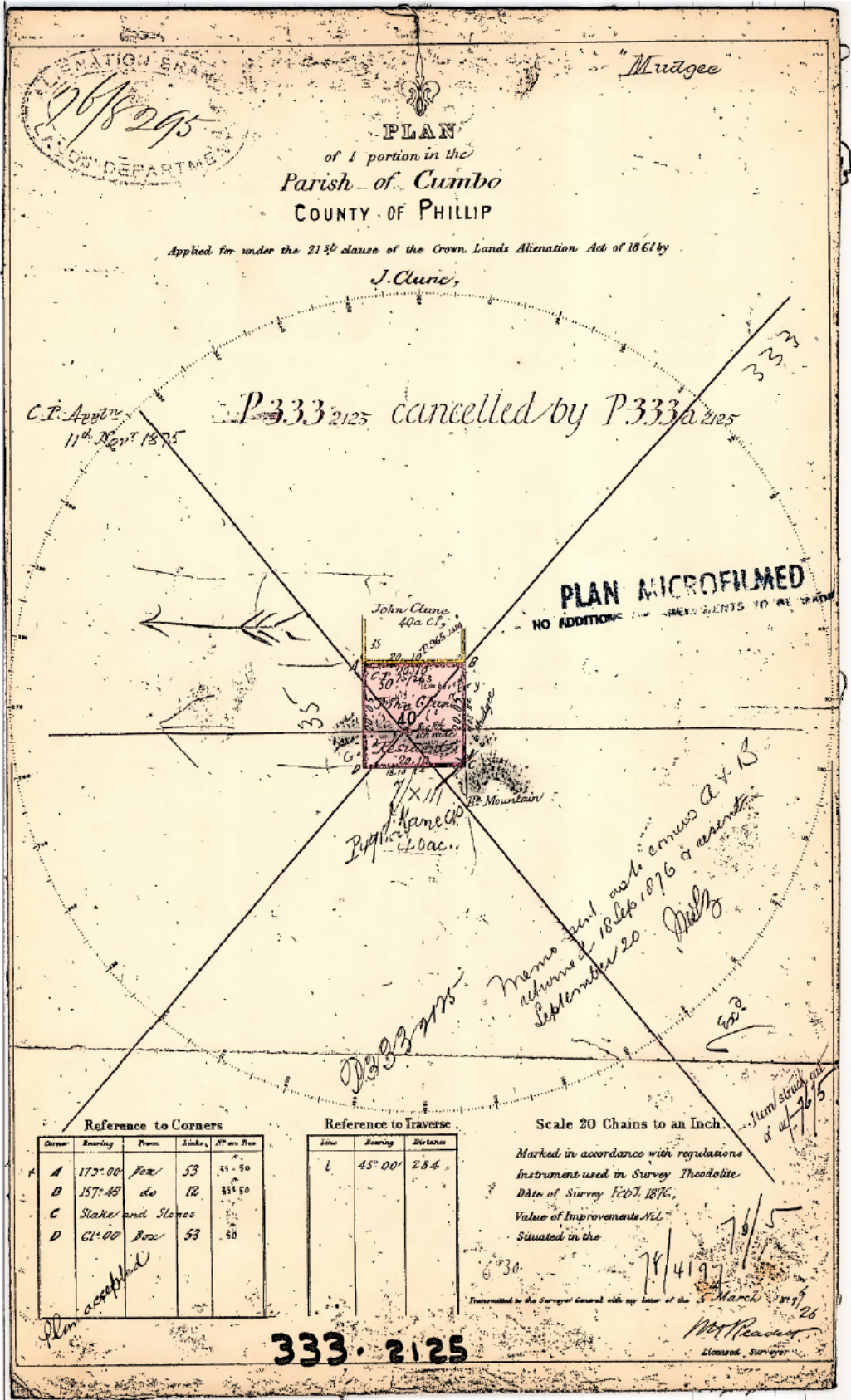


06/05/2019 10:23 AM

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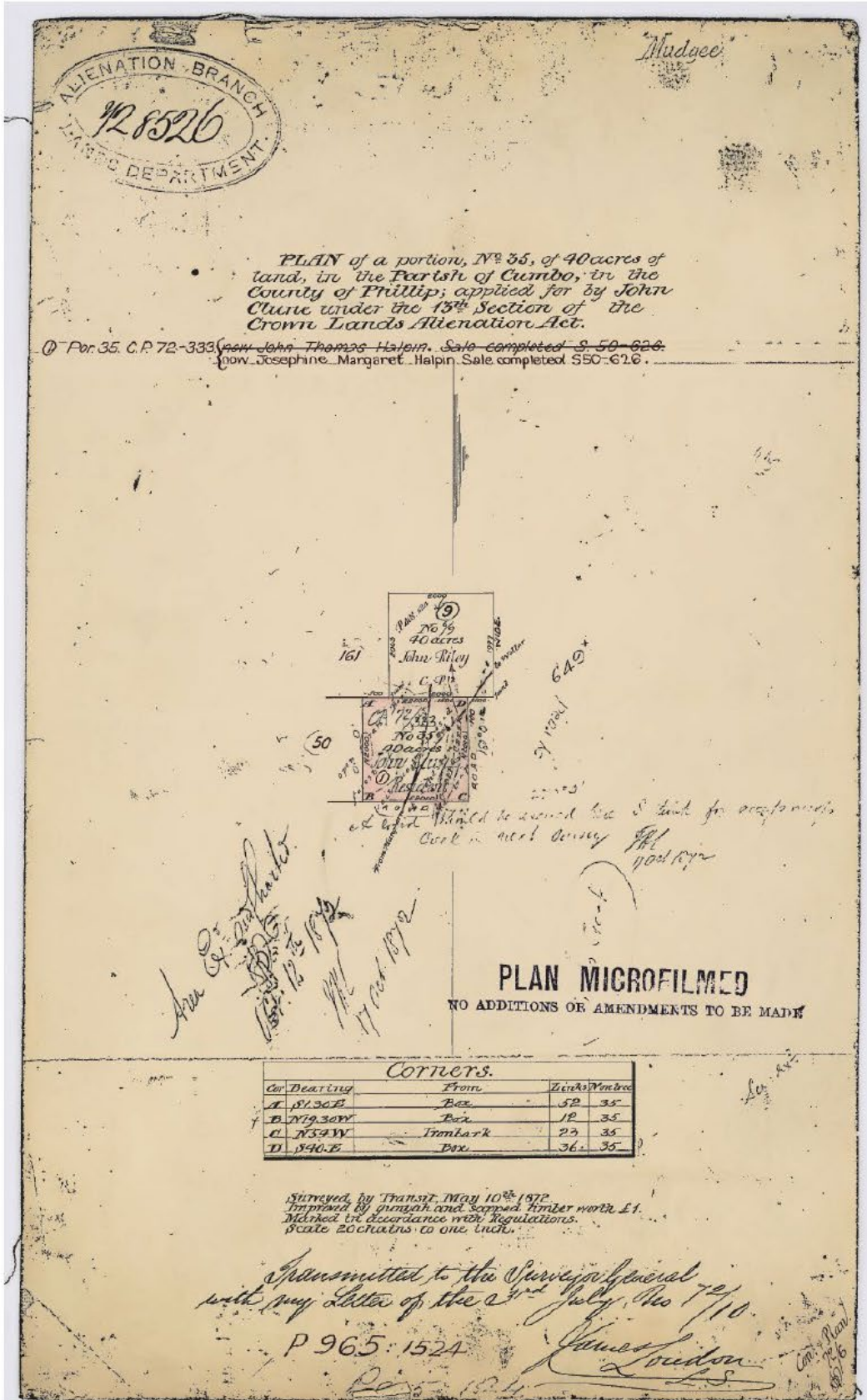




06/05/2019 10:21 AM

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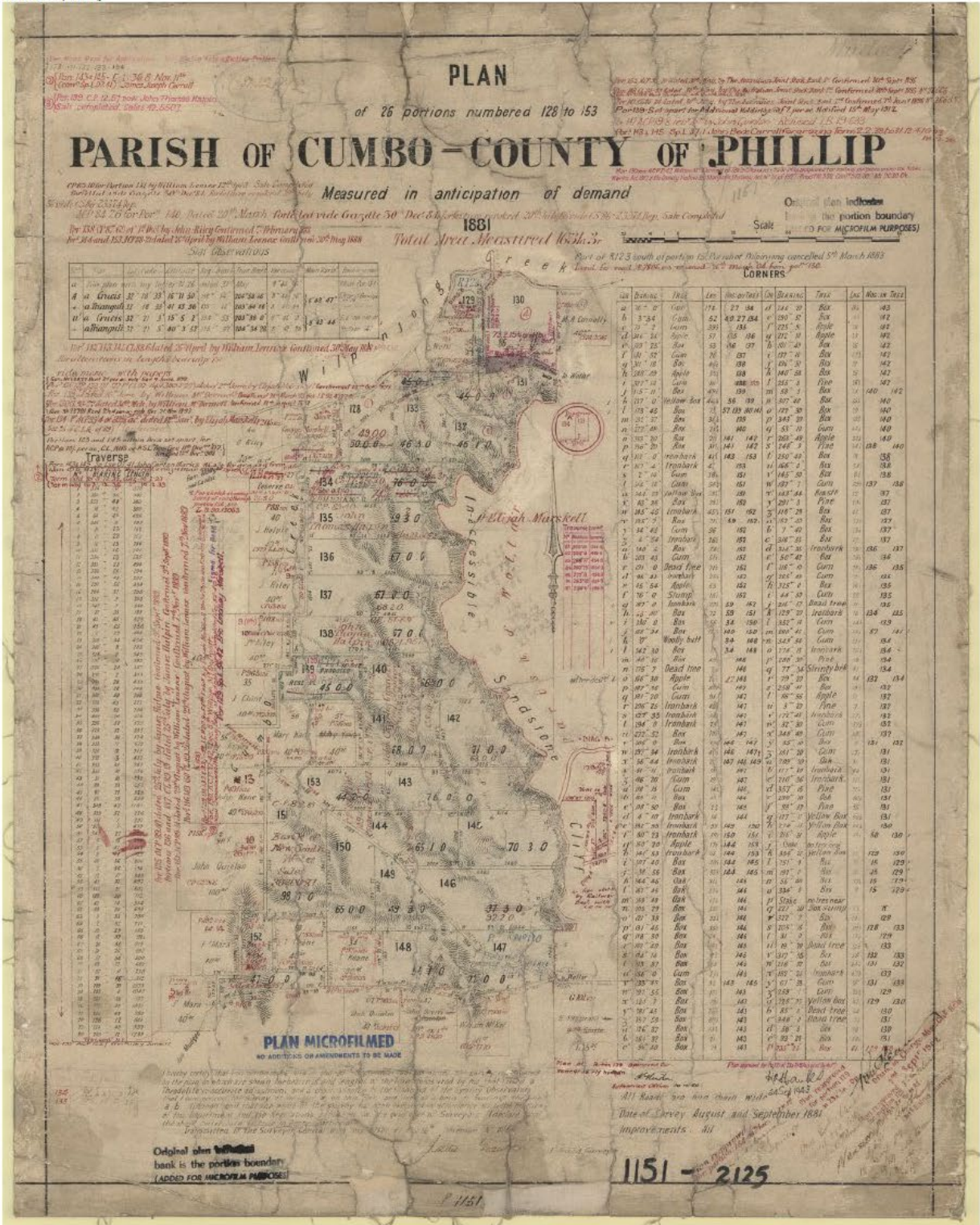
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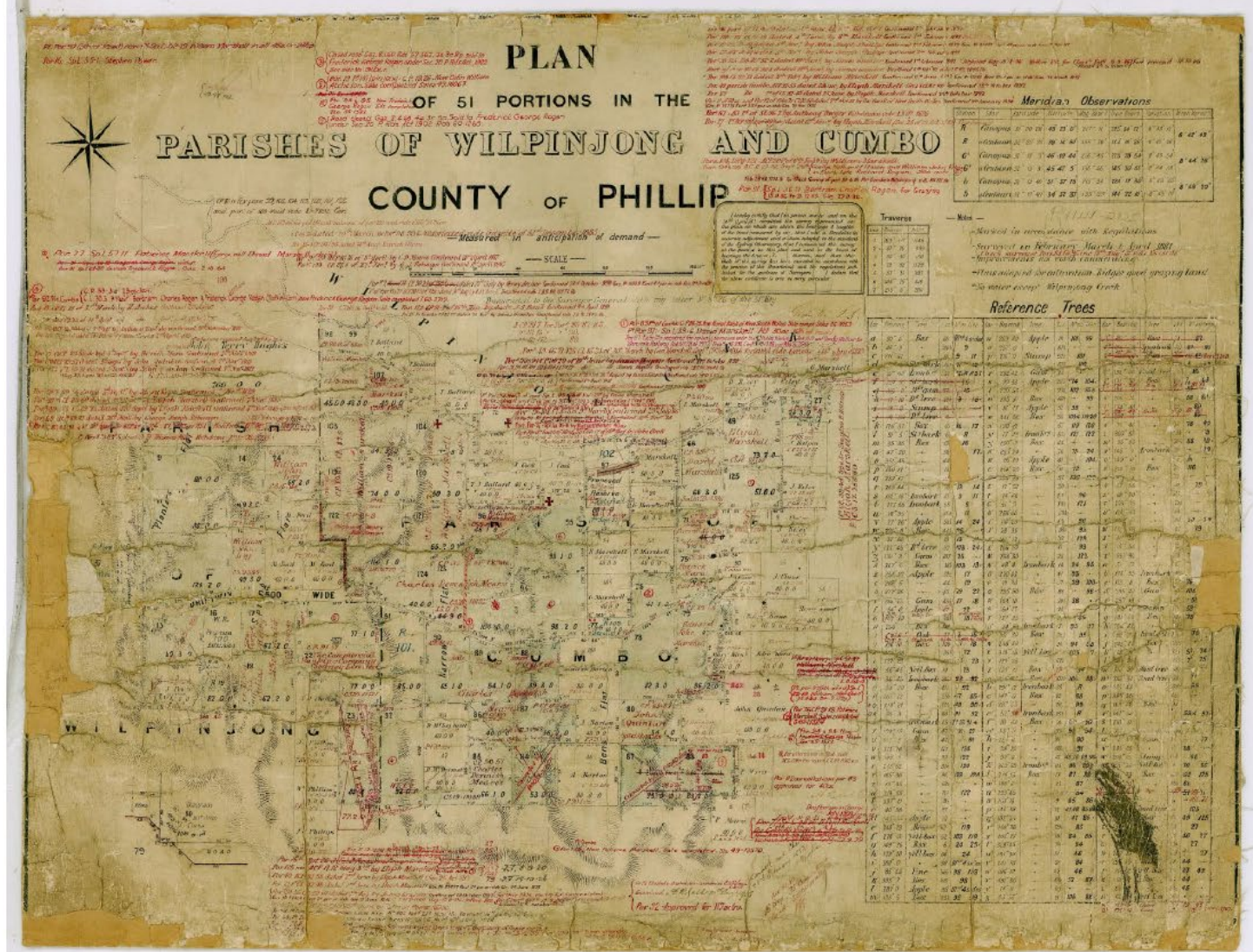




06/05/2019 02:18 PM

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PLAN

OF 51 PORTIONS IN THE PARISHES OF WILPINJONG AND CUMBO COUNTY OF PHILLIP



Measured in anticipation of demand

SCALE

Meridian Observations

| Station | Year | Latitude | Longitude | Time | Observer |
|---------|------|----------|-----------|-------|-------------|
| K | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| L | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| M | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| N | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| O | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| P | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| Q | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| R | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| S | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |

Traverses

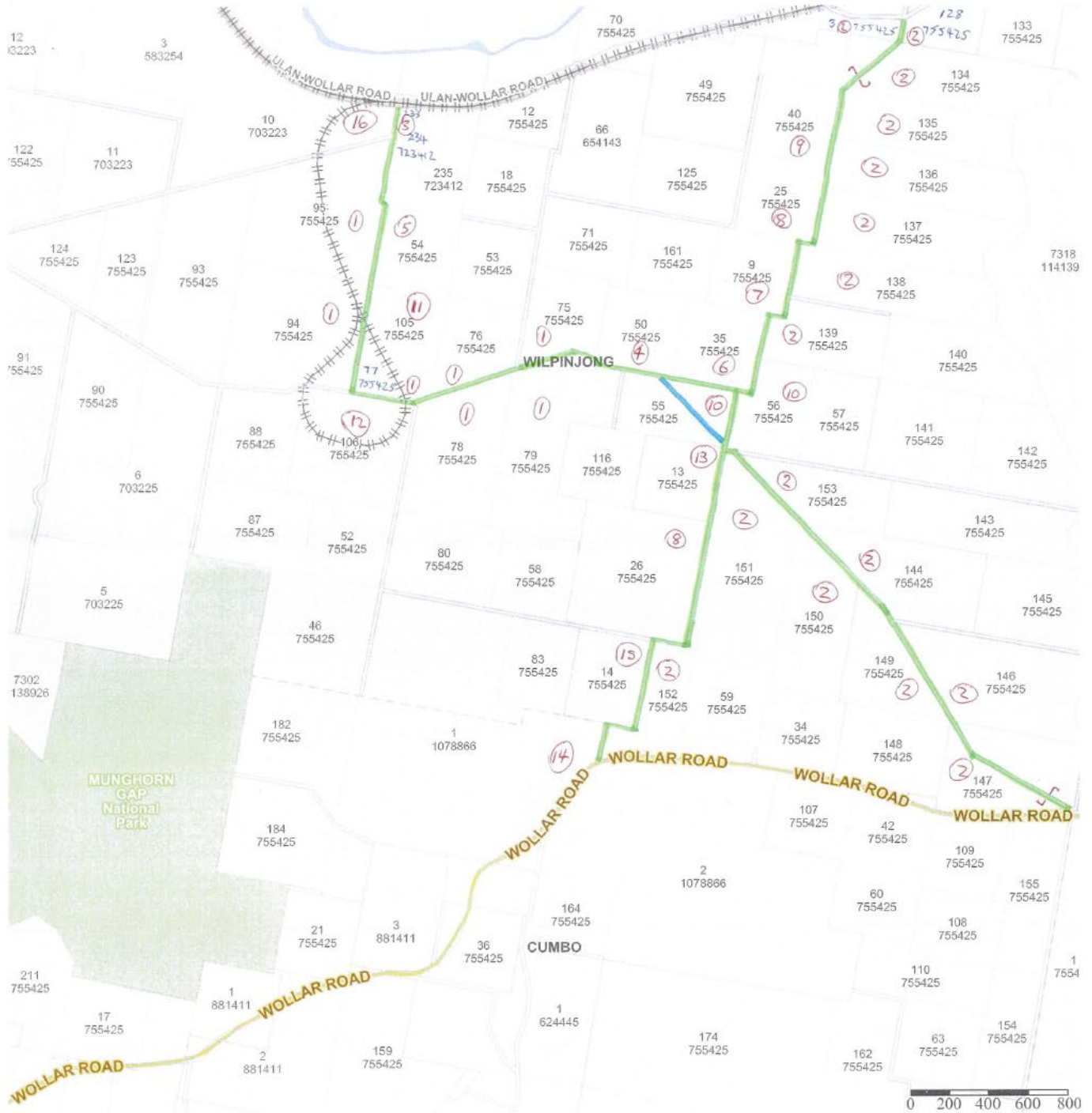
| Station | Year | Latitude | Longitude | Time | Observer |
|---------|------|----------|-----------|-------|-------------|
| 1 | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| 2 | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| 3 | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| 4 | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| 5 | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |

Reference Trees

| No. | Year | Latitude | Longitude | Time | Observer |
|-----|------|----------|-----------|-------|-------------|
| 1 | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| 2 | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| 3 | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| 4 | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| 5 | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| 6 | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| 7 | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| 8 | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| 9 | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| 10 | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| 11 | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| 12 | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| 13 | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| 14 | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| 15 | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| 16 | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| 17 | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| 18 | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| 19 | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| 20 | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| 21 | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| 22 | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| 23 | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| 24 | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| 25 | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| 26 | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| 27 | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| 28 | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| 29 | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| 30 | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| 31 | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| 32 | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| 33 | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| 34 | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| 35 | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| 36 | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| 37 | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| 38 | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| 39 | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| 40 | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| 41 | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| 42 | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| 43 | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| 44 | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| 45 | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| 46 | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| 47 | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| 48 | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| 49 | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| 50 | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |
| 51 | 1850 | 37 28 | 152 42 | 10 11 | W. H. H. H. |

ATTACHMENT 2

CROWN PLAN REFERENCE SHEET



72
 72
 72

Meridian Observations
 Station No. Meridian Azimuth Distance
 1. Camp 27.740 117.1 125.0 175.0
 2. Camp 27.740 117.1 125.0 175.0
 3. Camp 27.740 117.1 125.0 175.0
 4. Camp 27.740 117.1 125.0 175.0
 5. Camp 27.740 117.1 125.0 175.0

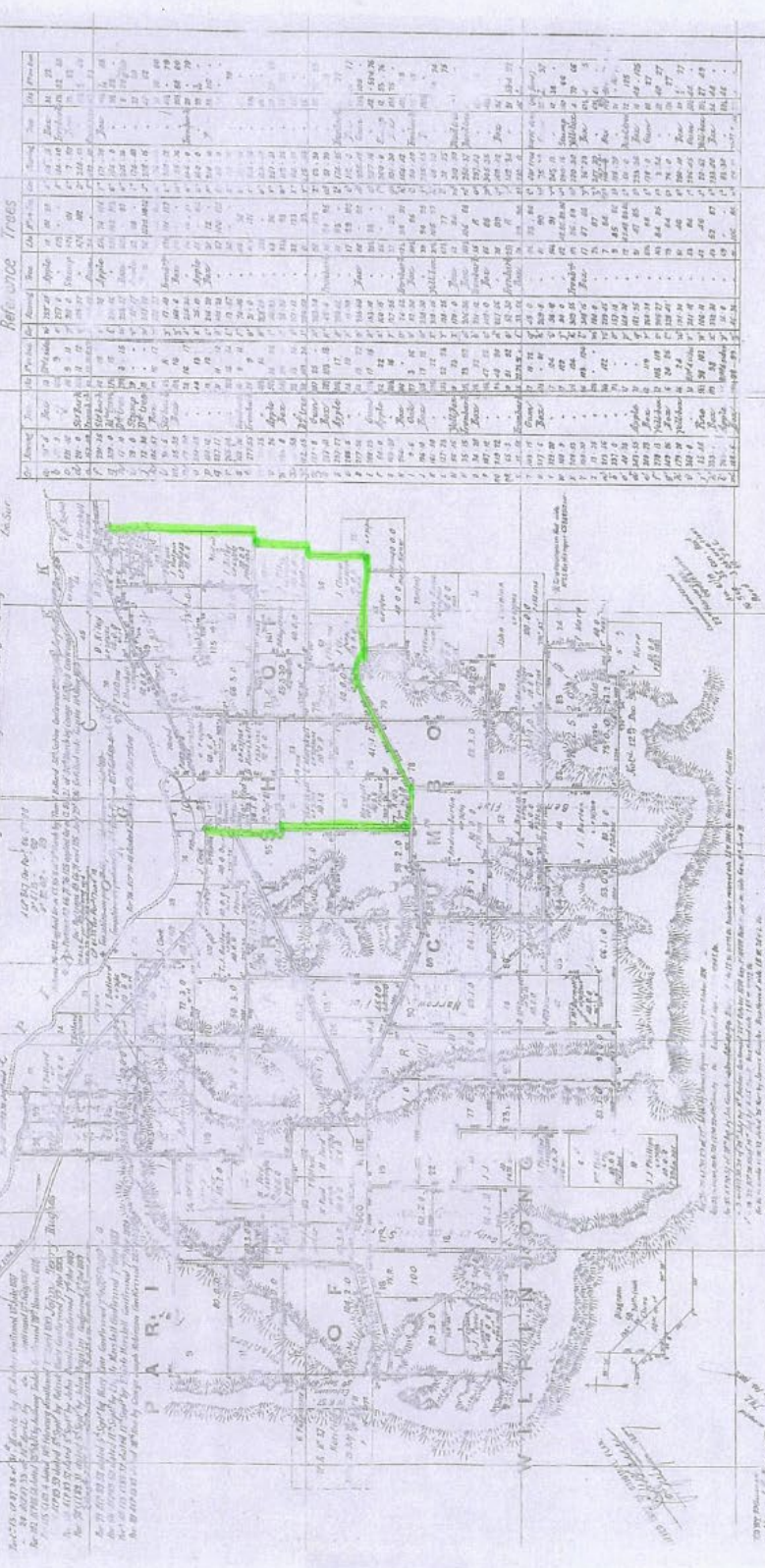
Traverse
 Station No. Bearing Distance
 1. 17.0 200
 2. 17.0 200
 3. 17.0 200
 4. 17.0 200
 5. 17.0 200

Reference Triangles
 Station No. Bearing Distance
 1. 17.0 200
 2. 17.0 200
 3. 17.0 200
 4. 17.0 200
 5. 17.0 200

PLAN
 OF 51 PORTIONS
 IN THE
 PARISHES OF WILPINJONG AND CUMBO
 COUNTY OF PHILLIP

Scale
 1" = 400 Feet
 1" = 125 Meters

North
 True North
 Magnetic North
 Grid North



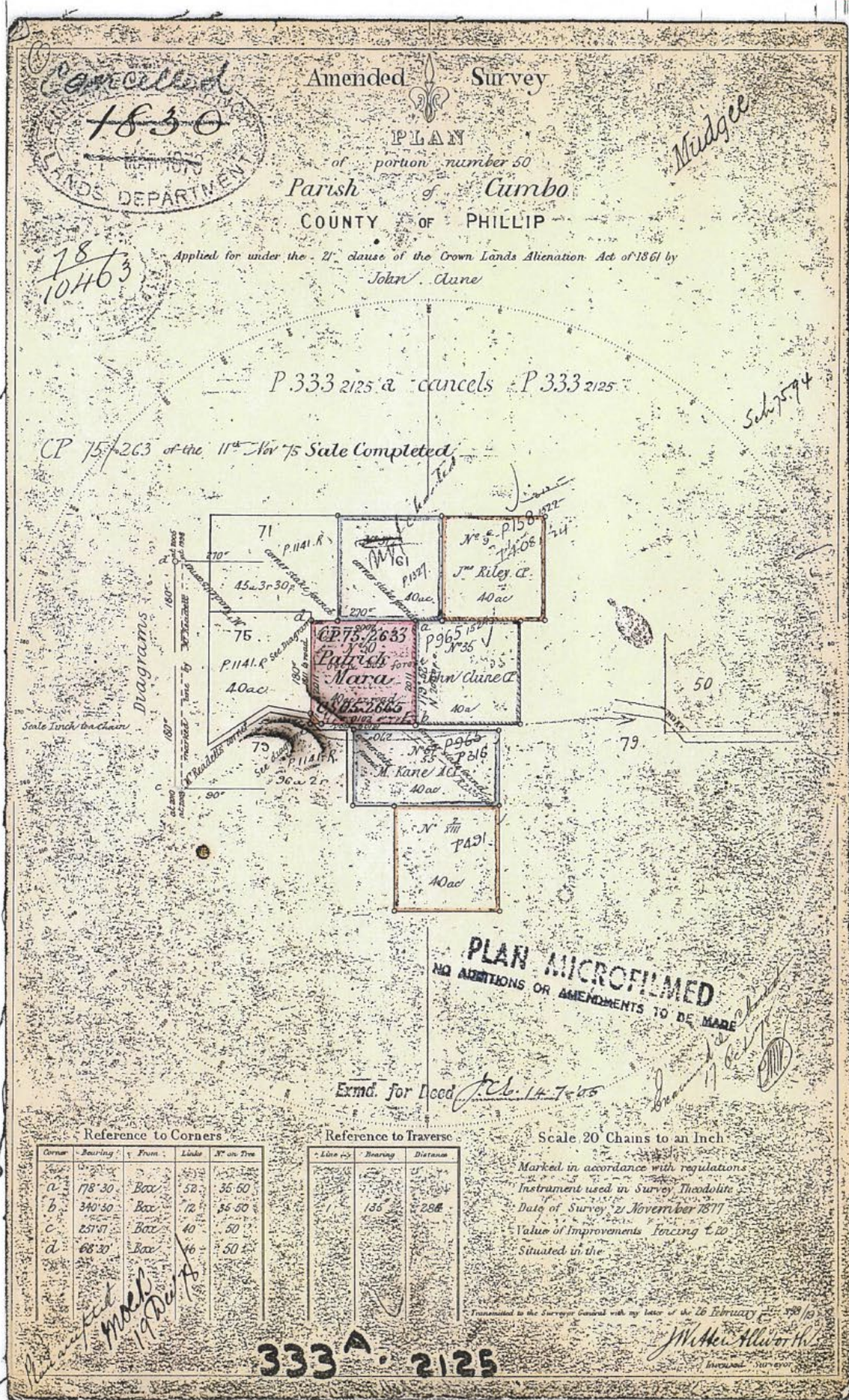
| Parcel No. | Bearing | Distance | Area |
|------------|---------|----------|------|
| 1 | 17.0 | 200 | ... |
| 2 | 17.0 | 200 | ... |
| 3 | 17.0 | 200 | ... |
| 4 | 17.0 | 200 | ... |
| 5 | 17.0 | 200 | ... |
| 6 | 17.0 | 200 | ... |
| 7 | 17.0 | 200 | ... |
| 8 | 17.0 | 200 | ... |
| 9 | 17.0 | 200 | ... |
| 10 | 17.0 | 200 | ... |
| 11 | 17.0 | 200 | ... |
| 12 | 17.0 | 200 | ... |
| 13 | 17.0 | 200 | ... |
| 14 | 17.0 | 200 | ... |
| 15 | 17.0 | 200 | ... |
| 16 | 17.0 | 200 | ... |
| 17 | 17.0 | 200 | ... |
| 18 | 17.0 | 200 | ... |
| 19 | 17.0 | 200 | ... |
| 20 | 17.0 | 200 | ... |
| 21 | 17.0 | 200 | ... |
| 22 | 17.0 | 200 | ... |
| 23 | 17.0 | 200 | ... |
| 24 | 17.0 | 200 | ... |
| 25 | 17.0 | 200 | ... |
| 26 | 17.0 | 200 | ... |
| 27 | 17.0 | 200 | ... |
| 28 | 17.0 | 200 | ... |
| 29 | 17.0 | 200 | ... |
| 30 | 17.0 | 200 | ... |
| 31 | 17.0 | 200 | ... |
| 32 | 17.0 | 200 | ... |
| 33 | 17.0 | 200 | ... |
| 34 | 17.0 | 200 | ... |
| 35 | 17.0 | 200 | ... |
| 36 | 17.0 | 200 | ... |
| 37 | 17.0 | 200 | ... |
| 38 | 17.0 | 200 | ... |
| 39 | 17.0 | 200 | ... |
| 40 | 17.0 | 200 | ... |
| 41 | 17.0 | 200 | ... |
| 42 | 17.0 | 200 | ... |
| 43 | 17.0 | 200 | ... |
| 44 | 17.0 | 200 | ... |
| 45 | 17.0 | 200 | ... |
| 46 | 17.0 | 200 | ... |
| 47 | 17.0 | 200 | ... |
| 48 | 17.0 | 200 | ... |
| 49 | 17.0 | 200 | ... |
| 50 | 17.0 | 200 | ... |
| 51 | 17.0 | 200 | ... |

Scale
 1" = 400 Feet
 1" = 125 Meters

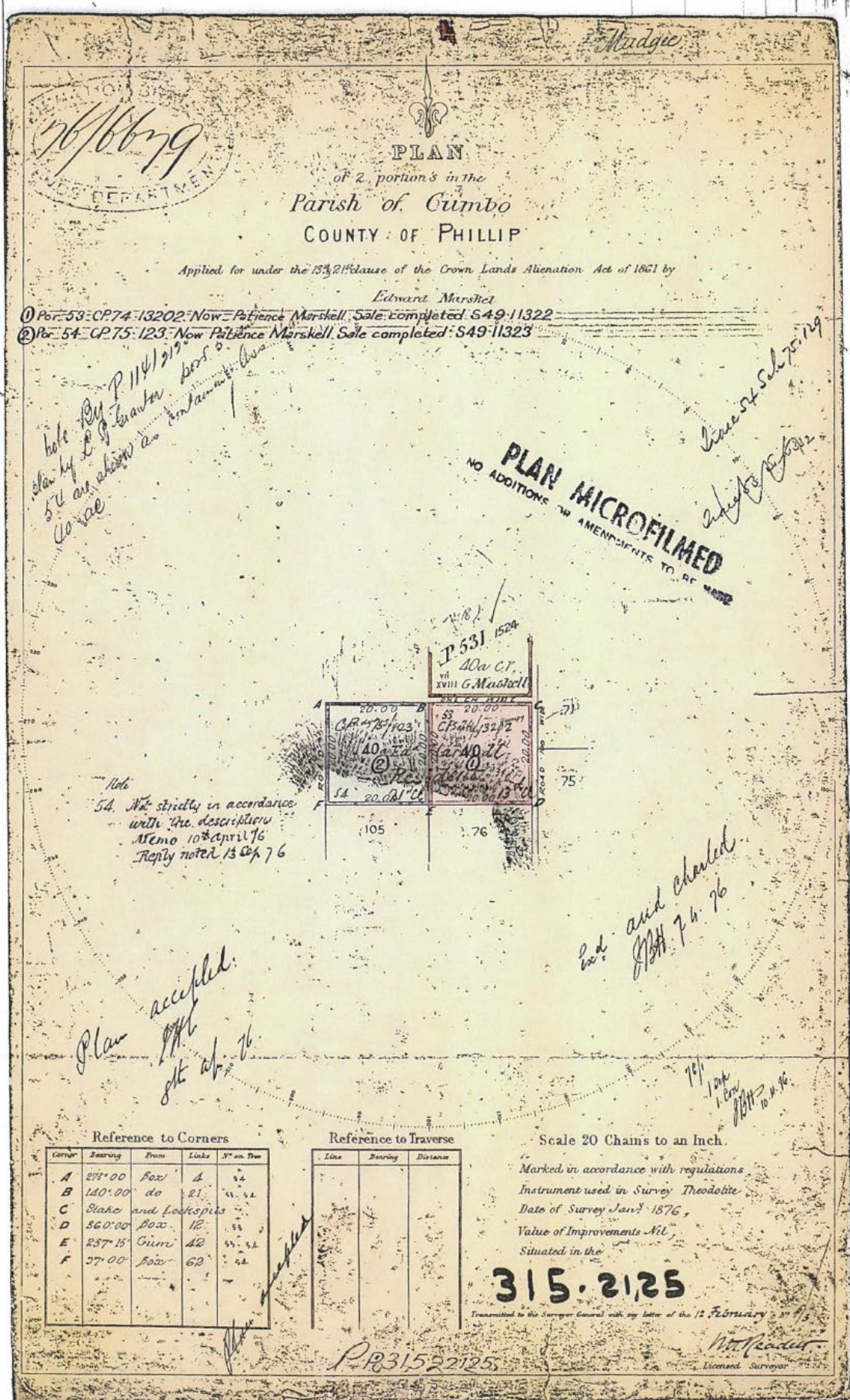
Map No. P141 325

Reg:R330204 /Doc:CP 00333-2125 p /Rev:17-Aug-2016 /Sts:OK.OK /Prt:06-May-2019 10:21 /Seq:1 of 2
 Ref:Wilpy /Src:Q

4

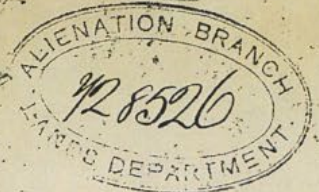


5



Req:R330184 /Doc:CP 00965-1524 p /Rev:24-Nov-2012 /Sts:OK.OK /Prt:06-May-2019 10:20 /Seq:1 of 1
 Ref:Wilpy /Src:Q

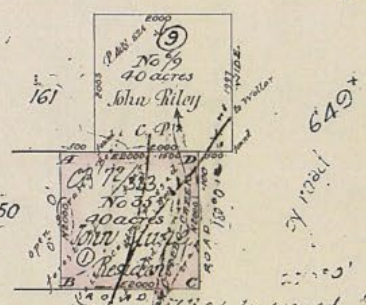
6



Mudgee

PLAN of a portion, N^o 35, of 40 acres of land, in the Parish of Cumbo, in the County of Phillip; applied for by John Clune under the 13th Section of the Crown Lands Alienation Act.

Por. 35. C.P. 72-333 (now John Thomas Halpin. Sale completed S 50-626.
 now Josephine Margaret Halpin. Sale completed S50-626.



Ann. 24. 1872
15. 12. 1872
17 Oct. 1872

*ed. 1872 which is correct but I think for accuracy
 Cook is next survey 1871*

PLAN MICROFILMED

NO ADDITIONS OR AMENDMENTS TO BE MADE

| Corners. | | | | |
|----------|-----------|----------|-------|-------|
| Cor. | Bearing | From | Links | Value |
| A | S 130 E | Box | 52 | 35 |
| B | N 79 30 W | Box | 12 | 35 |
| C | N 34 W | Trenbark | 23 | 35 |
| D | S 40 E | Box | 36 | 35 |

Surveyed by Transit, May 10th 1872.
 Improved by greyah and sapped timber worth £1.
 Marked in accordance with Regulations.
 Scale 20 chains to one inch.

*Transmitted to the Surveyor General
 with my Letter of the 2nd July, No 72/10*

P 965:1524

James Loudon

Cons. Plan 72/6

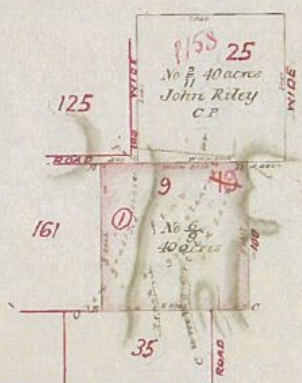
7

19045
 66

PLAN of a portion of land containing 40 acres, numbered 9, in the Locality of Cumbo Creek, in the County of Phillip, applied for by John Riley as a conditional purchase under the 21st Section Crown Lands Alienation Act.

PH OF CUMBO

① Por 9 C.P.64-1723. ~~Now John Thomas Halpin. Sale completed S.50 625.~~
~~Now Josephine Margaret Halpin. Sale completed S50 625.~~



PLAN MICROFILMED

NO ADDITIONS OR AMENDMENTS TO BE MADE

| CORNERS | | | | |
|---------|-------------|-------|----------|---------|
| CRP | Bearing | From | Distance | Remarks |
| A | S 69° 45' W | box | 67 | IX |
| B | S 8° W | box | 46 | IX |
| C | S 20° W | box | 8 | IX |
| D | N 67° W | apple | 28 | IX |

*Surveyed by Circumferentor.
 Marked in accordance with Regulations
 Scale twenty chains to one inch*

*Transmitted to the Surveyor General with my letter
 of the 15th October No 69/47*

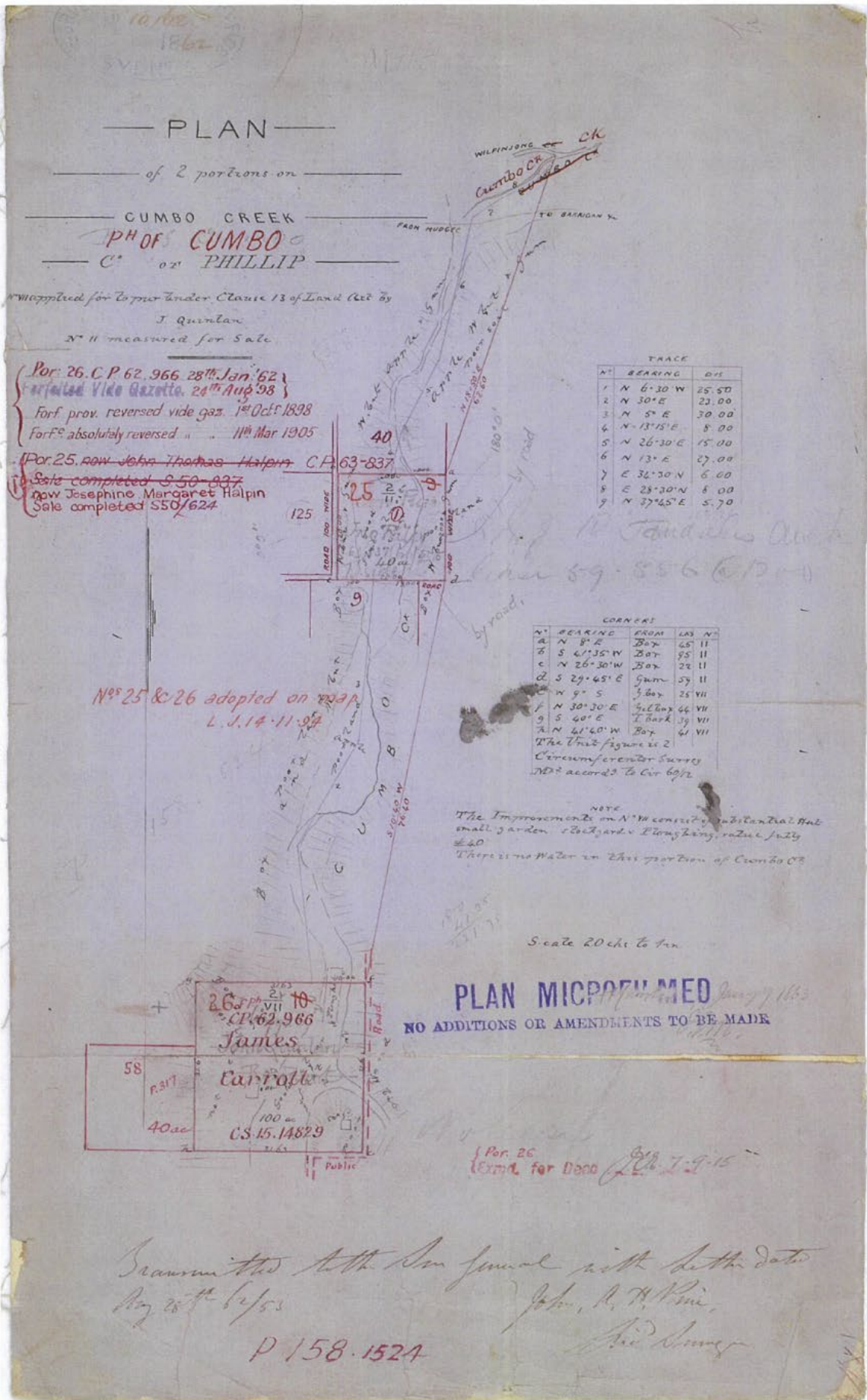
P 408. 1524

John Gordon
 P. S.

66 394

Req:R335970 /Doc:CP 00158-1524 P /Rev:25-Nov-2012 /Sts:OK,OK /Prt:10-Sep-2017 11:58 /Seq:1 of 1
 Ref:cumbo /Src:Q

8



9



Mudgee

PLAN
 of a portion of land
 Parish of Cumbo
 COUNTY OF PHILLIP

Applied for under the 21st clause of the Crown Lands Alienation Act of 1861 by
James Halpin

① Por: 40 (C.P 72-5442) now John Thomas Halpin. Sale completed S. 50-628.
 (now Josephine Margaret Halpin Sale completed S50 628)

PLAN MICROFILMED
 NO ADDITIONS OR AMENDMENTS TO BE MADE



*Charted
 11th Dec 73
 J.H.*

Reference to Corners

| Corner | Bearing | From | Links | 3" on Plan |
|--------|---------|-------|-------|------------|
| a | 8° 0' | Box | 45 | 1/4 40 |
| b | 3° 50' | Green | 52 | 1/4 40 |
| c | 17° 20' | Green | 60 | 1/4 40 |
| d | 22° 35' | Box | 55 | 1/4 40 |

Reference to Traverse

| Line | Bearing | Distance |
|------|---------|----------|
| | | |

Scale 20 Chains to an Inch.

Marked in accordance with regulations
 Instrument used in Survey, Theodolite
 Date of Survey, 29 March 1873
 Value of Improvements Nil.
 Situated in the

88.2125

Transmitted to the Surveyor General with my letter of the 20 March 1873

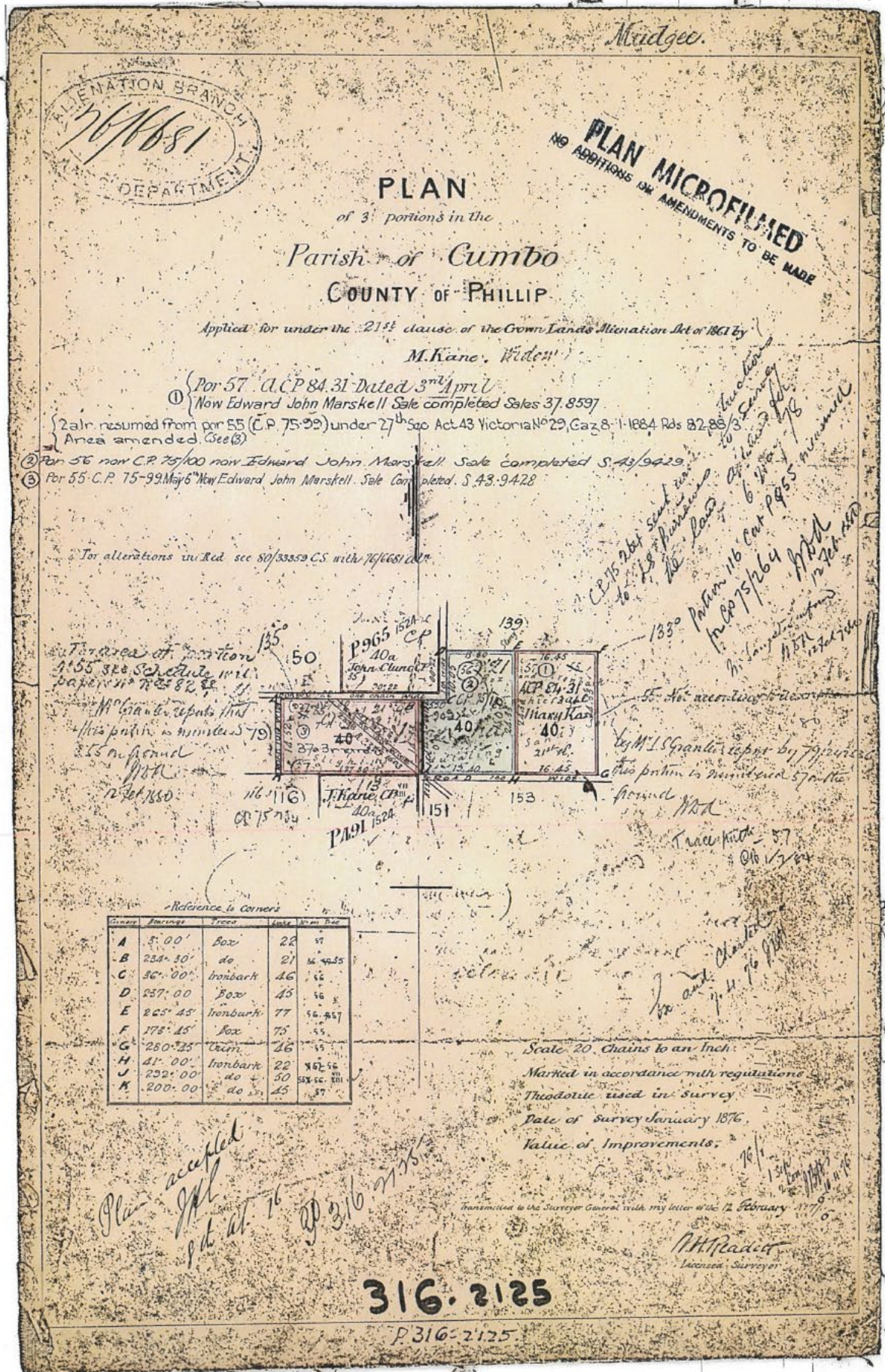
P 88.2125

W.F. 36
Informated
 Licensed Surveyor

*Plan surveyed by
 W.F. 36
 29 Dec 73*

Reg:R329998 /Doc:CP 00316-2125 p /Rev:28-Nov-2012 /Sts:OK.OK /Prt:06-May-2019 10:04 /Seq:1 of 1
 Ref:Wilpy /Src:Q

10



82

88

Plan

showing the survey of a

road from Farms through Portion 55 to Wollair

in the County of Phillip

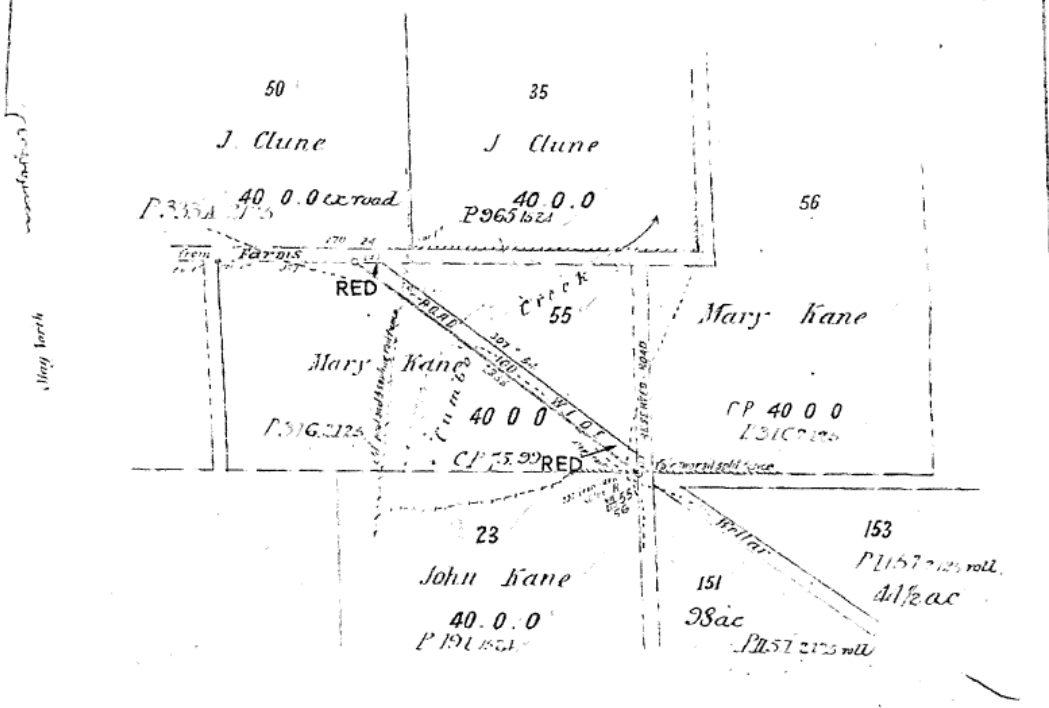
Proposed to be opened as a Parish road under the Act of Council 1st Will^{ms} 3rd 11
and to be resumed under the 2nd clause of the Act 15th Victoria N^o 22

Scale 10 chains to an inch

1881

Preliminarily Notified in Gov^t Gazette 10th August '83 fol 4303
Confirmed in Gov^t Gazette 8th January 1884 fol 184
Opened " " " 14th November 1884 " 653

*Accepted by the Council
on the 17th July 1883
Hydrographer
Phillip*



Marked according to Regulations

Theolite used in Survey

Surveyed on the 24th October 1881

Total length of road 23 chains 38 links

Approved by the Governor with my letter of the 12th December 1881 N^o 68

PLAN MICROFILMED

NO ADDITIONS OR AMENDMENTS TO BE MADE

James Traiter
Inland Surveyor

*Forc. Sl. y.
detailed works
done*

2335-1603

10

4303

[4776]

Department of Mines,
Sydney, 7th August, 1888.

PUBLIC GATES.

NOTICE is hereby given that Public Gates, as hereunder described, have been applied for under the provisions of the Act 89 Victoria No. 10, and all persons interested are invited to state within thirty days from this date, their objections, if any, to the granting of such applications.

JOSEPH P. ABBOTT.

| Gate No. | R. S. D. No. | Applicant. | Description. |
|----------|------------------------------|----------------------|--|
| 973 | 83-2,866 83-196-3 S.G. | Thomas Guthrie | Gate (not less than 11 feet wide), on the road from the Pointer towards Milton, at fence, within Thomas Guthrie's 831 acres (part of H. P. Dutton's 2,560 acres), and about 6 chains north-easterly from the west boundary of that land, parish of Conjola, county of St. Vincent. |
| 974 | " | Do | Gate (not less than 11 feet wide), on the road from the Pointer towards Milton, at fence, on the east boundary of Thomas Guthrie's 106½ acres (part of H. P. Dutton's 2,560 acres), parish of Conjola, county of St. Vincent. |

[4810]

Department of Mines,
Sydney, 10th August, 1888.

PRELIMINARY NOTIFICATION OF PARISH ROADS.

HIS Excellency the Governor, with the advice of the Executive Council, having deemed it expedient to open and make the several Parish Roads mentioned in the Schedule appended hereto, to be maintained at the expense of the parishes through which they pass: Notice is hereby given that in accordance with the provisions of the Act 4th William IV, No. 11, plans and books of reference showing the intended lines of the Roads in question are now deposited at the Office of the Surveyor-General in Sydney, and at the Police Offices mentioned.

It is requested that any well-grounded objections that may exist to the formation of the Roads in question may be transmitted in writing to the Clerk of the Executive Council within one month from this date.

By His Excellency's Command,
JOSEPH P. ABBOTT.

SCHEDULE REFERRED TO.

| Roads No. | Description of Roads. | Names of reputed owners or occupiers through whose properties the Roads pass. | Police Offices at which plans and books of reference have been lodged. |
|---------------------------------------|---|--|--|
| 81-2781 81-219-1 S.O. R. 2323 | Road from the Swallow Creek towards Carcoar, viz. — From the west boundary of W. Lawson's (now executors of late W. Lawson), 776 acres, portion No. 21, parish of Carlton, to the north-west corner of portion No. 108 of 122½ acres, parish of Beaufort, with two branches viz. — One to the north-west corner of H. G. Louisa's 60 acres, C.P., portion No. 75, parish of Carlton, and one towards Cadia, to the north boundary of J. N. Rodd's 640 acres, parish of Blake, county of Bathurst. | Executors of late W. Lawson, H. G. Louisa, Cadian gullong (Creek, reserved road, Crown Lands, Flyer's Creek, Church and School Estate. | Carcoar. |
| 81-2784 81-695-3 S.O. R. 2471 | Road from "Marowan," parish of Marowan, county of Gough, via West Mount Mitchell to East Mount Mitchell, parish of Hall, county of Clarke. | Crown Lands, reserved road | Glen Innes. |
| 81-2788 81-1434-2 S.O. R. 2576 | Road for access to crossing over Bobbiwas Creek, at the north-east corner of A. J. Doyle and others' 50 acres, portion No. 10, parish of Bobbiwas, county of J. Mason. | A. J. Doyle and others | Narrabri. |
| 81-2641 81-74-4 S.O. R. 2406 | Part of road from Bukkulla to Mullamanna, viz. — From the north-east corner of John Crowell's 72½ acres, C.P., portion No. 135, to the western boundary of A. McCallum's 320 acres, C.P., portion No. 60, parish of Burgundy, county of Ararat. | Boundary roads, John Wells, C.P., Thomas Well, C.P. | Inverell. |
| 81-2642 81-1237-17 S.O. R. 2511 | Road from the south boundary of R. Cameron's (now A. Cameron's) 81 acres, C.P., portion No. 112, to the north boundary of that portion, at a reserved road, parish of Taloumbi, county of Clarence. | Alexander Cameron, C.P. | Maclean. |
| 81-2789 81-86-4 S.O. R. 2335 | Road from the north to the east boundary of portion No. 55, Mary Kane's 40 acres, C.P., parish of Cumbo, county of Phillip. | Mary Kane, C.P. | Wollar. |
| 81-2782 81-313-3 S.O. R. 2166 | Road from reserved road, within R. Hamilton's (now the Commercial Bank's) 215 acres, C.P., portion No. 49, at Loch Albra Lagoon, parish of Clevedon, to a reserved road, within Anderson and Legh's (now A. Cruickshank's) 63 acres 3 roods, C.P., portion No. 71, parish of Davidson, with a branch road towards Pint Pot, through Anderson and Legh's (now A. Cruickshank's) 63 acres, C.P., portion No. 68, parish of Davidson, county of Sandon. | Reserved roads, boundary roads, Alexander Cruickshank, C.P., Crown, Armidale Gully. | Armidale. |
| 81-2785 81-928-4 S.O. R. 2152 | Part of road from Armidale to the Chandler River, viz. from a western boundary of reserve No. 1,251, notified 31st October, 1881, being portion No. 54, parish of Hillgrove, to the north-east corner of Alexander McEneaney's 40 acres C.P. portion, parish of Urotah, county of Sandon. | Crown Lands, boundary road, J. H. Mulligan, C.P., Mercantile Bank, Pint Pot Creek, A. McEneaney, C.P. | do |
| 81-2787 81-35-8 S.O. R. 2397 | Parts of the road from Armidale to Pint Pot, viz. from the north-east corner of Anderson and Legh's (now A. Cruickshank's) 63 acres C.P., portion No. 68, to the north-east corner of Anderson and Legh's (now A. Cruickshank's) 40 acres 2 roods C.P. portion No. 70, and from the west boundary of R. Horton's (now James Faint's) 200 acres C.P., portion No. 36, to the east boundary of that portion, parish of Davidson, county of Sandon. | Boundary road, Alexander Cruickshank, C.P., J. Faint, C.P. | do |
| 81-2786 81-641-16 S.O. R. 2500 | Parts of road from Boat Harbour towards North Head, Bellington River, with a road from confirmed road, within portion No. 8, parish of South Bellington, to a point on the left bank of Bellington River (North Arm) within portion No. 11, parish of North Bellington, county of Raleigh, in lieu of parts of roads confirmed in Government Gazette of 18th November, 1870, folio 2564, and 16th January, 1871, folio 103. | P. M'Nally, C.P., H. M'Nally, C.P., boundary roads, F. Bennett, F. MacCrystal, C.P., Elizabeth M'Crystal, C.P., Commercial Bank, C.P., T. Jarratt, C.P., J. Washington, C.P., W. Washington, C.P., J. Bollwood, C.P., Hyde's Creek, W. Tyson, C.P., O. Redmond, T. O. Jones, C.P., F. E. Cheers, C.P., F. S. Bushell, C.P., T. T. O'Connor, C.P., J. Cook, Junr, C.P., J. Grady, C.P., J. Kelly, T. Salter, — Henderson, — Walsh, J. McAleer, C.P., W. Reihery, C.P., J. Carroll, C.P., R. A. McAleer, C.P., Crown, J. Sweeney, C.P., reserved road. | Boat Harbour. |

New South Wales Government Gazette (Sydney, NSW : 1832 - 1900), Tuesday 8 January 1884 (No.13), page 184

10

| (80) | | Department of Mines, Sydney, 8th January, 1884. | |
|---|---|---|--|
| CONFIRMATION OF PARISH ROADS. | | | |
| <p>NOTICE is hereby given, in conformity with the provisions of the Act 4th William IV No. 11, that His Excellency the Governor, with the advice of the Executive Council, has been pleased to confirm the Roads mentioned in the annexed Schedule (notwithstanding any objections that might have been urged); and it is hereby declared expedient to open and make the Roads referred to, according to the plans and books of reference, to be seen at the Police Offices mentioned.</p> <p>Any persons intending to claim compensation in respect of the said lines are reminded that notice must be served on the Secretary for Mines within forty days from the date hereof, as are provided by the sixth section of the Act above referred to, or they will be for ever foreclosed from such claim.</p> <p style="text-align: right;">By His Excellency's Command, JOSEPH P. ARBOTT.</p> | | | |
| SCHEDULE REFERRED TO. | | | |
| Roads No. | Description of Road. | Date of Gazette of previous Notice of intended opening of Road. | Plan, &c., lodged at the Police Office at— |
| 83-3175 82-107-12 R. 2307 | *Part of the road from Yass via Meroo, Biala, and Gurrunda, to Goulburn, with a branch road within D. Foley's 43 acres, A.C.P. portion No. 73, parish of Gurrunda, parishes of Biala and Lamington, county of King, and parish of Gurrunda, county of Argyll,—in lieu of part of road previously confirmed in Government Gazette of 25th January, 1867, folio 33. | 29 June, 1883, folio 3516..... | Gunning. |
| 83-3182 82-88-8 R. 2333 | Road from the north to the east boundary of portion No. 55, Mary Kane's 40 acres, C.P., parish of Cumbo, county of Phillip. | 10 August, 1883, folio 4373..... | Wollar. |
| 83-3181 81-908-8 R. 2152 | *Part of road from Armidale to the Chandler River, viz:—From a western boundary of reserve No. 1251, notified 31st October, 1881, being portion No. 54, parish of Hillgrove, to the north-east corner of Alexander McClenaghan's 40 acres, C.P. portion No. 1, parish of Urolah, county of Handon. | 10 August, 1883, folio 4373..... | Armidale. |
| 83-3183 81-35-12 R. 2297 | Part of the road from Armidale to Pink Pt., viz:—From the north-west corner of Anderson and Leigh's (now A. Crutskbank's) 63 acres, C.P. portion No. 68, to the north-east corner of Anderson and Leigh's (now A. Crutskbank's) 40 acres 2 roads, C.P. portion No. 70, and from the west boundary of R. Horton's (now James Paul's) 111 acres, C.P. portion No. 36, to the east boundary of that portion, parish of Davidson, county of Handon. | 10 August, 1883, folio 4373..... | Armidale. |
| 83-3167 82-2056-10 R. G. R. 2423 | Part of the road from Hay to Wagga Wagga, through Rutherford, McCulloch, & Sellar's two V.L.O.'s of 50 acres each, portions Nos. 15 and 61, parish of Rutherford, county of Westmorland. | 22 June, 1883, folio 3397..... | Hay. |
| 83-3168 81-1045-7 R. G. R. 1759 | Deviation in the road from O'Connell Plains to Bucknabul, viz:—From the north boundary of James Aron's 43 acres, C.P. portion No. 307, to the east boundary of Matthew Harris' 31 acres 2 roads, portion No. 35, parish of Bolton, county of Westmorland,—in lieu of part of road confirmed in Government Gazette, 8th September, 1865, folio 2312. | 20 July, 1883, folio 3112..... | Oberon. |
| 83-3169 81-305-10 R. G. R. 2199 | Road through Ronald and M'Blain's 260 acres, portion No. 29, parish of Malebo, county of Clarence. | 20 July, 1883, folio 3912..... | Wagga Wagga. |
| 83-3170 81-720-19 R. G. R. 2460 | Road from the west boundary of T. J. Fuller's 50 acres V.L.O., to the Bolong River, at Pughobon's dry timber ford, being part of the road from Blinda to Belghwood, with two branch roads within James Haxell's (now T. J. Fuller's) 1,280 acres, viz:—No. 1, to the south boundary of that land; No. 2, to Phil's River, parish of Bolong, county of Georgiana. | 31 July, 1883, folio 4143..... | Blinda. |
| 83-3171 83-21-6 R. G. R. 2503 | Part of road from the Macquarie River to the Springs Railway Station, via Burrell Gap, viz:—From the north boundary of E. W. Vermer's 40 acres, portion No. 16, to the right bank of Burrell Creek, with a branch towards Ironbarks, to the south boundary of the portion, parish of Galwadgere, county of Wellington. | 3 August, 1883, folio 4183..... | Wellington. |
| 83-3172 83-205-10 R. G. R. 2498 | Road from the Lane Cove Road at H. Henry's 45 acres to the head of Lane Cove River, at W. Moore's 61 acres 1 road, portion No. 20, parish of Gordon, county of Cumberland,—in lieu of part of road previously confirmed in Government Gazette of 1st October, 1859, folio 2198. | 28 August, 1883, folio 4651..... | Ryde. |
| 83-3173 81-1434-6 R. G. R. 2506 | Road for access to crossing over Bobbiwaa Creek, at the north-east corner of A. G. Doyle and others' 50 acres, portion No. 10, parish of Bobbiwaa, county of Jamieson. | 10 August, 1883, folio 4373..... | Narrabri. |
| 83-3176 81-53-7 R. G. R. 2147 | Road through M. Rigney's 50 acres, C.P. portion No. 5, parish of Calliga, county of Handon. | 13 July, 1883, folio 3784..... | Cootamundra. |
| 83-3177 83-242-6 R. G. R. 2819 | Road through M. J. Barclay's 40 acres, C.P. No. 162, and J. A. Barclay's 50 acres, C.P. No. 38, parish of Bugong, county of Oxiana. | 13 July, 1883, folio 3784..... | Newra. |
| 83-3178 81-209-15 R. G. R. 2318 | Road from the north boundary of W. Adams' (now Charlotte D. Beveridge's) 60 acres, C.P. portion No. 124, to the south boundary of L. Hayden's 125 acres, C.P. portion No. 19, parish of Tunstall, county of Ross,—being part of the road from Goodmangar to Lismore. | 17 July, 1883, folio 3855..... | Lismore. |
| 83-3179 81-274-8 R. G. | Part of road from the Macquarie River to the Springs Railway Station, via Burrell Gap, viz:—From the north boundary of W. Queen's 40 acres, portion No. 63, parish of Galwadgere, across the Morungulsa Creek to | 3 August, 1883, folio 4183..... | Wellington. |

New South Wales Government Gazette (Sydney, NSW : 1832 - 1900), Friday 14 November 1884 (No.594), page 7653

[7653]

Department of Mines,
 Sydney, 14th November, 1884.

FORMAL OPENING OF PARISH ROADS

NOTICE is hereby given that the lines of Parish Road mentioned in the annexed Schedule have been formally marked and opened by the proper officer, and that the same are now open for public use.

JOSEPH P. ABBOTT.

SCHEDULE.

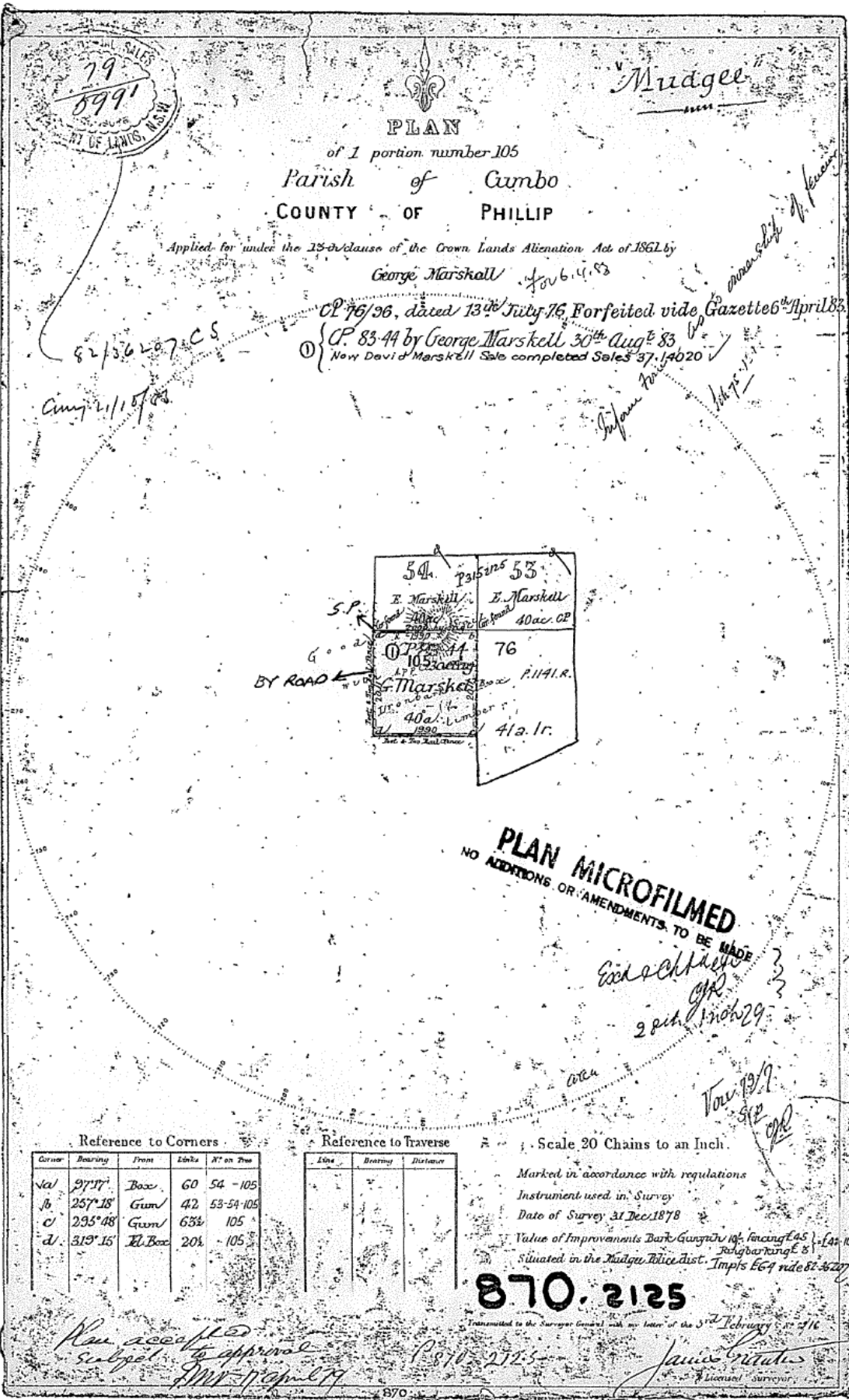
| Roads No. | Description of Roads. | Date of Gazette Notice. | Plans, &c., lodged at the Police Office, at - |
|---------------------------------------|---|--------------------------------|---|
| 84-4904 81-479-71 R.G. R. 2396 | Deviation in road from Skilling-street, town of Glen Innes, to the Big Bear Gate, near Vegetable Creek, via - From the south boundary of T. Hutcheon's C.P. of 40 acres to road 5 parcels, portion No. 8, to the South River, at the north boundary of O. Blount's 40 acres, portion No. 6, which of Fradbury, county of Gough, - in lieu of parcel road previously confirmed in Government Gazette of 9th September, 1881, folio 4956. | 17 June, 1884, folio 3902 | Glen Innes. |
| 84-4905 81-315-13 R.G. R. 2371 | Part of the road from Glen Innes to Shannon's Vale, via - From the Glen Innes and Gordon Road, within J. Nicholls's 20 acres, portion No. 101, to the left bank of the E. Hardy Water, within O. Blount's 52 acres, portion No. 158, parish of Glen Innes, county of Gough. | 20 June, 1884, folio 3902 | do |
| 84-4906 81-311-12 R.G. R. 10596 | Deviation in the road from Cassville to W. Lamb's 40 acres C.P., on Ironbark Creek, via - Within A. Dwyer's 600 acres, parish of Hornsby, county of Bligh, - in lieu of part of road previously confirmed in Government Gazette of 15th March, 1874, folio 698. | 24 June, 1884, folio 4038 | Cassville. |
| 84-4907 81-723-15 R.G. R. 2356 | Road from the reserved road at the south boundary of James Cronin's 40 acres C.P., portion No. 16, parish of Man, to the south boundary of T. Dunbar's (now James Dunbar) 40 acres C.P., portion No. 3-1, parish of Berowang, county of Bligh, - being part of the road down the right bank of Half-moon Creek. | 30 November, 1883, folio 6540. | do |
| 84-4908 81-413-10 R.G. R. 2371 | Part of road from Loombah to Molong, via - From the north boundary of Henry Sherrington's C.P. of 120 acres, portion No. 44, to the Oddy and Molong Road, within that portion, parish of Burrawang, county of Gordon. | 20 June, 1884, folio 3902 | Oddy. |
| 84-4909 81-28-13 R.G. R. 2067 | Road from the Swatfield and O'Connell Places Road, at the north-west corner of the Humphreys' 40 acres C.P. No. 341, to a point in the Oberon and Berwick Road near the 3rd mile-tree, parishes of Joubert, Oberon, and Oron, county of Westmoreland. | 15 May, 1883, folio 2712 | Oberon. |
| 84-4910 81-28-11 R.G. R. 2377 | Part of the road from Glen Innes to Gracem, via - From the south boundary of J. Milroy's 19 acres, portion No. 157, parish of Glen Innes, to the bridge across the Berwick Water, near the south-east corner of D. Dunbar's C.P. of 160 acres, No. 85, parish of Berrard Plains, county of Gough. | 20 June, 1884, folio 3902 | Glen Innes. |
| 84-4911 81-28-12 R.G. R. 2315 | Road from the north to the east boundary of portion No. 55, Mary Keane's 40 acres C.P., parish of Cumber, county of Phillip. | 8 January, 1884, folio 154. | Wollar. |

* Confirmed through allocated land only.

National Library of Australia

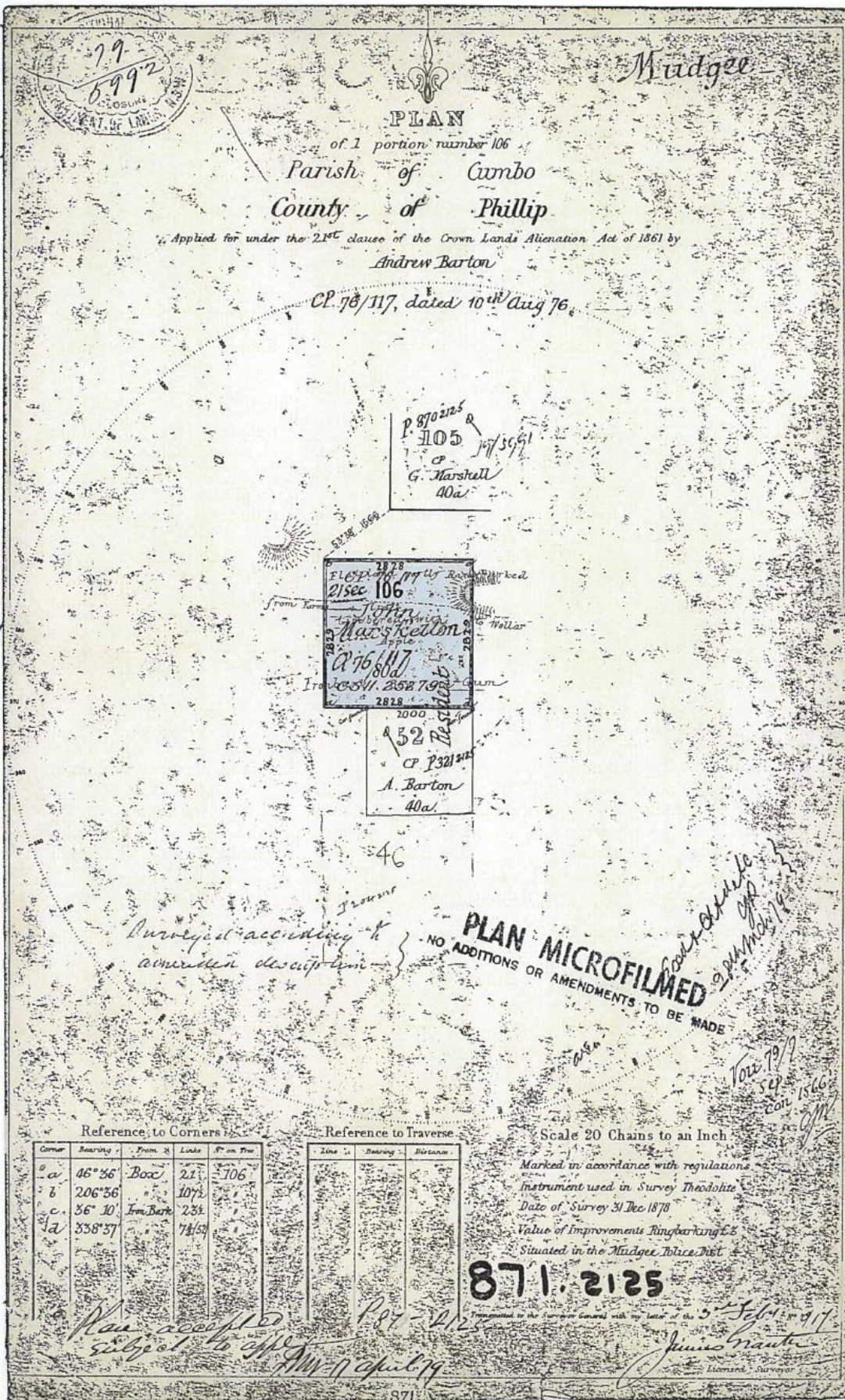
http://nla.gov.au/nla.ne

10



Reg:R980736 /Doc:CP 00871-2125 P /Rev:28-Nov-2012 /NSW LRS /Prt:18-Nov-2020 16:33 /Seq:1 of 1
 © Office of the Registrar-General /Src:DIRECTINFO /Ref:DI-19-273

12



Surveyed according to
 accurate description

PLAN MICROFILMED
 NO ADDITIONS OR AMENDMENTS TO BE MADE

Reference to Corners

| Corner | Bearing | From | Links | ft on Plan |
|--------|----------|-----------|---------|------------|
| a | 46° 56' | Box | 21 | 106 |
| b | 206° 36' | | 107 1/2 | |
| c | 36° 10' | Iron Bark | 23 1/2 | |
| 1a | 338° 37' | | 7 1/2 | |

Reference to Traverse

| Line | Bearing | Distance |
|------|---------|----------|
| | | |
| | | |
| | | |

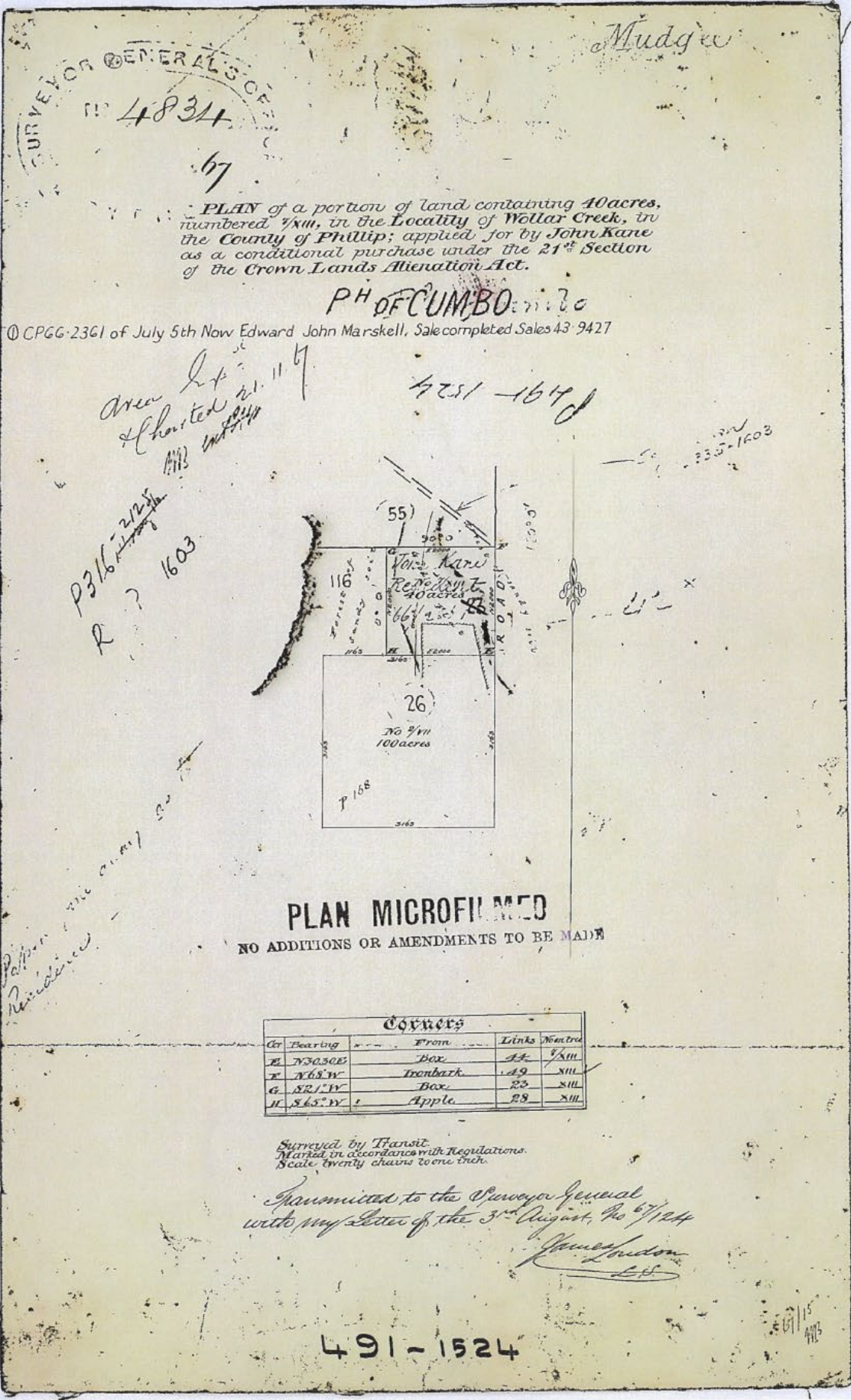
Scale 20 Chains to an Inch

Marked in accordance with regulations
 Instrument used in Survey Theodolite
 Date of Survey 31 Dec 1878
 Value of Improvements Ringbarking &c
 Situated in the Mudgee Police Dist

871-2125

Plan accepted subject to offer AM 11 April 79

James Grant
 Licensed Surveyor



SURVEYOR GENERAL'S OFFICE
 4834
 67

Mudgee

PLAN of a portion of land containing 40 acres, numbered 40, in the Locality of Wollar Creek, in the County of Phillip; applied for by John Kane as a conditional purchase under the 21st Section of the Crown Lands Alienation Act.

PH OF CUMBO

CPGG-2361 of July 5th Now Edward John Marskell, Sale completed Sales 43 9427

Area of
 of charted 11 1/2
 11 1/2

4281-164

P316-2125
 R 1603

335-1603

PLAN MICROFILMED

NO ADDITIONS OR AMENDMENTS TO BE MADE

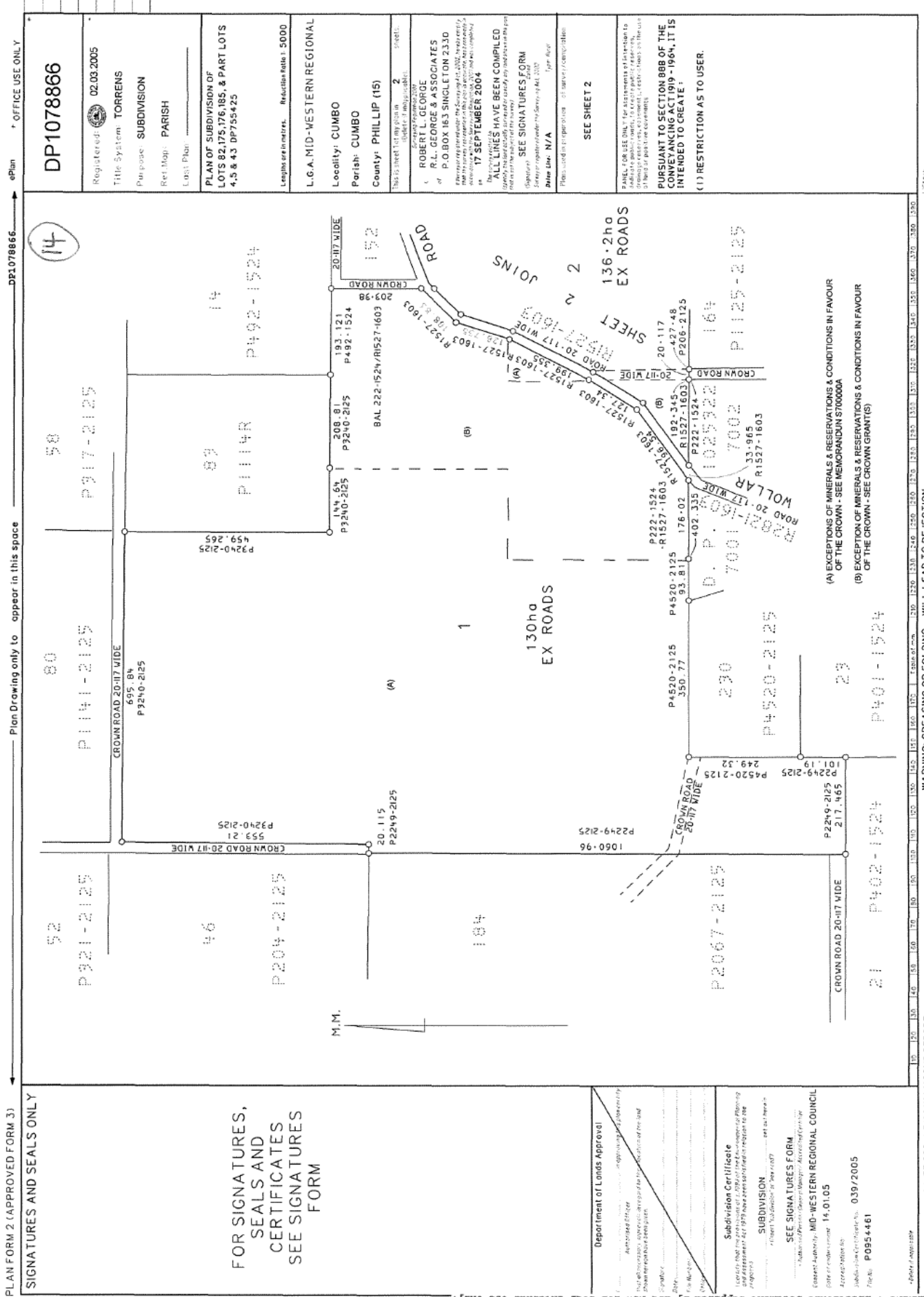
| Corners | | | |
|---------------|----------|-------|----------|
| Gr Bearing | From | Links | Measures |
| E 73° 30' 00" | Box | 44 | 1/4 MI. |
| E 76° 5' 00" | Ironbark | 49 | 1/4 MI. |
| G 82° 1' 00" | Box | 25 | 1/4 MI. |
| N 86° 5' 00" | Apple | 28 | 1/4 MI. |

Surveyed by Transit.
 Made in accordance with Regulations.
 Scale, twenty chains to one inch.

Submitted to the Surveyor General
 with my Plan of the 3rd August, No 67/124

James Loudon
 Lt

491-1524



| | |
|--|------------------------|
| Registered: DP1078866 | Registered: 02.03.2005 |
| Title System: TORRENS | |
| Purpose: SUBDIVISION | |
| Rel. Map: PARISH | |
| Last Plan: | |
| PLAN OF SUBDIVISION OF LOTS 82, 175, 176, 185, & PART LOTS 4, 5 & 43 DP755425 | |
| Length of frontage: Reduction Ratio: 5000 | |
| L.G.A. MID-WESTERN REGIONAL | |
| Locality: CUMBO | |
| Parish: CUMBO | |
| County: PHILLIP (15) | |
| This is sheet 1 of my plan in sheets 1 and 2. | |
| ROBERT L. GEORGE R. L. GEORGE & ASSOCIATES P.O. BOX 163 SINGLETON 2330 17 SEPTEMBER 2004 | |
| ALL LINES HAVE BEEN COMPILED FROM THE ORIGINAL PLAN AND THE ORIGINAL PLAN IS AVAILABLE FOR INSPECTION AT THE OFFICE OF THE REGISTRAR OF LANDS, 110 RIVER STREET, SYDNEY, NSW 2000. | |
| SEE SIGNATURES FORM | |
| Date: N/A | Type: Rural |
| Plan used in operation of survey legislation | |
| SEE SHEET 2 | |
| PURSUANT TO SECTION 88B OF THE CONVEYANCING ACT 1919 - 1966, IT IS INTENDED TO CREATE: (1) RESTRICTION AS TO USER. | |

PLAN FORM 2 (APPROVED FORM 3) Plan Drawing only to appear in this space DP1078866 OFFICE USE ONLY

FOR SIGNATURES, SEALS AND CERTIFICATES SEE SIGNATURES FORM

Department of Lands Approval

Subdivision Certificate

SEE SIGNATURES FORM

Subdivision: 14, 01.05

039/2005

P0954461

WARNING: CREASING OR FOLDING WILL LEAD TO REJECTION

DP1078866

ePlan

* OFFICE USE ONLY

DP1078866

Registered:  02.03.2005
 Division 2
 17 SEPT 2004

SEE SIGNATURES FORM
 Surveyor's Name: *[Signature]*

SEE SIGNATURES FORM
 Author's Name: *[Signature]*

SEE SIGNATURES FORM
 Author's Name: *[Signature]*

SEE SIGNATURES FORM
 Author's Name: *[Signature]*

SEE SIGNATURES FORM
 Author's Name: *[Signature]*

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 Author's Name: *[Signature]*

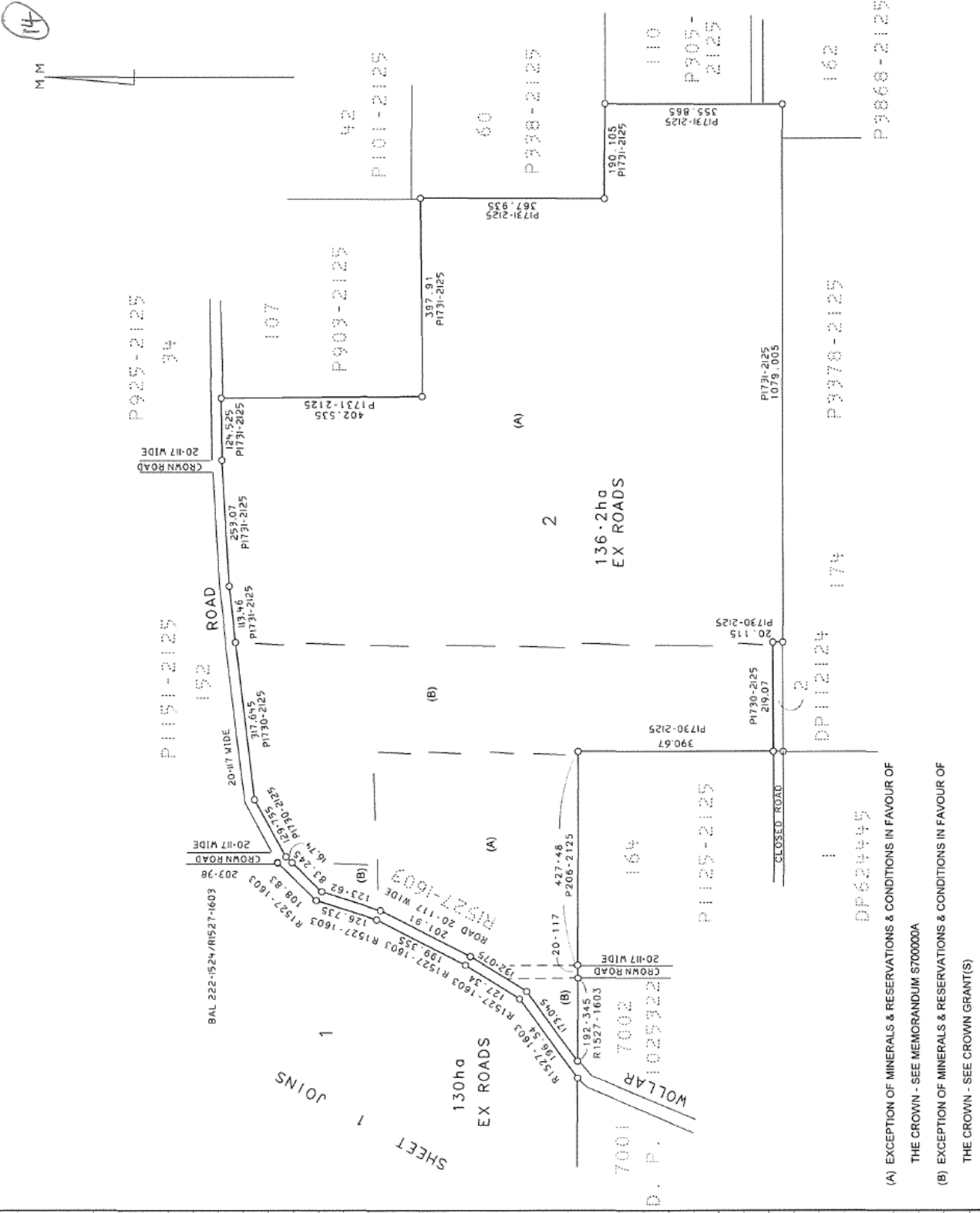
SEE SIGNATURES FORM
 Author's Name: *[Signature]*

SEE SIGNATURES FORM
 Author's Name: *[Signature]*

SEE SIGNATURES FORM
 Author's Name: *[Signature]*

SEE SIGNATURES FORM
 Author's Name: *[Signature]*

SEE SIGNATURES FORM
 Author's Name: *[Signature]*




(A) EXCEPTION OF MINERALS & RESERVATIONS & CONDITIONS IN FAVOUR OF THE CROWN - SEE MEMORANDUM S700000A
 (B) EXCEPTION OF MINERALS & RESERVATIONS & CONDITIONS IN FAVOUR OF THE CROWN - SEE CROWN GRANT(S)

Reduction Ratio: 5000

Plan Drawing only to appear in this space

Surveyors Reference: 04-177

14

| | |
|--|---|
| <p>CERTIFICATES, SIGNATURES AND SEALS</p> <p>Sheet 1 of 1 sheet(s)</p> | |
| <p>PLAN OF SUBDIVISION OF LOTS 82, 175, 185, & PART LOTS 4, 5, & 43 D.P.755425</p> <p>DP1078866</p> | <p>Registered: 02.03.2005</p>  |
| <p>SIGNATURES, SEALS and STATEMENTS of intention to dedicate public roads or to create public reserves and drainage reserves.</p> <p><i>[Signature]</i> *</p> <p><i>[Signature]</i> *</p> | <p>I, ROBERT L. GEORGE of R L GEORGE & ASSOCIATES P.O. BOX 163 SINGLETON NSW 2330 a surveyor registered under the <i>Surveying Act, 2002</i>, certify that the survey represented in this plan is accurate, has been made in accordance with the <i>Surveying Regulation, 2001</i> and was completed on 17 SEPTEMBER 2004 The survey relates to ALL LINES HAVE BEEN COMPLETED (specify the land actually surveyed or specify any land shown in the plan that is not the subject of the survey) Signature <i>[Signature]</i> Dated: 17/1/04 Surveyor registered under the <i>Surveying Act, 2002</i> Datum Line: N/A Type: Rural</p> |
| <p>Department of Lands Approval</p> <p>I, [Signature] (Authorised Officer) in approving this plan certify that all necessary approvals in regard to the allocation of the land shown herein have been given</p> <p>Signature: [Signature] Date: [Date] File Number: [Number] Office: [Office]</p> | <p>Subdivision Certificate</p> <p>I certify that the provisions of s.109J of the Environmental Planning and Assessment Act 1979 have been satisfied in relation to: + the proposed subdivision set out herein; and + the subdivision is for lease purposes in accordance with s.23H of the Conveyancing Act 1919</p> <p>[Signature] Authorised Person/General Manager/Accredited Certifier Consent Authority: Mid-Western Regional Council Date of Endorsement: 14.1.05 Accreditation no: 039/2005 Subdivision Certificate no: P0954461 File no: [Number]</p> <p>* Delete whichever is inapplicable.</p> |
| <p>Use PLAN FORM 6A for additional certificates, signatures and seals</p> | <p>SURVEYOR'S REFERENCE 04-77</p> |

* OFFICE USE ONLY

14

PLAN
 No. 3,022
 1864

Madgee

PLAN
 of 2 portions on

CUMBO CREEK
 Pt of Cumbo
 Co of PHILLIP

72 2618
 Date 7.6.72

N^o 4 appl^d for under Clause 13 by P. Mara
 N^o 5 " " " " 23 E. Mara

Sale at Madgee on the 7th August 1864
 Country Lot PP

PORTION 5
 vide 65/20703 About lot withdrawn from sale

P222 1524



| N ^o | BEARING | DIST |
|----------------|---------|-------|
| 1 | N 25° E | 26.36 |
| 2 | E | 5.71 |

| LET | BEARING | FROM | LN | N ^o |
|-----|------------------------|----------------|---------------|----------------|
| A | S 88° 30' E | Box | 35 | 5 |
| B | S 65° W | Box | 35 | 5 |
| C | S | Gum | 20 | 5 |
| D | S 26° 30' E | Apple | 17 | 5 |
| E | S 43° 30' E | Gum | 122 | 4 |
| F | S 26° 30' E | Gum | 17 | 5 |
| G | S 30° 31' E | Box | 63 | 1524 |
| H | N 26° 65' E | Gum | 146 | 4 |

NOTE: The Union of 4
 Circumferent to Survey
 MD record to Cir 60/2



Scale 20 chs to 1 in

Areas Charted &c
 Aug. 6/64
 J.H. 1/2/1864

PLAN MICROFILMED

NO ADDITIONS OR AMENDMENTS TO BE MADE

Transmitted to the Survey General with Letter dated
 April 10th 69/43

222-1524

1865 P. 230.
 E. Mara 1864

P 222-1524

Req:R335963 /Doc:CP 00492-1524 P /Rev:24-Nov-2012 /Sts:OK.OK /Prt:10-Sep-2017 11:53 /Seq:1 of 1
 Ref:cumbo /Src:Q

15

SURVEYOR GENERAL'S OFFICE
 4835

Muirglen

67
 PLAN of a portion of land containing 40 acres,
 numbered 7/4, in the Locality of Wollar Creek,
 in the County of Phillip; applied for by Patrick
 Mara as a conditional purchase under the 21st
 Section of the Crown Lands Alienation Act.

P^{ts} of Cumbo

*Area 24 1/2
 Charter 21.11.67
 11/3 2000*



PLAN MICROFILMED

NO ADDITIONS OR AMENDMENTS TO BE MADE

| Corners | | | |
|---------|-----------|-------|------------|
| Cor | Bearing | From | Links Feet |
| A | N 76.30 W | Stump | 37 3/4 |
| B | S 35.72 E | Gun | 40 1/2 |
| C | S 53.7 W | Gun | 26 1/2 |
| D | S 46.7 W | Gun | 7 1/2 |

Surveyed by circumferenter.
 Marked in accordance with Regulations.
 Scale twenty chains to one inch.

*Transmitted to the Surveyor General
 with my Letter of the 3rd August, No 47/25
 James Gordon
 S^{rs}*

492-1524

492-1524

ALIENATION BRANCH
 4918
 LANDS DEPARTMENT

PLAN
 of 2 portions of land
 Parish of Cumbo
 COUNTY OF PHILLIP

Applied for under the 13th clause of the Crown Lands Alienation Act of 1861 by

Thos. Robbins,
 No 39 measured for sale Transfer to John Cook

PLAN MICROFILMED
 NO ADDITIONS OR AMENDMENTS TO BE MADE

P 37-2125



Charted
 30th Augt 73
 H

Reference to Corners

| Corner | Bearing | To From | Links | ° on the |
|--------|----------|---------|-------|----------|
| A | 246° 30' | Green | 12 | 58 |
| B | 108° 30' | Green | 23 | 58 |
| C | 159° 30' | Boe | 29 | 59 |
| D | 159° 30' | Boe | 27 | 59 |
| E | 129° 45' | Green | 40 | 39 |

Reference to Traverse

| Line | Bearing | Distance |
|------|---------|----------|
| 1 | | |
| 2 | | |
| 3 | | |
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Scale 20 Chains to an Inch

Marked in accordance with regulation
 Instrument used in Survey Theodolite
 Date of Survey 29th March 1873
 Value of Improvements on No 38 26
 situated in the

37. 2125

P. 37

Sec 8: 31.3.11 Rds 10#

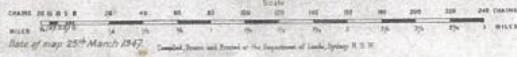
ATTACHMENT 3

(ROAD STATUS PLAN)

SIXTH EDITION PARISH OF CUMBO COUNTY OF PHILLIP LAND DISTRICT OF MUDGEE CUDJEGONG SHIRE EASTERN DIVISION N.S.W.

Checked to date... Put into office use... Officer in Charge

CLASSIFIED AREAS table with columns for Parish, No. of Acres, and County



DISTINCTIVE BOUNDARIES ETC. Legend for various boundary types like Reserve from Sale, Public Road, etc.

Validation of Land Act 1966, Part 118 W, operates on State of Cudjergong from 1.8.80, Sec 22 E.30

REVISIONS table with columns for No., Date, and Description

PARISH NUMBERS USED

Table listing parish numbers and their corresponding areas, organized in columns.

NOTES

Notes regarding land status, mining surveys, and other legal notices.

MINING SURVEYS

Table listing mining survey details.

SMALL PORTIONS

Table listing small portions of land.

ROAD PERMITS

Table listing road permit details.

REFERENCE NOTES regarding land status and other legal references.

