



# ATTACHMENTS EXCLUDED FROM AGENDA ORDINARY COUNCIL MEETING 26 JULY 2021

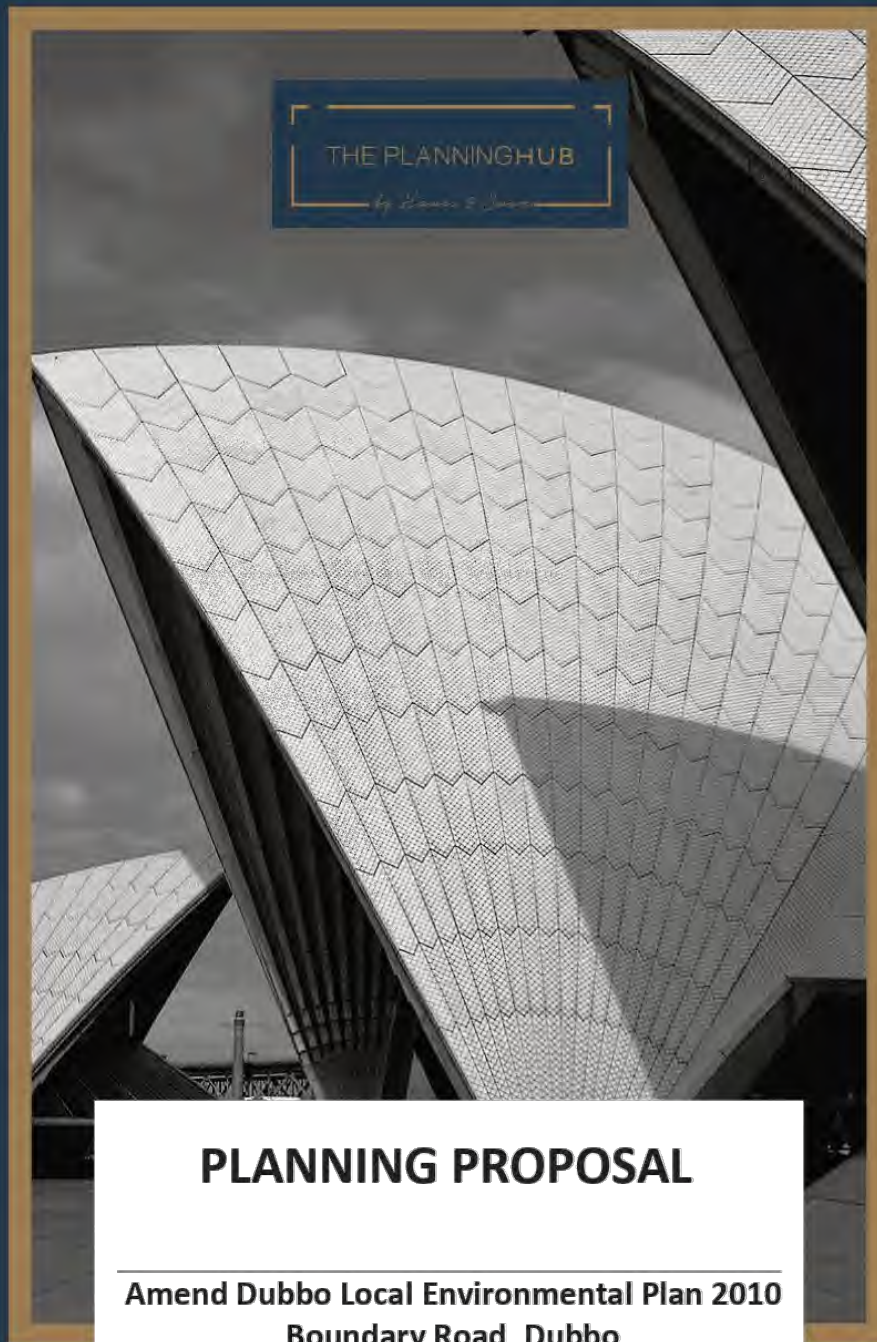
MEMBERSHIP: Councillors J Diffey, V Etheridge, D Grant, D Gumley, A Jones, S Lawrence, G Mohr, K Parker and J Ryan.

The meeting is scheduled to commence at 5:30pm.

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Planning Proposal  
Boundary Road, Dubbo

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## DOCUMENT INFORMATION

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## Planning Proposal – Proposed Rezoning – Part Lot 502 DP 1255115 Boundary Road, Dubbo

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## Appendices

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## 1.0 Introduction

This Planning Proposal has been prepared by The Planning Hub on behalf of the Dubbo RSL and seeks to amend the Dubbo Local Environmental Plan (LEP) 2011 to rezone a parcel of land to include additional permitted uses of a registered club and recreational facilities at Part Lot 502 DP 1255115 Boundary Road, Dubbo.

The purpose of this Planning Proposal is to rezone the subject site under Dubbo LEP 2011 to facilitate future development for the purposes of a registered club and recreational facilities. This Planning Proposal outlines the intended effects of the proposed LEP amendments to Dubbo LEP 2011 and provides justification for the proposed changes.

This Planning Proposal has been prepared in accordance with:

- Section 3.33 of the *Environmental Planning and Assessment Act 1979 (EP&A Act)*;
- The Department of Planning – A Guide to Preparing Planning Proposals; and
- The recommendations of Dubbo Regional Council's Pre-Application Consultation.

It is the first stage of the Planning Proposal which seeks the initial Department of Planning, Industry and Environment gateway determination to:

- Support the justification for the proposal;
- Confirm the technical investigations and consultation required; and
- Outline the process for continuing the assessment of the proposal.

As outlined in a Guide to Preparing Planning Proposals, the Planning Proposal will evolve throughout the course of preparing the amending LEP as relevant sections will be updated and amended in response to the outcomes of technical investigations and consultation.

The Planning Proposal forms part of a suite of documents that are submitted in support of the application attached as Appendices A-K.

## 1.1 Project Context

Dubbo RSL Club (the Club) is a registered club currently located at 178-188 Brisbane Street, Dubbo. The Club provides a range of community facilities and services at the existing site comprising event and conference space, gym and aquatic centre and multiple bars and food amenities.

The Club also operates a number of other community facilities and services in Dubbo comprising the Dubbo RSL Motel, the Dubbo City Bowling Club and the Rhino Lodge. In addition to the facilities the Club sponsors a range of local sports and community groups including the following:

- Dubbo RSL Colts Cricket Inner Club
- Dubbo RSL Community Swimming Inner Club
- Dubbo RSL Junior Soccer Inner Club





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- Dubbo RSL Squash Inner Club
- Dubbo RSL Swimming (Ducks) Inner Club
- Dubbo RSL Tennis Inner Club
- Dubbo RSL Youth Club
- Dubbo Country Music Association
- NSW Rural Fire Service
- Lifeline Central West
- Dunedoo Pastoral Ag Association
- City of Dubbo Turf Club
- Paramount Tennis Club
- Dubbo Community Men's Shed
- Group 11 Junior and Senior Rugby League
- Aboriginal Education Consult Group
- Dubbo Specialist & Rehab Centre

The Club is always looking to expand and provide additional facilities and services to the Dubbo Community.

The intent of the subject Planning Proposal is to provide a registered club and recreational facilities in close proximity to the South-East Dubbo Urban Release Residential Area which is currently under development. The site is located within the future Keswick Estate and borders the future Southlakes and Hillview Estates which will mostly consist of residential development. The inclusion of additional permitted uses for the site will allow for the future development of a registered club and recreational facilities to provide facilities and services to the existing and future population of the area.

## 1.2 Pre-Lodgement Consultation

An initial pre-application meeting was held with Dubbo Council staff on the 16<sup>th</sup> of October 2019 to discuss the intent of the Planning Proposal and confirm the relevant specialist studies to be prepared in support of the Planning Proposal.

In accordance with the Department of Planning & Environment Guidelines for preparing Planning Proposals, a subsequent pre-lodgment meeting was undertaken with Dubbo Council staff on the 9<sup>th</sup> of September 2020 to discuss the proposed rezoning of the site.

The Pre-Lodgment Meeting provided the opportunity to discuss the key constraints and opportunities of the site, the work undertaken on the proposal, the specialist studies prepared in support of the proposal and the proposed amendment to the LEP to achieve the intended outcome for the site.

Council were generally supportive of the proposal and agreed with the amendment to the LEP comprising the inclusion of additional permitted uses of a registered club and recreation facilities to ensure that the site is not sterilized from future development through a full rezoning of the site.

A key point of discussion in the Pre-Lodgment meeting was in relation to the access to the site being a key constraint for future development. In previous discussions, Council had detailed that vehicular access to

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*by Alison D. Stevens*

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the site could not be provided from Boundary Road due to the gradient of the road and the predicted future traffic volumes. Therefore, vehicular access would have to be provided from the future road on the eastern boundary of the site identified as Henty Drive. The Boundary Road extension that bounds the site to the south is currently under construction with the future roundabout and stub of Henty Drive to also be constructed.

Council have agreed to provide a temporary access road along the site's eastern boundary from the roundabout to provide access to the site until such time Henty Drive is fully constructed. The temporary access road is detailed in the Concept Layout Plan provided in **Appendix D** and the Traffic and Transport Assessment provide in **Appendix J**. The applicant would be happy to discuss the inclusion of any site-specific clauses in the Dubbo LEP relating to the interim access measures if deemed to be required.

## 2.0 Project Vision and Strategic Merit

### 2.1 Project Vision

The intent of the subject Planning Proposal is to provide a registered club and recreational facilities in close proximity to the South-East Dubbo Urban Release Residential Area which is currently under development. The proposal is deemed to have strategic merit in that it will provide a community use and infrastructure in a future residential area that will positively contribute to the economy and liveability of the neighbourhood.

The proposal aims to provide a community use and facilities that can ensure the area can develop its own neighbourhood identity. This is to be achieved through the rezoning of the subject site to provide registered club and recreation facilities as additional permitted land uses for the subject site under the Dubbo LEP.

The objectives of the Planning Proposal have been informed by a range of specialist studies provided as attachments to this report. The specialist studies have ensured the proposal recognises and considers the significant aspects of the subject site and surrounding locality and ensures the proposal is an appropriate response to the site characteristics.

The key objectives of the Planning Proposal and resulting neighbourhood are as follows:

#### **Community and Recreational Infrastructure to Support Growth**

The proposal will facilitate the future development of community and recreational facilities in an area identified for future residential growth. The future development of the site is in conjunction with the extension of Boundary Road and associated infrastructure and will ensure there is appropriate community and recreational infrastructure in the area to support residential growth and create a viable residential community with a high level of amenity.

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**Generation of Community Interactions**

The proposal will facilitate the future development of community and recreational facilities and will ensure they are established in the early stages of the development of the wider residential area. The early establishment of the club and recreational facilities will generate community interactions and create a cohesive residential community as the wider area develops. The site will become a key social, recreational and community destination positively contributing to the liveability of the area.

**Accessibility and Liveability of the Community**

The proposal will ensure residents of the future residential area will have appropriate access to community and recreation facilities as the area is developed ensuring a high level of accessibility and positively contributing to the liveability of the area. The integration of the development into the neighbourhood will ensure a number of social, recreational and community can occur within the neighbourhood and reduce the need to leave the neighbourhood for social and recreational purposes.



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Figure 1: Concept Layout Plan for the Subject Site (Source: Curtin Architects)

## 2.2 Strategic Merit

A key consideration for any Planning Proposal is its strategic merit. The proposal is considered to have a high level of strategic merit based on the following key areas:

### Removal of Restriction on Recreation Facilities in the Residential Area

The proposal will facilitate the future development of community and recreational facilities in an area where recreation facilities are currently prohibited. The subject site and surrounding area are currently zoned R2 Low Density Residential under the provisions of the Dubbo LEP, recreation facilities and registered clubs are prohibited in the R2 zone. The proposal will rezone the site to include the additional permitted uses of a registered club and recreation facilities. The inclusion of the additional permitted uses will ensure the objectives of the proposal can be achieved whilst also ensuring that the site is not sterilized from future development through a full rezoning of the site.

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**Generation of Community Interaction and Cohesion**

The proposal will facilitate the future development of community and recreational facilities and will ensure they are established in the early stages of the development of the wider residential area. The early establishment of the club and recreational facilities will generate community interactions and create a cohesive residential community as the wider area develops. The site will become a key social, recreational and community destination positively contributing to the liveability of the area.

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#### Co-location of Employment Lands with Future Neighbourhood Centre

The proposal will take advantage of the location of the subject site in proximity to the Boundary Road extension and the future neighbourhood centre identified for development on the opposite side of Boundary Road. The co-location of the proposal with the future neighbourhood centre will create a strategic community and retail precinct for the wider south east residential area. The proposal will ensure the key community, recreation and retail uses are provided in one central location for the wider residential area for convenience and to reduce the impact of providing commercial uses throughout the neighbourhood.

### 3.0 Site Analysis

#### 3.1 Site Location and Context

The subject site currently forms part of a larger site in which the subject site will eventually be subdivided to accommodate the proposed development. The larger site is commonly known as Volta Avenue, Dubbo and legally described as Lot 502 DP 1255115. The Planning Proposal only relates to the 3.3ha portion of the site as identified below.

A site aerial of the larger site and eventual subject site is detailed in **Figure 2** and **3** below.



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Figure 2: Larger Site Containing the Subject Site (Source: Nearmap)



Figure 3: Subject Site as identified within the larger site (Source: Dubbo Regional Council)



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The site sits within an area identified for future residential development forming part of the existing residential estate to the west known as Keswick Estate and the wider South-East Dubbo Urban Release Residential Area. The site is currently zoned R2 Low Density Residential under the provisions of the Dubbo Local Environmental Plan (LEP) 2011.

The site sits north of Stage 1 of the South-East Dubbo Urban Release Residential Area Structure Plan which is bounded by the future extension of Boundary Road to the north, Hennessy Road and its future extension to the south, Southlakes Estate to the west and Sheraton Road to the east.

**3.2 Site Description**

The eventual subject site has a site area of 3.3 hectares and will have frontage to the future extension of Boundary Road to the south and Stream Avenue to the east. Construction of the Boundary Road extension between Wheelers Lane and Sheraton Road has commenced and will provide future access to the property with the construction of the roundabout and extension of Henty Drive along the site’s eastern boundary.

The surrounding area is currently vacant and identified for future residential land use with a site located to the south west on the opposite side of the future roundabout identified for use as a neighbourhood centre to service the area. The site is not identified as being Bushfire prone or flood prone.

Refer to Figure 4 for a site aerial detailing the subject site and future neighbourhood centre.



Figure 4: Site Aerial with the Location of the Future Neighbourhood Centre detailed (Source: Dubbo Regional Council)

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#### 4.0 Objectives or Intended Outcomes

##### 4.1 Project Objectives and Intended Outcomes

The primary purpose of this Planning Proposal is to amend the Dubbo Local Environmental Plan (LEP) 2011 to enable the future development of the site for the purposes of a registered club and recreation facilities.

The intent of the subject Planning Proposal is to provide a registered club and recreation facilities in close proximity to the South-East Dubbo Urban Release Residential Area which is currently under development. The proposal is deemed to have strategic merit in that it will provide a community use and infrastructure in a future residential area that will positively contribute to the economy and liveability of the neighbourhood.

#### 5.0 Explanation of Provisions

In summary the project objectives and intended outcomes will be achieved by:

- Amending the Dubbo LEP 2011 Additional Permitted Uses Map for the subject site (Sheet APU\_008B) to identify the site for additional permitted uses referenced in Schedule 1 of the LEP.
- Amending Schedule 1 of the Dubbo LEP 2011 – to include a provision relating to the subject site that would permit development for the purposes of a registered club and recreation facilities.

##### 5.1 Zoning and Additional Permitted Uses

The subject site is currently zoned R2 Low Density Residential under the provisions of the Dubbo LEP 2011. Registered clubs and recreation facilities are prohibited in the R2 Low Density Residential zone.

The proposal seeks to amend the Dubbo LEP 2011 to include registered club and recreation facilities as additional permitted land uses for the subject site as identified in Schedule 1 of the LEP. The Planning Proposal relates to specific use for the Dubbo RSL and therefore a full rezoning of the site is not sought.

#### 6.0 Justification

##### 6.1 Need for Planning Proposal

The intent of the subject Planning Proposal is to provide a registered club and recreational facilities in close proximity to the South-East Dubbo Urban Release Residential Area which is currently under development. The proposal is deemed to have strategic merit in that it will provide a community use and infrastructure in a future residential area that will positively contribute to the economy and liveability of the neighbourhood. The proposal aims to provide a community use and facilities that can ensure the area can develop its own neighbourhood identity.

The site and surrounding area is currently zoned R2 Low Density Residential under the provisions of the Dubbo LEP. Recreational facilities and registered clubs are prohibited in the R2 zone which restricts

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*by Sharon D. Smith*

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opportunities for community uses to be developed to support the growing population in the area. The Club currently supports a range of sporting and youth clubs and the site represents an ideal opportunity for the club to continue to support a new community where the new population will be looking for facilities to train and sporting clubs to join in the local area. The provision of new recreational facilities may also attract additional grants and funding for the wider community and contribute to the viability and liveability of the new residential area.

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

The Planning Proposal is not a result of any specific strategic study or report however a number of specialist studies have been undertaken in support of the proposal that demonstrate the suitability of the site for the inclusion of the additional permitted uses and future to enable the future development of the site for the purposes of a registered club and recreation facilities. The specialist studies are provided as Appendices to this report.

In addition, a comprehensive assessment of the proposal has been undertaken against the strategic planning strategies and policies relevant to the site which is provided in Section 6.2 of this report. The assessment has found that the Planning Proposal is generally consistent with the relevant objectives and actions of the key planning strategies and policies relevant to the site.

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

Yes, the project objectives and intended outcomes can only be achieved through the amendment of the Dubbo Local Environmental Plan 2011.

## 6.2 Relationship to Strategic Planning Framework

The Planning Proposal is generally consistent with the relevant objectives and actions of the key planning strategies and policies relevant to the site. The relevant key strategic planning policies that relate to the area and the proposal are as follows:

- Central West and Orana Regional Plan;
- Dubbo Regional Council Community Strategic Plan;
- Dubbo Local Strategic Planning Statement;
- Residential Areas Development Strategy; and
- Employment Lands Strategy.

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

### 6.2.1 Central West and Orana Regional Plan

The Central West and Orana is home to more than 300,000 people. People from metropolitan areas are attracted to its vibrant regional cities and centres, historic towns and villages, diverse lifestyles, and



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community festivals and events. The region makes a major contribution to the State's economy, building on its proud agricultural heritage and embracing innovation. Its rich soils, mountains and vast plains form a mosaic of beautiful landscapes.

The Central West and Orana Regional Plan provides a guide for the NSW Government's land use planning priorities and decisions over the next 20 years for the region, The Plan provides an overarching framework to guide subsequent and more detailed land use plans, development proposals and infrastructure funding decisions. The Plan sets the following regionally focused goals:

- The most diverse regional economy in NSW
- A stronger, healthier environment and diverse heritage
- Quality freight, transport and infrastructure networks
- Dynamic, vibrant and healthy communities

Each goal is proposed to be achieved through a number of focused planning directions. An assessment of the proposal's consistency with the relevant key planning directions of The Central West and Orana Regional Plan is provided in the table below.

Direction	Comment
<b>Direction 4:</b> Promote and diversify regional tourism markets	The proposal will facilitate a future community and recreational land use that will assist in promoting the emerging residential area and provide a use that will diversify the tourism market in Dubbo and provide a key facility that will attract people to the area.
<b>Direction 10:</b> Promote business and industrial activities in employment lands	The proposal will facilitate future employment generating land uses in an appropriate scale for the future residential neighbourhood.
<b>Direction 14:</b> Manage and conserve water resources for the environment	The proposal has been designed with consideration of the natural environment and characteristics of the site to ensure natural resources can be appropriately managed and conserved. A Salinity and Groundwater Assessment has been prepared by Envirowest in support of the proposal and is provided in Appendix G. The assessment concludes that no impact on groundwater including contamination and changed groundwater levels is expected from the development. The development will not impact on quantity or quality of both unconfined and confined aquifers.  All future development on the site will be designed and constructed to appropriately manage and conserve water resources for the environment.



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Table 2: Consistency with the Central West and Orana Regional Plan	
Direction	Comment
<b>Direction 16:</b> Respect and protect Aboriginal heritage assets	<p>An Aboriginal Due Diligence Assessment (<a href="#">Appendix E</a>) has been prepared by Artefact in support of the proposal. The assessment included a desktop review and site inspection. The desktop and visual inspection component for the study area follows the <i>Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales</i> (Due Diligence; DECCW 2010). The field inspection followed the <i>Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in New South Wales</i> (OEH 2011).</p> <p>The undertaking of the Due Diligence process resulted in the conclusion that the proposed works will have an impact on the ground surface, however, no Aboriginal objects or intact archaeological deposits will be harmed by the proposal. The Due Diligence Assessment concludes that no Aboriginal Heritage Impact Permit application is required and provides a number of recommendations to be implemented in future development to ensure the greatest possible protection to the area's Aboriginal cultural heritage values.</p>
<b>Direction 21:</b> Coordinate utility infrastructure investment	The proposal will facilitate the future development of the site in conjunction with the current extension of Boundary Road along the southern boundary of the site which includes the provision of services for future connection.
<b>Direction 22:</b> Manage growth and change in regional cities and strategic and local centres	The proposal will provide a community use and infrastructure in a future residential area that will positively contribute to the economy and liveability of the neighbourhood. The proposal aims to provide a community use and facilities that can ensure the area can develop its own neighbourhood identity and provide a key strategic precinct in association with the future neighborhood centre on the opposite side of Boundary Road for the wider residential area.
<b>Direction 25:</b> Increase housing diversity and choice	The proposal will positively contribute to the future residential area by providing community and recreation facilities in close proximity to a range of future residential land uses. The proposal will only involve the provision of additional permitted uses to ensure that the site is not sterilized from future residential development through a full rezoning of the site.

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Table 2: Consistency with the Central West and Orana Regional Plan	
Direction	Comment
<b>Direction 29:</b> Deliver healthy built environments and better urban design	The proposal will facilitate the future development of community and recreational infrastructure that will positively contribute to the built environment and liveability of the future residential area.

6.2.2 Dubbo Regional Council 2040 Community Strategic Plan

The Dubbo Regional Council 2040 Community Strategic Plan is a high-level strategy that aims to guide and influence the actions and initiatives of Dubbo Regional Council, the community, all tiers of government and community stakeholders through to 2040. The plan identifies five themes in which the plan aims to focus on within the LGA, these are as follows:

- Theme 1 – Housing;
- Theme 2 – Infrastructure;
- Theme 3 – Economy;
- Theme 4 – Community Leadership; and
- Theme 5 – Liveability.

The proposal is considered to be consistent with the themes of the Dubbo Regional Council Community Strategic Plan in that it will provide a community use and infrastructure in a future residential area that will positively contribute to the economy and liveability of the neighbourhood.

The table below details the key planning themes of the 2040 Community Strategic Plan and the proposal's consistency with the relevant planning strategies.

Table 3: Consistency with the Dubbo Regional Council 2040 Community Strategic Plan		
Theme	Strategy	Comment
<b>Theme 1 - Housing</b>	1.1.1 - A variety of residential housing types are located close to appropriate services and facilities	The proposal will facilitate the future development of community and recreational facilities in an area identified for future residential growth. The future development of the site is in conjunction with the extension of Boundary Road and associated infrastructure and will ensure there is appropriate community and recreational infrastructure in the area to support residential growth and create a viable



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Table 3: Consistency with the Dubbo Regional Council 2040 Community Strategic Plan		
Theme	Strategy	Comment
	<p>1.2.3 - New residential development is designed in accordance with Safer- By-Design principles.</p> <p>1.4.3 - Residential and other development is supported by the provision of a strategic and affordable infrastructure framework</p>	<p>residential community with a high level of amenity.</p> <p>Future development on the subject site will be designed in accordance with the Safer- By-Design principles. If the rezoning of the site is progressed it will facilitate the development of the site and promote enhanced neighbourhood safety and security through casual surveillance generated by the presence of a permanent new development and activity within the site.</p> <p>The proposal will facilitate the future development of the site in conjunction with the current extension of Boundary Road along the southern boundary of the site which includes the provision of public utility infrastructure and will provide suitable future connections for the site.</p>
<b>Theme 2 - Infrastructure</b>	<p>2.2.1 - Council promotes a high level of road safety to users.</p> <p>2.2.3 - Council's road network meets the transport needs of users in terms of traffic capacity, functionality and economic and social connectivity.</p> <p>2.5.5 - A network of cycleways and pedestrian facilities is provided and maintained.</p>	<p>Traffic and road safety have been key considerations in the preparation of the proposal. A Traffic and Transport Assessment (Appendix J) has been prepared in support of the proposal that details that the site is suitable for the proposal and will not adversely impact the safety of the existing or future road network.</p> <p>The Boundary Road extension is currently under construction to the south of the site which includes the provision of pedestrian and bicycle facilities.</p>



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Table 3: Consistency with the Dubbo Regional Council 2040 Community Strategic Plan		
Theme	Strategy	Comment
<b>Theme 3 - Economy</b>	3.1.5 Events that provide for activities that foster cultural and recreational opportunities and community interaction are supported.	The proposal will facilitate the future development of community and recreational facilities and will ensure they are established in the early stages of the development of the wider residential area. The early establishment of the club and recreational facilities will generate community interactions and create a cohesive residential community as the wider area develops. The site will become a key social, recreational and community destination positively contributing to the liveability of the area.
	3.7.2 Strategic land use strategies establish a land use hierarchy for the location of employment generating activities	The proposal will take advantage of the location of the subject site in proximity to the Boundary Road extension and the future neighbourhood centre identified for development on the opposite side of Boundary Road. The co-location of the proposal with the future neighbourhood centre will create a strategic community and retail precinct for the wider south east residential area. The proposal will ensure the key community, recreation and retail uses are provided in one central location for the wider residential area for convenience and to reduce the impact of providing commercial uses throughout the neighbourhood.
	3.7.3 Planning controls ensure adequate and suitable land is available for new development opportunities.	The proposal will rezone the site to include the additional permitted uses of a registered club and recreation facilities. The inclusion of the additional permitted uses will ensure



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Table 3: Consistency with the Dubbo Regional Council 2040 Community Strategic Plan		
Theme	Strategy	Comment
	3.7.4 Neighbourhood shopping centres are located to provide attractive and convenient services and facilities to support new and established neighbourhoods without adversely impacting on the Dubbo Central Business District.	<p>the objectives of the proposal can be achieved whilst also ensuring that the site is not sterilized from future development through a full rezoning of the site.</p> <p>The proposal will take advantage of the location of the subject site in proximity to the Boundary Road extension and the future neighbourhood centre identified for development on the opposite side of Boundary Road. The co-location of the proposal with the future neighbourhood centre will create a strategic community and retail precinct for the wider south east residential area whilst not detracting from the vitality of the Dubbo CBD.</p>
<b>Theme 4 – Community Leadership</b>	4.1.1 There is demonstrated unity throughout the community	The proposal will facilitate the future development of community and recreational facilities and will ensure they are established in the early stages of the development of the wider residential area. The early establishment of the club and recreational facilities will generate community interactions and create a cohesive residential community as the wider area develops. The site will become a key social, recreational and community destination positively contributing to the liveability of the area.
<b>Theme 5 – Liveability</b>	<p>5.5.1 Access to recreation and cultural facilities for young people is improved.</p> <p>5.5.2 Quality passive and active open space is located to</p>	The proposal will ensure residents of the future residential area will have appropriate access to community and recreation facilities as the area is developed ensuring a high level of accessibility and positively contributing to the liveability of the



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Theme	Strategy	Comment
	<p>maximise access and use by the community</p> <p>5.5.3 Unique recreational facilities and opportunity are available</p> <p>5.5.4 Our sporting facilities are recognised as catering for a wide range of local, regional and state sporting events and opportunity</p>	<p>area. The integration of the development into the neighbourhood will ensure a number of social, recreational and community can occur within the neighbourhood and reduce the need to leave the neighbourhood for social and recreational purposes.</p> <p>In addition, The proposal will facilitate a future community and recreational land use that will assist in promoting the emerging residential area and provide a use that will diversify the tourism market in Dubbo and provide a key facility that will attract people to the area.</p>

Is the Planning Proposal consistent with Council's local strategy or other local strategic plan?

**6.2.3 Dubbo Local Strategic Planning Statement**

The Dubbo 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 Dubbo Local Government Area (LGA) can thrive both now and in the future, and that future development is appropriate for the local context. The plan is aimed at ensuring the people have a great city, towns and villages in which to live, work and play; that businesses and visitors have a great place to invest and experience; and that it continue to work towards the strategic vision articulated in the 2040 Community Strategic Plan.

The LSPS is structured around the following five key themes:

- Infrastructure;
- Economy;
- Housing;
- Liveability; and
- Sustainability.

An assessment of the proposal against the relevant key planning priorities of the Dubbo LSPS is provided in the table below.





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Table 4: Consistency with the Dubbo Local Strategic Planning Statement	
Planning Priority	Comment
<b>Planning Priority 1:</b> Plan for the delivery of infrastructure to support growth	The proposal will facilitate the future development of community and recreational facilities in an area identified for future residential growth. The future development of the site is in conjunction with the extension of Boundary Road and associated infrastructure and will ensure there is appropriate community and recreational infrastructure in the area to support residential growth and create a viable residential community with a high level of amenity.
<b>Planning Priority 7:</b> Continue to support and grow our tourism industry	The proposal will facilitate a future community and recreational land use that will assist in promoting the emerging residential area and provide a use that will diversify the tourism market in Dubbo and provide a key facility that will attract people to the area.
<b>Planning Priority 8:</b> Ensure supply of employment generating land	The proposal will take advantage of the location of the subject site in proximity to the Boundary Road extension and the future neighbourhood centre identified for development on the opposite side of Boundary Road. The co-location of the proposal with the future neighbourhood centre will create a strategic community and retail precinct for the wider south east residential area. The proposal will ensure the key community, recreation and retail uses are provided in one central location for the wider residential area for convenience and to reduce the impact of providing commercial uses throughout the neighbourhood.
<b>Planning Priority 12:</b> Create sustainable and well-designed neighbourhoods	The proposal will facilitate the future development of community and recreational facilities in an area identified for future residential growth. The future development of the site is in conjunction with the extension of Boundary Road and associated infrastructure and will ensure there is appropriate community and recreational infrastructure in the area to support residential growth and create a viable residential community with a high level of amenity.

#### 6.2.4 Residential Areas Development Strategy

The Dubbo Residential Areas Development Strategy aims to provide a spatial, servicing and development control framework that will assure the timely provision of residential development opportunities which fit the needs of Dubbo and the region it services. The Strategy was designed to protect land for future residential development and to facilitate the servicing, staging, and release of this land.





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The subject site falls within the South East Precinct of the strategy. The strategy sets a goal to identify and protect the established residential neighbourhoods and ensure a sufficient supply of suitable land to meet the future residential development needs of the city.

The proposal is not inconsistent with the aims and objectives of the strategy in that it will provide a community use and infrastructure to support area identified for future residential growth. The proposal aims to provide a community use that can ensure the area can develop its own neighbourhood identity.

An assessment of the proposal against the key planning principles of the Residential Area Development Strategy is provided in the table below.

Planning Principle	Comment
<b>Sustainability</b>	Sustainability will be a key consideration in the design of all future development onsite.
<b>Compatibility</b>	The proposal is supported by a number of specialist studies that demonstrate the site's suitability for the inclusion of the additional permitted uses of a registered club and recreational facilities. The Concept Layout Plan provided in Appendix D details how the site can be sited and designed to ensure it is compatible with the surrounding residential area.
<b>Amenity</b>	The proposal will facilitate the future development of community and recreational facilities in an area identified for future residential growth. The future development of the site is in conjunction with the extension of Boundary Road and associated infrastructure and will ensure there is appropriate community and recreational infrastructure in the area to support residential growth and create a viable residential community with a high level of amenity.
<b>Efficiency</b>	The proposal will establish community and recreation facilities in the community which will assist in the efficient development of the surrounding area based on the provision of community and recreation infrastructure in the early stages of the development of wider residential area.

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Table 5: Consistency with the Residential Areas Development Strategy	
Planning Principle	Comment
<b>Economy</b>	It is expected that the proposal and future development of the site will generate significant employment for the community during construction, providing employment for workers and economic benefits from materials and transport of goods. During operation the proposed facility would provide employment for staff required to run and service the restaurants and bars as well as maintain and run the sports facilities. In addition, the proposal will facilitate the development of the site in close proximity to the future neighborhood centre on the opposite side of Boundary Road.
<b>Diversity</b>	The proposal will facilitate the future development of the site for the purposes of a registered club and recreational facilities which will diversify the development envisaged for the area. The inclusion of the additional permitted uses will ensure the objectives of the proposal can be achieved whilst also ensuring that the site is not sterilized from future development through a full rezoning of the site.
<b>Community</b>	The proposal will facilitate the future development of community and recreational facilities and will ensure they are established in the early stages of the development of the wider residential area. The early establishment of the club and recreational facilities will generate community interactions and create a cohesive residential community as the wider area develops. The site will become a key social, recreational and community destination positively contributing to the liveability of the area.

#### 6.2.5 Employment Lands Strategy

The Employment Lands Strategy aims to ensure the City of Dubbo has an appropriate level of commercial, industrial, institutional and tourist zoned land in the future which is situated in locations that can best meet the long-term requirements of Dubbo and the Region.

Whilst it is noted the subject site is zoned R2 Low Density Residential and is not identified within this strategy, the proposal will rezone the site to include additional permitted uses that will result in employment generating activity onsite.

Council staff have advised that as the proposal only includes additional permitted uses and not a full rezoning of the site, the Employment Lands Strategy does not need amending to accommodate the subject site.

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An assessment of the proposal against the relevant planning principles of the Employment Lands Strategy is provided in the table below.

Table 6: Consistency with the Employment Lands Strategy	
Planning Principle	Comment
Maintain and support the CBD as Dubbo’s primary service and retail centre	The proposal will take advantage of the location of the subject site in proximity to the Boundary Road extension and the future neighbourhood centre identified for development on the opposite side of Boundary Road. The co-location of the proposal with the future neighbourhood centre will create a strategic community and retail precinct for the wider south east residential area whilst not detracting from the vitality of the Dubbo CBD.
Infrastructure is appropriately planned to encourage sustainable development of employment lands.	The proposal will facilitate the future development of the site in conjunction with the current extension of Boundary Road along the southern boundary of the site which includes the provision of public utility infrastructure and will provide suitable future connections for the site allowing for the appropriate and sustainable development of the site.
Any proposals for new employment lands are adequately planned for to meet the long-term needs of Dubbo’s industry and community.	<p>The proposal will facilitate the future development of community and recreational facilities and will ensure they are established in the early stages of the development of the wider residential area. The early establishment of the club and recreational facilities will generate community interactions and create a cohesive residential community as the wider area develops. The site will become a key social, recreational and community destination positively contributing to the liveability of the area.</p> <p>It is expected that the proposal and future development of the site will generate significant employment for the community during construction, providing employment for workers and economic benefits from materials and transport of goods. During operation the proposed facility would provide employment for staff required to run and service the restaurants and bars as well as maintain and run the sports facilities.</p>
Maintain the efficiency of Dubbo’s key transport corridors.	The subject site will have frontage to the future extension of boundary road between Wheelers Lane and Sheraton Road. A key driver for the extension of Boundary Road was the redirection of localised traffic away from Dubbo’s key

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Table 6: Consistency with the Employment Lands Strategy	
Planning Principle	Comment
	transport corridors to minimise potential for conflict and appropriately manage volumes of traffic. The proposal will ensure the key transport corridors can maintain efficiency.

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

The Planning Proposal is consistent with the relevant State Environmental Planning Policies (SEPPs) that apply to the site. A detailed list of the SEPPs and commentary is provided at Appendix A.

Is the Planning Proposal consistent with applicable Ministerial Directions (s9.1 directions)?

The Planning Proposal is generally consistent with the Section 9.1 directions issued by the Minister for Planning. A statement of the consistency of this Planning Proposal with these directions is provided at Appendix B.

**6.3 Environmental, Social and Economic Impact**

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?

**6.3.1 Ecological Impacts**

The subject site is not identified as having biodiversity value or being ecologically significant as detailed in the Natural Resource – Biodiversity Map provided in the Dubbo Local Environmental Plan (LEP) 2011. The site currently contains scattered vegetation in the form of weeds and some trees.

The site is currently zoned R2 Low Density Residential under the Dubbo LEP and it is assumed it would eventually be developed to accommodate residential dwellings. The Planning Proposal will rezone the site to include the additional permitted uses of a register club and recreation facilities.

All future development on the site will be sited and designed to best respond to the ecological value of the surrounding area and will include the provision of native landscaping to assist in the integration of the future development into the surrounding environment. It is therefore considered that the Planning Proposal will not adversely impact on critical habitat, threatened species, populations or ecological communities and their habitats.

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

**6.3.2 Contamination**



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The subject site was previously used for agricultural purposes and has introduced fill from various sources present onsite. A Preliminary Site Investigation (Appendix F) has been undertaken by Envirowest in support of the proposal to determine suitability of the site for the proposed rezoning. A site assessment was conducted on 19 May 2020 consisting of a site walkover, desktop study and limited soil sampling.

The preliminary contamination assessment comprised a soil sampling and laboratory analysis program. A total of sixteen locations were assessed across the site. Six boreholes were drilled to rock onsite to determine the soil profile and ten soil samples were collected from stockpiles to provide an indicator of potential contamination.

Levels of chromium (III) exceeded adopted thresholds in one stockpile sample. Additional investigations are required to delineate impacted material. The levels of all other analytes evaluated in the soil samples were below the adopted health and ecological investigation and screening levels for recreational and commercial land-use. The Investigation concluded that it is expected that the site can be made suitable for the proposed land-use following additional investigations, completion of remediation works and validation assessment where required.

The additional investigations and remediation work and validation assessment where required will be undertaken at Development Application stage when physical works are proposed onsite.

### 6.3.3 Salinity and Groundwater

A Salinity and Groundwater Assessment (Appendix G) was prepared by Envirowest to assess the existing salinity conditions of the soil and groundwater onsite and determine the potential future impact of development on the site.

An initial investigation and desktop review was undertaken to collect existing information on groundwater on and around the site and the likelihood of salinity across the site. Boreholes were drilled and soil samples collected on 19 May 2020.

The site investigation included description of the existing landscape, soil investigation, laboratory analysis and groundwater investigation. The soil profile investigation was undertaken by constructing six boreholes up to 1.7m in depth or drill refusal. Representative soil samples were collected and analysed for pH, electrical conductivity, colour, dispersion, texture, chlorides and exchangeable sodium percentage.

The investigation results and proposed development were evaluated to identify impacts and recommend management outcomes to minimise salinity risk. Water balance was modelled to estimate changes in infiltration following development. Surface water flow containing sediment, nitrogen and phosphorus were modelled.

No visual surface or sub-surface indicators of groundwater discharge areas were identified on the site. The infiltration balance indicated infiltration will reduce under the post development scenario due to an increase in impermeable areas. Rainfall on impermeable areas will drain off-site in stormwater pipes.



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The investigation concluded that the risk of groundwater contamination from the proposed land uses is lower than the current land use. Nutrient contributions will decrease as a result of smaller available areas for fertilisation and a decrease in animal waste. Sediment contributions will also decrease as a result of an increase in hard cover areas and no soil disturbance from farming activities.

No impact on groundwater including contamination and changed groundwater levels is expected from the development. The development will not impact on quantity or quality of both unconfined and confined aquifers.

#### 6.3.4 Aboriginal Heritage

An Aboriginal Due Diligence Assessment (Appendix E) has been prepared by Artefact in support of the proposal. The assessment included a desktop review and site inspection. The desktop and visual inspection component for the study area follows the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales* (Due Diligence; DECCW 2010). The field inspection followed the *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in New South Wales* (OEH 2011).

The investigation identified that the study area is relatively distant to reliable water and has no specific landform features indicating archaeological sensitivity. However, the local area more generally appears to have provided good conditions for Aboriginal occupation over many previous generations.

The lack of identifiable resources in the study area (other than potentially basalt) and its distance to water indicate that habitation sites (artefact scatters, isolated finds and hearths indicating occupation of the land) may be less likely than further to the east or south. The basalt capping makes the ridge top uneven, reducing its suitability as a camp site. This is supported by the registered AHIMS sites near the study area, which show a high occurrence of artefact sites closer to Eulomogo Creek and the Macquarie River. The expected site types at the study area would be the result of resource gathering or markers associated with habitation of nearby areas, such as scarred trees and isolated finds.

The undertaking of the Due Diligence process resulted in the conclusion that the proposed works will have an impact on the ground surface, however, no Aboriginal objects or intact archaeological deposits will be harmed by the proposal. The Due Diligence Assessment concludes that no Aboriginal Heritage Impact Permit application is required and provides a number of recommendations to be implemented in future development to ensure the greatest possible protection to the area's Aboriginal cultural heritage values.

#### 6.3.5 Acoustic Impacts

The subject site is located in an area identified for future low-density residential development and therefore acoustic amenity and the potential impact of future development has been a key consideration in the preparation of the Planning Proposal.

A Preliminary Opportunities and Constraints Noise Assessment (Appendix H) has been prepared by Muller Acoustic Consulting in support of the proposal. The assessment was undertaken to provide a summary of existing environmental noise and identifies opportunities and constraints related to the

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rezoning of the site to facilitate the development of a registered club and recreation facilities. The main aspects considered in the assessment were:

- Noise emissions during the construction phase of a potential registered club;
- Independent Liquor and Gaming Authority (ILGA) noise emissions from the proposal site;
- Noise emissions associated with the internal operation including likely facilities such as restaurant, bar and function room;
- Noise emissions associated with the potential external activities including the use of the sports facilities and outdoor terrace areas;
- Operational noise from the mechanical plant associated with the development; and
- Road traffic noise from patron access and egress from the proposal site.

The surrounding locality is currently described as a rural environment with undeveloped lots located on all sides of the proposal site. The current noise environment is dominated by natural and wildlife noise sources.

It is however noted that as the wider area develops, the ambient environment surrounding the proposal site will evolve from a rural to a suburban environment, with traffic and domestic noise becoming the dominating sources.

Once the area is developed the site will be bound to the south by the Boundary Road extension and to the east by (proposed) Henty Drive. The undeveloped lots to the west and north are expected to be a range of residential land uses. To assess noise levels at the nearest potential residences, hypothetical receiver points were identified in close proximity to each side of the proposal site.

The assessment identified that the rural nature of the locality, short separation distances between the proposal site and nearby receivers, and the nature of the proposal activities would result in a moderate to high risk of noise impacts, particularly from sports/external events and road traffic noise.

The assessment does note that as Keswick Estate develops it is likely that the ambient rural noise environment will evolve into a typical suburban noise environment. The review has concluded that during the construction phase of a potential registered club, there is potential that the generated noise levels may be above the relevant criteria, however as the area is currently undergoing development, construction noise may be typical for the area for the foreseeable future. It is also noted that the lots surrounding the project site are undeveloped and that many receivers would not be completed or occupied prior to construction of the facility.

During operation of a potential registered club, there is a moderate to high risk of noise impacts within the community. The risk of potential impacts would be greater during the evening and night period as a result of the more stringent period criteria. It is therefore considered that management and mitigation measures may be required to reduce the potential impacts on the community. The management and mitigation measures will be provided in more detail in the Noise Impact Assessment report for the project.

The assessment concluded that the proposal site is considered suitable for rezoning to allow for the potential future development of a registered club and recreation facilities subject to appropriate

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management and mitigation measures to be confirmed and implemented at Development Application stage.

#### 6.3.6 Traffic and Transport

A Traffic and Transport Assessment has been prepared by TTM Consulting in support of the proposal and is provided in **Appendix J**. The report assesses the transport implications of the proposed rezoning and includes an assessment of the existing conditions including site context and the current and planned transport environment, road network assessment and traffic modelling.

Vehicular access to the site is provided via a single 11m wide divided driveway crossover on Henty Drive, in the north-east corner of the site. The preliminary design indicates an all-movements, unsignalized access with dedicated left and right turn lanes into the site from Henty Drive. The proposed access location is cognisant not only of Council restrictions, but also of the practical spatial requirements of the sports field and of the desire to minimise traffic impacts on the roundabout.

Given that the timing for the construction of Henty Drive is uncertain, and in order to facilitate access to the site, Council has advised that it will construct and maintain an interim arrangement on Henty Drive until such time as full construction takes place. TTM are advised that this interim arrangement will consist of a two-lane bitumen sealed access from the roundabout along the entire eastern frontage of the site. The applicant would be happy to discuss the inclusion of any site specific clauses in the Dubbo LEP relating to the interim access measures if deemed to be required.

The total indicative parking supply is 197 car spaces as detailed on the Concept Layout Plan provided in **Appendix D**. This satisfies the estimated maximum practical demand for the development (194 spaces), and essentially satisfies the Council requirement as outlined in the Dubbo Development Control Plan (DCP) 2011, being just 5 spaces (or 2.5%) less than the calculated requirement. The dimensions layout and geometry of the car park design are consistent with the requirements of AS2890, and the Dubbo DCP.

Given the estimates of development generated traffic during these times are relatively low, and that the access driveway has been located as far from the adjacent intersection as possible, it is considered likely that the future road network will easily accommodate the development generated traffic.

The Traffic and Transport Assessment concludes that the Planning Proposal is supportable from a traffic engineering and safety perspective and the site is considered suitable for the future development of a registered club and recreation facilities.

Has the Planning Proposal adequately addressed any social and economic effects?

#### 6.3.7 Social Infrastructure

A Social Impact Assessment has been prepared by Hill PDA in support of the proposal and is provided in **Appendix K**. The Social Impact Assessment provides a detailed description of the existing social environment and an assessment of the potential social impacts from the proposed development.

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The assessment identified the following key areas potential social impacts resulting from the proposal:

- **Access and Connectivity** - How patrons arrive to and from a licensed premise can have a significant impact on the amenity and safety of an area. The longer a patron must wait for transport generally increases the opportunity for antisocial behaviour and risk to themselves and the community. Ensuring that the proposed development has adequate public transport and a high quality and frequent taxi service would improve safety and amenity of the area;
- **Amenity** - Unwanted noise may result in reduced residential amenity for neighbouring residents. Adopting the recommendations of the acoustic report would manage the potential noise impacts generated from the proposal. Doing so would ensure compliance with the NSW Government's Office of Liquor, Gaming and Racing (OLGR) noise limits and help mitigate potential social impacts resulting from increased noise.
- **Community Cohesion** - The review of the surrounds indicates that the proposed venue is isolated from other licensed venues and late-night venues. The proposal is likely to benefit the community both, adults and children, in the eastern Dubbo area who may use the new Dubbo RSL as an option for entertainment and recreation. The proposed development is expected to be generally publicly accessible and would act as a place for social interaction. As such, it could increase the opportunities for residents of the surrounding residential community and surrounds to interact, subsequently would be beneficial to community cohesion within the study area and provide social benefits.
- **Community Health and Safety** - Crime associated with alcohol consumption could be perceived as a risk to public safety in the local area. Alcohol related antisocial behaviour can negatively impact patrons, employees, property, neighbouring residents, police and emergency service workers, and hospitality workers in general. The area surrounding the site does not have a high incidence of alcohol-related assault or non-domestic assault crimes. The proposed venue is not located near other licensed venues which indicates that a clustering effect of alcohol-related antisocial behaviour is less of a risk. In addition, the provision of additional sporting facilities will help encourage health lifestyles for the wider area.
- **Local Economy and Employment** - It is expected that the site will generate significant employment for the community during construction, providing employment for workers and economic benefits from materials and transport of goods. During operation the proposed facility would provide employment for staff required to run and service the restaurants and bars as well as maintain and run the sports facilities.
- **Provision of Social Infrastructure and Recreation Facilities** - At current the proposal includes unique facilities that are not currently available within 2km of the site. The Club would provide facilities for the new and existing community to enjoy sports, recreation and entertainment locally. The additional facilities would have a positive impact on the community.

The assessment concludes that the potential negative impacts of the proposed development can be successfully managed with the implementation of the mitigation measures detailed throughout the report and the community will benefit from the addition of local sports, recreation and entertainment facilities.



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A Plan of Management can be prepared at the DA stage to minimise the risk of antisocial behaviour at the site and ensure that ongoing operations at the site appropriately managed and monitored.

#### 6.3.8 Services and Utilities

A Civil Engineering Servicing Report has been prepared by AT&L in support of the proposal and is provided in Appendix I. The report undertook a review of all the existing civil infrastructure on site and in the surrounding area to determine the ability of the site to be serviced if the rezoning progresses.

As part of Dubbo Council's investment of capital projects, the Boundary Road Extension project is proposed to provide connection between Wheelers Lane and Sheraton Road to the east. The purpose of this extension is to provide access to developing The Keswick and Southlakes housing estates and improve access for residents to Dubbo's growth areas.

Stage 1 of the Boundary Road Extension Project, between Wheelers Lane and Alexandria Avenue was completed by Council in late 2018. Stage 2, between Alexandria Avenue and Sheraton Road is currently under construction.

The Stage 2 extension is a 1.2km long two-lane sealed and fully kerbed extension with integrated bike lanes and a footpath on the southern side. The following utilities will be installed as part of the works:

- Stormwater;
- Potable Water;
- Sewer;
- Street lighting and underground electricity; and
- Telecommunications.

#### Stormwater Drainage

Dial Before You Dig (DBYD) records from Dubbo Regional Council indicate there is no existing piped stormwater infrastructure on the site or within the proposed street frontages to the site.

As part of the Boundary Road extension works scheduled for completion by Dubbo Council, stormwater drainage has been proposed within the road reserve. The proposed network indicates a DN525mm pipe will be installed in the south-east corner of the lot fronting Stream Ave and a DN300mm pipe will be installed in the south-east corner of the lot fronting Boundary Road. These two connection locations ultimately drain into the same trunk drainage network to the east. Council have advised it will be possible to connect the proposed lot into this system, subject to their consultation and approval.

In order to control stormwater runoff, a new stormwater drainage network will be constructed within the proposed site to service the development. Prior to discharging into Council's street trunk drainage system, on-site detention will be provided to satisfy the permissible discharge requirements for the site.

All stormwater drainage infrastructure will be designed in accordance with the requirements of the relevant engineering standards including the Dubbo Development Control Plan 2013 and AS3500.3.





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**Potable Water**

Dial Before You Dig (DBYD) records from Dubbo Regional Council indicate there is no existing potable water infrastructure on the site or within the proposed street frontages to the site. There is however an existing potable water service at the intersection of Alexandria Avenue and Boundary Road.

As part of the Boundary Road extension works, Council have advised a DN150mm PVC potable water main will extend from the potable water service at the intersection of Alexandria Avenue and Boundary Road and be provided within the verge fronting the south east corner of the lot. Council have advised connection to this potable water service is possible, subject to their consultation and approval.

**Sewer**

Dial Before You Dig (DBYD) records from Dubbo Council indicate there is no existing sewer infrastructure on the site or within the proposed street frontages to the site.

As part of the Boundary Road extension works, Dubbo Council propose a HDPE DN50mm pressure sewer connection and pressure sewer boundary kit will be made available to the lot. Council have advised connection to the pressured sewer network is possible, subject to the construction of an on-site sewer pump station and their consultation and approval.

In addition to the pressurised system, a DN150mm gravity sewer connection will also be provided to the lot. Connection to this service will not be available for use until such a time the Southlakes Residential subdivision to the south of Boundary Road extends its internal sewer network. Once the gravity sewer is made live, the lot can be disconnected from the pressure sewer network and connected to the gravity sewer.

**Electricity**

Dial Before You Dig (DBYD) records from Essential Energy indicate there is no existing electrical infrastructure on the site or within the proposed street frontages to the site. However, Council's Boundary Road extension documentation show 2 x 11kV existing underground feeders from the Sheraton Road Solar Farm to the east of the proposed site. Connection to these feeders are not available and need to be protected during construction.

As part of the Boundary Road extension works, Dubbo Council propose the installation of underground electrical conduits located within the centre median and the southern verge of Boundary Road, and within a crossing connection on Stream Avenue. Council have not confirmed the capacity within these conduits, however, have expressed both high (11kV) and low voltage (415V) conduits are likely to be provided. Connection to this service is available, subject to the approval of the Essential Energy.

**Natural Gas**

Dial Before You Dig (DBYD) records indicate there is no existing gas infrastructure on the site or within the

Planning Proposal – Proposed Rezoning - Part Lot 502 DP 1255115 Boundary Road, Dubbo

proposed street frontages to the site.

As part of the Boundary Road extension works, Dubbo Council propose a low-pressure natural gas main in the southern verge of Boundary Road and within a crossing connection on Stream Avenue. The diameter of the gas main has not been finalised, however will likely be either DN32mm or DN50mm. Connection to this gas main will be available in the south-east corner of the site within the Stream Avenue (Henty Drive) verge.

#### Telecommunications

Dial Before You Dig (DBYD) results from NBN indicate there is no existing telecommunications infrastructure on the site or within the proposed street frontages to the site.

As part of the Boundary Road extension works, Dubbo Council propose NBN pit and pipe network in the southern verge of Boundary Road and within a crossing connection on Stream Avenue. The network will provide conduits only and fibres are to be provided by the proposed development in consultation with the NBN.

#### 6.4 State and Commonwealth Interests

**Is there adequate public infrastructure for the Planning Proposal?**

As detailed above, the Boundary Road Extension project is proposed to provide connection between Wheelers Lane and Sheraton Road to the east. Stage 1 of the Boundary Road Extension Project, between Wheelers Lane and Alexandria Avenue was completed by Council in late 2018. Stage 2, between Alexandria Avenue and Sheraton Road is currently under construction.

The Stage 2 extension is a 1.2km long two-lane sealed and fully kerbed extension with integrated bike lanes and a footpath on the southern side. Stage 2 will construct the section of Boundary Road that bounds the subject site to the south. The following utilities will be installed as part of the works:

- Stormwater;
- Potable Water;
- Sewer;
- Street lighting and underground electricity; and
- Telecommunications.

Once the construction of Boundary Road is completed the site will have adequate access to public infrastructure to support the future development of the site subject to approval and consultation with Council and the relevant authorities at Development Application Stage.

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

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Consultation with relevant State and Commonwealth public authorities will be undertaken as part of the exhibition of the Planning Proposal, as directed by the Gateway Determination. In this regard, consultation with the following public authorities is anticipated:

- Transport for NSW
- Essential Energy
- NSW Water
- NSW Environment, Energy and Science
- NSW Office of Environment and Heritage

#### 7.0 Mapping

As discussed in Section 5 of this report the Planning Proposal seeks to amend the Dubbo LEP 2011 as follows:

- Amend the Additional Permitted Uses Map for the subject site (Sheet APU\_008B) to identify the site for additional permitted uses referenced in Schedule 1 of the LEP.

The required mapping will be undertaken by Council once Gateway Determination has been issued for the proposal.

#### 8.0 Community and Key Stakeholder Consultation

It is expected that direction as to the nature and extent of the public exhibition will be provided by Department of Planning, Industry and Environment as part of the Gateway Determination. No formal community consultation has been undertaken in relation to this Planning Proposal to date.

In accordance with the Department of Planning & Environment Guidelines for preparing Planning Proposals a pre-lodgment meeting was undertaken with Dubbo Council staff on 9 September 2020 to discuss the proposed rezoning of the site as detailed in Section 1.2 of this report.

#### 9.0 Project Timeline

The Relevant Planning Authority (RPA) has discretion to determine the relevant project timeframe for the determination of this Planning Proposal. The information detailed within this Planning Proposal has been provided to outline any potential impacts and provide justification to support and assist the RPA's determination.

#### 10.0 Conclusion

This Planning Proposal has been prepared by The Planning Hub on behalf of the Dubbo RSL and seeks to amend the Dubbo Local Environmental Plan (LEP) 2011 to will seek to rezone a parcel of land to include additional permitted uses of a registered club and recreational facilities at Boundary Road, Dubbo.

The Planning Proposal has been prepared in accordance with Section 3.33 of the Environmental Planning



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and Assessment Act 1979 (the EP&A Act) and the relevant guidelines prepared by the NSW Department of Planning including 'A Guide to Preparing Local Environmental Plans' and 'A Guide to Preparing Planning Proposals'.

The Planning Proposal provides a comprehensive justification of the proposed amendment to the Dubbo LEP 2011, and significant planning merit in the following respects:

- It will facilitate the future development of community and recreational facilities in an area identified for future residential growth;
- It will provide suitable access to community and recreational facilities for future residents of the wider area;
- It will allow the site to become a key social, recreational and community destination positively contributing to the liveability of the area; and
- It will allow the site to contribute to the generation of a key strategic community and retail precinct for the wider south east residential area in association with the future neighborhood centre.

Given the above significant planning merits and the absence of any adverse social, economic or environmental impacts, it is requested that the Planning Proposal be favorably considered by Council and that Council resolve to forward it to the Department of Planning, Industry & Environment to allow the Department to consider the Planning Proposal for Gateway Determination under Section 3.34 of the Environmental Planning and Assessment Act, 1979.

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## APPENDIX A

# PLANNING PROPOSAL CONSISTENCY WITH STATE ENVIRONMENTAL PLANNING POLICIES (SEPPs)

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Consistency with Relevant State Environmental Planning Policies (SEPPs) Boundary Road, Dubbo			
SEPP	Aim	Comment	Complies
<b>SEPP 55 – Remediation of Land</b>	<p>This Policy provides a state-wide planning approach to remediation and aims to promote the remediation of any contaminated land for the purpose of reducing the risk of harm to human health and/or the environment.</p> <p>A planning authority is to consider whether the land is contaminated and if so whether it is, or can be made, suitable for the proposed land uses.</p>	<p>A Preliminary Site Investigation has been undertaken by Envirowest in support of the proposal and is provided in <b>Appendix F</b>.</p> <p>The Investigation states that additional investigations are required to delineate impacted material onsite. The levels of all other analytes evaluated in the soil samples were below the adopted health and ecological investigation and screening levels for recreational and commercial land-use. The Investigation concludes that It is expected that the site can be made suitable for the proposed land-use following additional investigations, completion of remediation works and validation assessment where required.</p> <p>The additional investigations and remediation work and validation assessment where required will be undertaken at Development Application stage when physical works are proposed.</p> <p>The proposal is considered to be consistent with this SEPP as contamination has been considered as a part of the proposal and the site is expected to be able to be made suitable for its intended use at DA Stage.</p>	✓
<b>SEPP 64 – Advertising and Signage</b>	<p>The aim of this policy is to regulate signage, ensure it is of a high-quality design and finish, provides effective communication in suitable locations and is compatible with the desired visual character.</p>	<p>The planning proposal does not preclude future development on the site of complying with the SEPP. All future applications for signage and advertisement</p>	✓

Planning Proposal Consistency with SEPPs – Boundary Road, Dubbo

		on the site will need to be consistent with the relevant provisions of this SEPP.	
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## APPENDIX B

# PLANNING PROPOSAL CONSISTENCY WITH SECTION 9.1 MINISTERIAL DIRECTIONS

BOUNDARY ROAD,  
DUBBO

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Consistency with Relevant Section 9.1 Ministerial Directions			
Boundary Road, Dubbo			
Direction	Requirement	Comment	Complies
<b>2 – Environment and Heritage</b>			
<b>2.3 – Heritage Conservation</b>	<p>A planning proposal must contain provisions that facilitate the conservation of:</p> <p>(a) items, places, buildings, works, relics, moveable objects or precincts of environmental heritage significance to an area, in relation to the historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic value of the item, area, object or place, identified in a study of the environmental heritage of the area,</p> <p>(b) Aboriginal objects or Aboriginal places that are protected under the National Parks and Wildlife Act 1974, and</p> <p>(c) Aboriginal areas, Aboriginal objects, Aboriginal places or landscapes identified by an Aboriginal heritage survey prepared by or on behalf of an Aboriginal Land Council, Aboriginal body or public authority and provided to the relevant planning authority, which identifies the area, object, place or landscape as being of heritage significance to Aboriginal culture and people.</p>	<p>An Aboriginal Due Diligence Assessment (<b>Appendix E</b>) has been prepared by OzArk in support of the proposal and concludes that the proposal will not impact on any Aboriginal objects or intact archaeological deposits. In addition, the report provides recommendations for the construction of the proposal to ensure no further investigations will be required. The proposal is therefore considered to be consistent with this direction.</p>	✓
<b>2.6 – Remediation of Contaminated Land</b>	<p>A planning proposal authority must not include in a particular zone (within the meaning of the local environmental plan) any land specified in paragraph (2) if the inclusion of the land in that zone would permit a change of use of the land, unless:</p> <p>(a) the planning proposal authority has considered whether the land is contaminated, and</p> <p>(b) if the land is contaminated, the planning proposal authority is satisfied that the land is suitable in its contaminated state (or will be</p>	<p>A Preliminary Site Investigation has been undertaken by Envirowest in support of the proposal and is provided in <b>Appendix F</b>.</p> <p>The Investigation states that additional investigations are required to delineate impacted material onsite. The levels of all other analytes evaluated in the soil samples were below the adopted health and ecological investigation and screening levels for recreational and commercial land-use.</p>	✓

Planning Proposal Consistency with Section 9.1 Ministerial Directions – Boundary Road, Dubbo

	<p>suitable, after remediation) for all the purposes for which land in the zone concerned is permitted to be used, and</p> <p>(c) if the land requires remediation to be made suitable for any purpose for which land in that zone is permitted to be used, the planning proposal authority is satisfied that the land will be so remediated before the land is used for that purpose.</p>	<p>The Investigation concludes that it is expected that the site can be made suitable for the proposed land-use following additional investigations, completion of remediation works and validation assessment where required.</p> <p>The additional investigations, remediation work and validation assessment where required will be undertaken at Development Application stage when physical works are proposed.</p> <p>The proposal is considered to be consistent with this direction as contamination has been considered as a part of the proposal and the site is expected to be able to be made suitable for its intended use at DA Stage.</p>	
<p><b>3 – Housing, Infrastructure and Urban Development</b></p>			
<p><b>3.1 – Residential Zones</b></p>	<p>A planning proposal must include provisions that encourage the provision of housing that will:</p> <p>(a) broaden the choice of building types and locations available in the housing market, and</p> <p>(b) make more efficient use of existing infrastructure and services, and</p> <p>(c) reduce the consumption of land for housing and associated urban development on the urban fringe, and</p> <p>(d) be of good design.</p>	<p>The proposal is inconsistent with the direction as it will facilitate additional permitted uses on land zoned for residential purposes. The proposal’s inconsistency with the direction is considered reasonable as it will provide a community use and infrastructure in a future residential area that will positively contribute to the economy and liveability of the neighbourhood.</p> <p>The proposal only relates to the one site and is considered to be of minor significance as the surrounding land will remain zoned for residential purposes and the proposal will facilitate a community use that will positively contribute to the residential area and provide suitable access to facilities for future residents.</p> <p>The inclusion of the additional permitted uses will ensure the objectives of the proposal can be achieved whilst also</p>	<p><b>On Merit</b></p>



## Planning Proposal Consistency with Section 9.1 Ministerial Directions – Boundary Road, Dubbo

		ensuring that the site is not sterilized from future development through a full rezoning of the site.	
<b>3.4 – Integrating Land Use and Transport</b>	The objective of this direction is to ensure that urban structures, building forms, land use locations, development designs, subdivision and street layouts achieve the following planning objectives: (a) improving access to housing, jobs and services by walking, cycling and public transport, and (b) increasing the choice of available transport and reducing dependence on cars, and (c) reducing travel demand including the number of trips generated by development and the distances travelled, especially by car; and (d) supporting the efficient and viable operation of public transport services, and (e) providing for the efficient movement of freight.	The proposal is consistent with this direction as it has been designed with consideration of the future road network and will ensure future development can facilitate the efficient movement of vehicles onsite and the surrounding road network.  A Traffic and Transport Assessment ( <i>Appendix J</i> ) has been prepared by TTM Group in support of the proposal which concludes that the proposal is unlikely to impact the existing and future road networks and further detailed assessment will be undertaken at development application stage.	✓
<b>5 - Regional Planning</b>			
<b>5.10 – Implementation of Regional Plans</b>	Planning proposals must be consistent with a Regional Plan released by the Minister for Planning.	The proposal is consistent with this direction as it is consistent with the Central West and Orana Regional Plan as detailed in Section 6.2 of the planning report.	✓



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View west through study area.

**ABORIGINAL HERITAGE DUE DILIGENCE ASSESSMENT REPORT**

**PROPOSED RSL SPORTING FACILITY: KESWICK ESTATE**

DUBBO

MAY 2020

Report prepared by  
OzArk Environment & Heritage  
for The Planning Hub

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**Acknowledgement**

OzArk acknowledge Traditional Owners of the area on which this assessment took place and pay respect to their beliefs, cultural heritage and continuing connection with the land. We also acknowledge and pay respect to the post-contact experiences of Aboriginal people with attachment to the area and to the elders, past and present, as the next generation of role models and vessels for memories, traditions, culture and hopes of local Aboriginal people.

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## EXECUTIVE SUMMARY

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OzArk Environment & Heritage (OzArk) has been engaged by The Planning Hub (the client), on behalf of Dubbo RSL Club (the proponent) to complete an Aboriginal heritage Due Diligence assessment for a planning proposal for the rezoning of the site to accommodate construction of an RSL club and associated recreation facilities (the proposal). The study area covers a 3.3-hectare portion of Lot 502, DP 1255115 in the Dubbo Local Government Area (LGA).

The undertaking of the Due Diligence process resulted in the conclusion that the proposed works will have an impact on the ground surface, however, no Aboriginal objects or intact archaeological deposits will be harmed by the proposal. This moves the proposal to the following outcome:

*Aboriginal Heritage Impact Permit (AHIP) application not necessary. Proceed with caution. If any Aboriginal objects are found, stop work and notify Heritage NSW (131 555 or info@environment.nsw.gov.au). If human remains are found, stop work, secure the site and notify NSW Police and Biodiversity and Conservation Division (BCD).*

To ensure the greatest possible protection to the area's Aboriginal cultural heritage values, the following recommendations are made:

- 1) The proposed work may proceed at the study area without further archaeological investigation under the following conditions:
  - a) All land and ground disturbance activities must be confined to within the study area, as this will eliminate the risk of harm to Aboriginal objects in adjacent landforms. Should the parameters of the proposal extend beyond the assessed areas, then further archaeological assessment may be required.
  - b) All staff and contractors involved in the proposed work should be made aware of the legislative protection requirements for all Aboriginal sites and objects.
- 2) This assessment has concluded that there is a low likelihood that the proposed work will adversely harm Aboriginal cultural heritage items or sites. However, during works, if Aboriginal artefacts or skeletal material are noted, all work should cease and the procedures in the *Unanticipated Finds Protocol (Appendix 2)* should be followed;
- 3) Although outside the study area for the RSL project, contractors should be provided with the updated location of K-ST-6 (GDA Zone 55 653765E, 6428443N) and efforts made to avoid the site, which should be feasible as it is outside the study area.
- 4) Work crews should undergo cultural heritage induction to ensure they recognise Aboriginal artefacts (see **Appendix 3**) and are aware of the legislative protection of

Aboriginal objects under the National Parks and Wildlife Act (NPW Act) and the contents of the *Unanticipated Finds Protocol*.

- 5) The information presented here meets the requirements of the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales*. It should be retained as shelf documentation for five years as it may be used to support a defence against prosecution in the event of unanticipated harm to Aboriginal objects.

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## 1 INTRODUCTION

### 1.1 BRIEF DESCRIPTION OF THE PROPOSAL

OzArk Environment & Heritage (OzArk) has been engaged by The Planning Hub (the client), on behalf of Dubbo RSL Club (the proponent) to complete an Aboriginal heritage Due Diligence assessment for a planning proposal for the rezoning of the site to accommodate construction of an RSL club and associated recreation facilities (the proposal). The proposal is in the Dubbo Local Government Area (LGA) (Figure 1-1).

Figure 1-1. Map showing the location of the proposal.



### 1.2 STUDY AREA

The study area covers a portion of Lot 502, DP 1255115 on Boundary Road in Dubbo, NSW.

The study area consists of approximately 3.3 hectares of land and is shown on Figure 1-2.

### 1.3 ASSESSMENT APPROACH

#### Aboriginal cultural heritage

The desktop and visual inspection component for the study area follows the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales* (Due Diligence; DECCW 2010). The field inspection followed the *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in New South Wales* (OEH 2011).

Figure 1-2: Aerial showing the study area.



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## 2 ABORIGINAL DUE DILIGENCE ASSESSMENT

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### 2.1 INTRODUCTION

The National Parks and Wildlife Regulation 2009 (NPW Regulation) made under the *National Parks and Wildlife Act 1974* (NPW Act) advocates a Due Diligence process to determining likely impacts on Aboriginal objects. Carrying out Due Diligence provides a defence to the offence of harming Aboriginal objects and is an important step in satisfying Aboriginal heritage obligations in NSW.

### 2.2 DEFENCES UNDER THE NPW REGULATION 2009

#### 2.2.1 Low impact activities

The first step before application of the Due Diligence process itself is to determine whether the proposed activity is a "low impact activity" for which there is a defence in the NPW Regulation. The exemptions are listed in Section 80B (1) of the NPW Regulation (DECCW 2010: 6).

The potential construction activities of the proponent are not considered 'low impact activities'.

#### 2.2.2 Disturbed lands

Relevant to this process is the assessed levels of previous land-use disturbance.

The NPW Regulation Section 80B (4) (DECCW 2010: 18) define disturbed land as follows:

*Land is disturbed if it has been the subject of a human activity that has changed the land's surface, being changes that remain clear and observable.*

*Examples include ploughing, construction of rural infrastructure (such as dams and fences), construction of roads, trails and tracks (including fire trails and tracks and walking tracks), clearing vegetation, construction of buildings and the erection of other structures, construction or installation of utilities and other similar services (such as above or below ground electrical infrastructure, water or sewerage pipelines, stormwater drainage and other similar infrastructure) and construction of earthworks.*

The study area has been used as a location for dumping rubbish and overburden for the two past decades. More recently it has been used as a stockpile for construction materials associated with road and housing development at the nearby Keswick and Southlakes Estates. While the majority of the study area has been disturbed in a 'clear and observable' manner under the NPW Regulation, the changes are not wholesale across the area. It is therefore determined that the proposal must be assessed under the Due Diligence Code. The reasoning for this determination is set out in **Table 2-1**.

**Table 2-1: Determination of whether Due Diligence Code applies.**

Item	Reasoning	Answer
Is the activity a Part 3A project declared under section 75B of the EP&A Act?	The proposal is assessed under Part 4 of the EP&A Act.	No
Is the activity exempt from the NPW Act or NPW Regulation?	The proposal is not exempt under this Act or Regulation.	No
Do either or both of these apply: Is the activity in an Aboriginal place? Have previous investigations that meet the requirements of this Code identified Aboriginal objects?	The activity will not occur in an Aboriginal place. No previous investigations have been conducted.	No
Is the activity a low impact one for which there is a defence in the NPW Regulation?	The proposal is not a low impact activity for which there is a defence in the NPW Regulation.	No
Is the activity occurring entirely within areas that are assessed as 'disturbed lands'?	The proposal is not solely within areas of high modification.	No
Due Diligence Code of Practice assessment is required		

### 2.3 APPLICATION OF THE DUE DILIGENCE CODE OF PRACTICE TO THE PROPOSAL

To follow the generic Due Diligence process, a series of steps in a question/answer flowchart format (DECCW 2010: 10) are applied to the proposed impacts and the study area, and the responses documented.

#### 2.3.1 Step 1

Will the activity disturb the ground surface or any culturally modified trees?

**Yes, the proposal will impact the ground surface and may impact culturally modified trees.**

The proposed works will impact the ground surface through excavation, levelling, and vegetation clearing for the construction of the facility buildings and sports fields. Culturally modified trees, if present in the study area, may be impacted by the proposal.

#### 2.3.2 Step 2a

Are there any relevant confirmed site records or other associated landscape feature information on AHIMS?

**No, there are no previously recorded sites within the study area.**

A search of the Aboriginal Heritage Information System (AHIMS) database conducted on 9 April 2020 covering a 5 km radius centred on the study area (GDA Zone 55, Eastings: 653060-657643, Northings: 6425891-6429965) returned 22 results.

**Figure 2-1** shows all previously recorded sites in relation to the study area and **Table 2-2** shows the types of sites that are close to the study area.

**Table 2-2: Site types and frequencies of AHIMS sites near the study area.**

Site Type	Number	% Frequency
Artefact Scatter	9	40.9
Modified Tree (Carved or Scarred)	7	31.8
Isolated Find	3	13.6
Axe Grinding Grooves	2	9.1
Artefact Reburial Location	1	4.5

**Figure 2-1: Previously recorded sites in relation to the study area.**



Artefact scatters are the most frequent site recorded in the search area, accounting for 40.9% of results. The next most common are modified trees (31.8%) and isolated finds (13.6%). As shown in Figure 2-1, the five closest sites to the study area are modified trees, suggesting that they were prevalent in the local area and could be expected in the study area if trees of appropriate age and species for cultural modification are present.

**2.3.3 Step 2b**

Are there any other sources of information of which a person is already aware?

**No, there are no other sources of information that would indicate the presence of Aboriginal objects in the study area.**



### 2.3.3.1 *Ethnographic sources of information*

According to Tindale's map of tribal boundaries (1974), the Dubbo area falls within the northern limits of Wiradjuri country, as defined by the limits of the Wiradjuri language group. The Tubba-Gah and Dundullimal comprise two local sub-groups, 'clans' or mobs within the larger Wiradjuri entity. The study area falls within the territory of the Tubba-Gah, thought to lie to the east of the Macquarie River, south of the Talbragar River and north of Eulomogo creek, whereas the Dundullimal are thought to have occupied the area to the west of the Macquarie River (Kelton 1995b: 7–8; Koettig 1985: 21–22). Not all Aboriginal community representatives agree with this division, with some arguing that the Tubba-Gah mob inhabited both sides of the Macquarie River.

Early accounts of first contact between Europeans and Aboriginals in the Macquarie River area can be found in Oxley (1820) and Sturt (1833). Although interesting, these sources provide only a small window into the lifestyle and customs of the Aboriginal people of the Dubbo area. Near Whylandra Creek / Tanners Springs, one of the first encounters John Oxley had with the Indigenous inhabitants of the area was on 13 August 1817. Oxley noted that the country clearly "...afforded them ample means of subsistence..." when compared to the areas he had travelled further to the south.

### 2.3.3.2 *Regional archaeological context*

Throughout Australia, numerous archaeological studies in widely varying environmental zones and contexts have demonstrated a high correlation between the permanence of a water source and the permanence and/or complexity of Aboriginal occupation in the vicinity of the water source. Results of archaeological studies covering the Dubbo area, such as Koettig (1985), have conformed to this general model.

Koettig conducted an assessment for Dubbo's Local Environmental Plan, concentrating investigations in the narrow river valley corridors of the Dubbo, Geurie and Wellington regions. The study concurred with prior hypotheses, noting that river corridors provide an abundance of resources readily accessible to Aboriginal people, and that this is generally reflected in the complexity of lithic assemblages from sites close to permanent water compared to those near ephemeral water sources (Koettig 1985: 84–99). Large open camp sites or artefact scatters are most likely to occur in exposed areas close to drainage features but may also occur along ridgelines and on elevated ground overlooking water courses.

In 1995 Kelton completed an Aboriginal archaeological survey of approximately 290 ha of the Keswick land parcel, including the study area. Five scarred trees were recorded during the survey, the closest of which is 150 m west of the current study area. The lack of any stone artefact sites identified across the 1995 study area is noteworthy, but was deemed to conform with Kelton's predictions for site locations due to distance from permanent water (Kelton 1995:45). Disturbance in the form of dumped materials was noted over the study area at that time.

Kelton (1998) conducted a survey for potential industrial development near Eulomogo Creek, 300 ha of land 1.5 km southeast of the current study area. The study resulted in the identification of nine Aboriginal sites, including two axe grinding groove sites, a scarred tree, and six open camp sites / artefact scatters. Kelton noted that the location of open camp sites and axe grinding grooves along the banks and adjacent terraces of Eulomogo Creek conformed to the predictive model. It was predicted sites would occur along the banks of perennial and ephemeral creek lines. Of the nine sites recorded, seven sites (AHIMS sites 36-1-0246, 36-1-0247, 36-1-0250, 36-1-0251, 36-1-0252, 36-1-0253 and 36-1-0254) are located within 200 m of Eulomogo Creek and drainage features of Eulomogo Creek. However, the recording of the extensive artefact scatter (36-1-0248) along a low hillslope east of the "South Keswick" homestead was not expected.

In 2017 OzArk undertook a due diligence assessment for the connection between the Dubbo Solar farm and the electricity substation located near the corner of Boundary Road and Wheelers Lane. This easement followed the fence that bounds the southern edge of the study area. No Aboriginal sites were found as a result of this assessment.

In 2018 OzArk undertook a due diligence assessment for the extension of Boundary Road, from Wheelers Lane to Sheraton Road. This new road, not yet complete, forms the southern boundary of the study area. No Aboriginal sites were found as a result of this assessment.

#### Conclusion

The study area was assessed in 1995 by Kelton and no artefacts were identified. Further assessments by OzArk (2017 and 2018) immediately adjacent to the study area to the south, also found no sites. While this does not rule out the possibility of new sites being identified, it does reduce the likelihood.

There are no known cultural values or Aboriginal sites pertaining directly to the location of the proposed work. No Aboriginal community members accompanied the current visual inspection.

#### **2.3.4 Step 2c**

Are there any landscape features that are likely to indicate presence of Aboriginal objects?

**No, the landforms of the study area have no specific indicators of archaeological sensitivity.**

##### ***2.3.4.1 Topography, geology and soil profile***

Low hills with long slopes characterise the locality. The study area straddles the edge of an undulating plain as it transitions to a basalt ridge above the Macquarie River floodplain at approximately 270 m Australian Height Datum. This is a tertiary basalt of the Cainozoic era, which can be found across the region, as here, as a cap on isolated hills and ridges (Holmes 1984). The surrounding area comprises mostly floodplain with low undulating basalt slopes.

Sedimentology of the landscape unit is dominated by Holocene fluvial sediments associated with the Macquarie River alluvial deposits and its distributary stream systems (Mitchell 2002: 34). Soil profiles are typified by dark yellow-brown silty clay with patches of sand and carbonate nodules deposited from suspended sediments in floodwater (Mitchell 2002: 34). On the ridge however, the soil is a red rich loam associated with the breakdown of the basalt.

#### **2.3.4.2 Hydrology**

The study area is located on a low basalt capped ridge between two unnamed drainage lines (approximately 400 m to the east and the west) that drain into Eulomogo Creek, an ephemeral waterway, which meets the Macquarie River 2.3 km south of the study area and is the permanent water source for the Dubbo region.

#### **2.3.4.3 Vegetation**

Grey Box (*Eucalyptus microcarpa*), Yellow Box (*E. melliodora*) and Rough-barked Apple (*Angophora floribunda*) occur on valley floors, while River Red Gum (*E. camaldulensis*) line the Macquarie River and River Oak (*Casuarina cunninghamiana*) tends to line the tributaries (OzArk 2015). Fuzzy Box (*E. conica*) is also known to occur along foot slopes and alluvial areas near the Macquarie River. Riverine woodland vegetation has been dramatically altered since European settlement, and few isolated native trees remain in proximity. The study area today exhibits a couple of immature exotic trees, but is predominantly cleared.

#### **2.3.4.4 Discussion**

The study area is relatively distant to reliable water and has no specific landform features indicating archaeological sensitivity. However, the local area more generally appears to have provided good conditions for Aboriginal occupation over many previous generations. The lack of identifiable resources in the study area (other than potentially basalt) and its distance to water indicate that habitation sites (artefact scatters, isolated finds and hearths indicating occupation of the land) may be less likely than further to the east or south. The basalt capping makes the ridge top uneven, reducing its suitability as a camp site.

This is supported by the registered AHIMS sites (Figure 2-1) near the study area, which show a high occurrence of artefact sites closer to Eulomogo Creek and the Macquarie River. The expected site types at the study area would be the result of resource gathering or markers associated with habitation of nearby areas, such as scarred trees and isolated finds. Again, this expectation is informed by the identified AHIMS sites near the study area, which are exclusively modified trees recorded by Kelton's 1995 survey.

The outcropping and boulder basalt may have been exploited / collected by Aboriginal in the past, but there is no specific evidence for this.

Although not required by the Due Diligence process, the proponent has elected to apply the precautionary principle and proceed to visual inspection of the study area (Section 2.3.6) in order to ground-truth the findings of the above desktop level assessment.

### 2.3.5 Step 3

Can harm to Aboriginal objects listed on AHIMS or identified by other sources of information and/or can the carrying out of the activity at the relevant landscape features be avoided?

**No known objects or landforms with identified archaeological sensitivity will be impacted by the proposal.**

### 2.3.6 Step 4

Does a desktop assessment and visual inspection confirm that there are Aboriginal objects or that they are likely?

**No Aboriginal objects were identified at the study area and their likelihood was assessed as low.**

The visual inspection of the study area was undertaken by OzArk Director Dr Jodie Benton and Heritage Officer Harrison Rochford on 15 April 2020. No new sites were recorded. The nearest AHIMS site (K-ST-6) was located and confirmed to be approx. 160 m west of the study area.

Figure 2-2: Survey coverage within the study area.



### Discussion

Dense weed cover limited Ground Surface Visibility (GSV) across the majority of the study area. Areas of Ground Surface Exposure (GSE) were largely restricted to existing vehicle tracks (**Plate 1**) or heaps of soil related to earthworks / dumping (**Plate 2**). While GSE was estimated to be only 20%, visibility within the exposures was good (60%) (**Plate 3**).

The visual inspection noted substantial disturbances to the natural ground surface across the study area, most frequently the accumulation of excess gravel associated with nearby road and housing construction (**Plate 4**). The majority of the study area has been used as a rubbish tip and evidence of this is still visible (**Plate 5**) and corresponds with previous available evidence (**Plate 6**).

The desktop modelling indicated that the study area has low archaeological potential and a history of previous land disturbance. The visual inspection results are consistent with this modelling. The most frequent site type near the study area, modified trees, were expected to be the most likely site recorded. There are very few mature native trees remaining in the study area due to widespread clearing.

The closest registered AHIMS site to the study area, K-ST-6 was located 160 m west of the study area. The coordinates on AHIMS (converted to GDA 94 Zone 55 653752E,6428423N) were found to be approximately 25 m off the location of the site, which was recorded as: GDA Zone 55 653765E,6428443. OzArk will submit a site card update with the correct coordinates.

A 'no' answer for Step 4, results in the following outcome (DECCW 2010):

*AHIP (Aboriginal Heritage Impact Permit) application not necessary. Proceed with caution. If any Aboriginal objects are found, stop work and notify Heritage NSW (131 555 or info@environment.nsw.gov.au). If human remains are found, stop work, secure the site and notify NSW Police and Heritage NSW.*

### **2.4 CONCLUSION**

The Due Diligence process has resulted in the outcome that an AHIP is not required. The reasoning behind this determination is set out in **Table 2-3**.

Table 2-3: Due Diligence Process application.

Item	Reasoning	Answer
<p>Will the activity disturb either of the following:</p> <ul style="list-style-type: none"> <li>▪ the ground surface where archaeological deposits are likely</li> <li>▪ mature, native trees that may be culturally modified.</li> </ul>	<p>The proposed works would disturb the ground surface through excavation and construction. The likelihood of archaeological deposits being present at the study area was assessed as low.</p> <p>The proposal will not impact culturally modified trees.</p>	No
<p>Are there any relevant records of Aboriginal heritage on site (AHIMS or from other sources), or landscape features that are likely to indicate presence of Aboriginal objects?</p>	<p>AHIMS indicated no Aboriginal sites within the study area, however, one recorded scarred tree confirmed 160 m to the west.</p> <p>No landscape features in the study area indicate the likely presence of Aboriginal objects.</p>	No
<p>Will the activity impact Aboriginal objects or landforms with archaeological potential?</p>	<p>There are no known items of Aboriginal significance present in the study area, and landforms with identified archaeological sensitivity are not present.</p>	No
<p>Does the desktop and/or visual assessment confirm that Aboriginal objects will be harmed?</p>	<p>Desktop searches found no known items of Aboriginal heritage in the study area. It is assessed that there is a low likelihood of there being subsurface archaeological deposits within the study area.</p>	No
AHIP not necessary. Proceed with caution.		



### 3 MANAGEMENT RECOMMENDATIONS

The undertaking of the Due Diligence process resulted in the conclusion that the proposed works will have an impact on the ground surface, however, no Aboriginal objects or intact archaeological deposits will be harmed by the proposal. This moves the proposal to the following outcome:

*AHIP application not necessary. Proceed with caution. If any Aboriginal objects are found, stop work and notify Heritage NSW (131 555 or info@environment.nsw.gov.au). If human remains are found, stop work, secure the site and notify NSW Police and Heritage NSW.*

To ensure the greatest possible protection to the area's Aboriginal cultural heritage values, the following recommendations are made:

- 1) The proposed work may proceed at the study area without further archaeological investigation under the following conditions:
  - a) All land and ground disturbance activities must be confined to within the study area, as this will eliminate the risk of harm to Aboriginal objects in adjacent landforms. Should the parameters of the proposal extend beyond the assessed areas, then further archaeological assessment may be required.
  - b) All staff and contractors involved in the proposed work should be made aware of the legislative protection requirements for all Aboriginal sites and objects.
- 2) This assessment has concluded that there is a low likelihood that the proposed work will adversely harm Aboriginal cultural heritage items or sites. However, during works, if Aboriginal artefacts or skeletal material are noted, all work should cease and the procedures in the *Unanticipated Finds Protocol (Appendix 2)* should be followed;
- 3) Although outside the study area for the RSL project, contractors should be provided with the updated location of K-ST-6 (GDA Zone 55 653765E, 6428443N) and efforts made to avoid the site, which should be feasible as it is outside the study area.
- 4) Work crews should undergo cultural heritage induction to ensure they recognise Aboriginal artefacts (see **Appendix 3**) and are aware of the legislative protection of Aboriginal objects under the NPW Act and the contents of the *Unanticipated Finds Protocol*.
- 5) The information presented here meets the requirements of the *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales*. It should be retained as shelf documentation for five years as it may be used to support a defence against prosecution in the event of unanticipated harm to Aboriginal objects.

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**REFERENCES**


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- Burra Charter 2013 International Council on Monuments and Sites 2013. *The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance*.
- DECCW 2010 DECCW. 2010. *Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW*. Department of Environment, Climate Change and Water, Sydney.
- Mitchell 2002 Mitchell, Dr. Peter. 2002. *Description for NSW (Mitchell) Landscapes Version 2*. Department of Environment and Climate Change NSW.
- OEH 2011 Office of Environment and Heritage. 2011. *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in New South Wales*. Department of Environment, Climate Change and Water, Sydney.
- Garnsey 1942 Garnsey, E.J. 1942. *A Treatise on the Aborigines of Dubbo and District: Their Camp-Life, Habits and Customs*. Dubbo: Dubbo Museum and Historical Society.
- Grounds 1983 Grounds, C. 1983. 'Oaklands' - a Historic Sketch. A Teacher's Handbook - 'Oaklands' Dubbo: Dubbo Local Inservice Committee.
- Holmes, K. 1984 Holmes, K. 1944. *Geology*. Chapter in *The Dubbo Region: A Natural History*. Macquarie Publications, Dubbo.
- Horton 1994 Horton, D. 1994. (ed.) *The Encyclopaedia of Aboriginal Australia*. Canberra: Aboriginal Studies Press.
- Kelton 1995 Kelton, J. 1995. *An Archaeological Survey for the Proposed Keswick Housing Subdivision, Dubbo, NSW*. Report to Development Consultants Hoynes Wheeler and Thorne.
- Kelton 1998 Kelton, J. 1998. *An Aboriginal Archaeological Survey of Industrial Candidate Area No. 1 – Mitchell / Eulomogo, East of Dubbo, central West Plains, NSW*. Report to Dubbo City Council.
- Oxley 1820 Oxley, J. *Journals of Two Expeditions into the Interior of New South Wales: Undertaken by Order of the British Government in the Years 1817-1818*. London: Murray.
- OzArk 2006 OzArk Environment and Heritage Management. 2006. *Aboriginal Heritage Study: Dubbo Local Government Area*. Report to Dubbo City Council.
- OzArk 2015 OzArk Environment and Heritage Management. 2015. *Aboriginal Archaeological Assessment: Subdivision of Lot 399 DP 1199356 and Lot*

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	<i>503 DP 1152321, Boundary Road, Dubbo NSW. Report to MAAS Group Properties.</i>
OzArk 2017	<i>OzArk Environment and Heritage Management. 2017. Aboriginal Due Diligence Archaeological Assessment: Power easement connection for the Dubbo Solar project, Dubbo NSW. Report to GHD on behalf of Neoen.</i>
OzArk 2018	<i>OzArk Environment and Heritage Management. 2017. Aboriginal Due Diligence Assessment: Boundary Rd extension Stage 2, Dubbo NSW. Report to Bamson on behalf of Dubbo Regional Council.</i>
OzArk 2019	<i>OzArk Environment and Heritage Management. 2019. Aboriginal Cultural Heritage Assessment Report: Management of site #36-1-0189, Southlakes Estate, Dubbo, NSW. Report to MAAS Group Properties.</i>
Sturt 1833	<i>Sturt, C. Two Expeditions into the Interior of Southern Australia. London: Smith, Elder and Co.</i>
Tindale 1974	<i>Tindale, A. 1974, Aboriginal Tribes of Australia, University of California Press.</i>

**PLATES**



Plate 1: View northeast to the study area.



Plate 2: View west through study area. Note vegetation of dense weeds.



Plate 3: View south through study area showing an exposure good Ground Surface Visibility (GSV).



Plate 4: View southwest showing mounds of imported gravel.



Plate 5: Example of rubbish remaining in the study area from previous use as a tip.

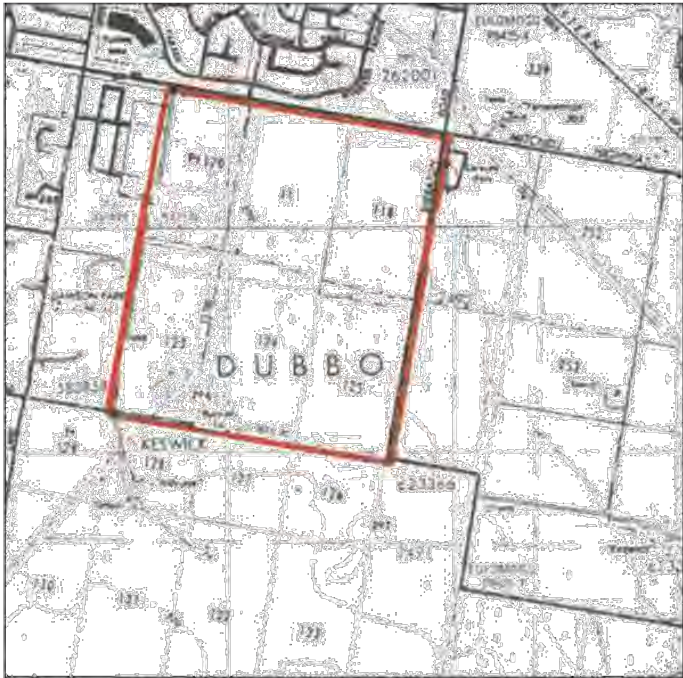


Plate 6: Figure after Kelton 1995, red indicates study area of that survey. Note area labelled 'rubbish tip' that corresponds with the majority of the current study area.



APPENDIX 1: AHIMS SEARCH RESULTS

AHIMS Web Services (AWS)											Your Ref/PO Number: Keswick
Extensive search - Site list report											Client Service ID: 436286
Ident	Site Name	Status	Zone	Listing	Northings	Eastings	Site Status	Site Features	Site Type	Remarks	
98-4-0236	82-814-00 (Kahungu Creek)	Ancient	S3	634968	6428840	6283562	Valid	Archaeo-	Open Camp Site	4378	
	Contact	Recorders	Central West Archaeological and Heritage Services Pty Ltd					Permits	9578-9377		
98-4-0237	82-415-00 (Kahungu Creek)	Ancient	S3	785240	6419940	Open site	Valid	Archaeo-	Open Camp Site	4378	
	Contact	Recorders	Central West Archaeological and Heritage Services Pty Ltd					Permits	1271,1277		
98-4-0240	Kahungu Creek (EG05-3)	Ancient	S3	656948	6437008	Open site	Valid	Archaeo-	Open Camp Site	4378	
	Contact	Recorders	Central West Archaeological and Heritage Services Pty Ltd/Ark Environmental					Permits	9578-9377		
98-4-0241	82-415-00 (Kahungu Creek)	Ancient	S3	634968	6428840	Open site	Valid	Archaeo-	Open Camp Site	4378	
	Contact	Recorders	Central West Archaeological and Heritage Services Pty Ltd					Permits	1414,1417		
98-4-0249	82-814-00 (Kahungu Creek)	Ancient	S3	634968	6428840	Open site	Valid	Archaeo-	Open Camp Site	4378	
	Contact	Recorders	Central West Archaeological and Heritage Services Pty Ltd/Ark Environmental					Permits	1271,1277		
98-4-0251	82-415-00 (Kahungu Creek)	Ancient	S3	634968	6428840	Open site	Valid	Archaeo-	Open Camp Site	4378	
	Contact	Recorders	Central West Archaeological and Heritage Services Pty Ltd/Ark Environmental					Permits	1271,1277		
98-4-0252	82-415-00 (Kahungu Creek)	Ancient	S3	634968	6428840	Open site	Valid	Archaeo-	Open Camp Site	4378	
	Contact	Recorders	Central West Archaeological and Heritage Services Pty Ltd/Ark Environmental					Permits	1271,1277		
98-4-0253	82-814-00 (Kahungu Creek)	Ancient	S3	634968	6428840	Open site	Valid	Archaeo-	Open Camp Site	4378	
	Contact	Recorders	Central West Archaeological and Heritage Services Pty Ltd/Ark Environmental					Permits	1271,1277		
98-4-0254	82-814-00 (Kahungu Creek)	Ancient	S3	634968	6428840	Open site	Valid	Archaeo-	Open Camp Site	4378	
	Contact	Recorders	Central West Archaeological and Heritage Services Pty Ltd/Ark Environmental					Permits	1271,1277		
98-4-0255	82-814-00 (Kahungu Creek)	Ancient	S3	634968	6428840	Open site	Valid	Archaeo-	Open Camp Site	4378	
	Contact	Recorders	Central West Archaeological and Heritage Services Pty Ltd/Ark Environmental					Permits	1271,1277		
98-4-0256	82-814-00 (Kahungu Creek)	Ancient	S3	634968	6428840	Open site	Valid	Archaeo-	Open Camp Site	4378	
	Contact	Recorders	Central West Archaeological and Heritage Services Pty Ltd/Ark Environmental					Permits	1271,1277		
98-4-0257	82-814-00 (Kahungu Creek)	Ancient	S3	634968	6428840	Open site	Valid	Archaeo-	Open Camp Site	4378	
	Contact	Recorders	Central West Archaeological and Heritage Services Pty Ltd/Ark Environmental					Permits	1271,1277		
98-4-0258	82-814-00 (Kahungu Creek)	Ancient	S3	634968	6428840	Open site	Valid	Archaeo-	Open Camp Site	4378	
	Contact	Recorders	Central West Archaeological and Heritage Services Pty Ltd/Ark Environmental					Permits	1271,1277		
98-4-0259	82-814-00 (Kahungu Creek)	Ancient	S3	634968	6428840	Open site	Valid	Archaeo-	Open Camp Site	4378	
	Contact	Recorders	Central West Archaeological and Heritage Services Pty Ltd/Ark Environmental					Permits	1271,1277		
98-4-0260	82-814-00 (Kahungu Creek)	Ancient	S3	634968	6428840	Open site	Valid	Archaeo-	Open Camp Site	4378	
	Contact	Recorders	Central West Archaeological and Heritage Services Pty Ltd/Ark Environmental					Permits	1271,1277		
98-4-0261	82-814-00 (Kahungu Creek)	Ancient	S3	634968	6428840	Open site	Valid	Archaeo-	Open Camp Site	4378	
	Contact	Recorders	Central West Archaeological and Heritage Services Pty Ltd/Ark Environmental					Permits	1271,1277		
98-4-0262	82-814-00 (Kahungu Creek)	Ancient	S3	634968	6428840	Open site	Valid	Archaeo-	Open Camp Site	4378	
	Contact	Recorders	Central West Archaeological and Heritage Services Pty Ltd/Ark Environmental					Permits	1271,1277		
98-4-0263	82-814-00 (Kahungu Creek)	Ancient	S3	634968	6428840	Open site	Valid	Archaeo-	Open Camp Site	4378	
	Contact	Recorders	Central West Archaeological and Heritage Services Pty Ltd/Ark Environmental					Permits	1271,1277		
98-4-0264	82-814-00 (Kahungu Creek)	Ancient	S3	634968	6428840	Open site	Valid	Archaeo-	Open Camp Site	4378	
	Contact	Recorders	Central West Archaeological and Heritage Services Pty Ltd/Ark Environmental					Permits	1271,1277		
98-4-0265	82-814-00 (Kahungu Creek)	Ancient	S3	634968	6428840	Open site	Valid	Archaeo-	Open Camp Site	4378	
	Contact	Recorders	Central West Archaeological and Heritage Services Pty Ltd/Ark Environmental					Permits	1271,1277		
98-4-0266	82-814-00 (Kahungu Creek)	Ancient	S3	634968	6428840	Open site	Valid	Archaeo-	Open Camp Site	4378	
	Contact	Recorders	Central West Archaeological and Heritage Services Pty Ltd/Ark Environmental					Permits	1271,1277		
98-4-0267	82-814-00 (Kahungu Creek)	Ancient	S3	634968	6428840	Open site	Valid	Archaeo-	Open Camp Site	4378	
	Contact	Recorders	Central West Archaeological and Heritage Services Pty Ltd/Ark Environmental					Permits	1271,1277		
98-4-0268	82-814-00 (Kahungu Creek)	Ancient	S3	634968	6428840	Open site	Valid	Archaeo-	Open Camp Site	4378	
	Contact	Recorders	Central West Archaeological and Heritage Services Pty Ltd/Ark Environmental					Permits	1271,1277		
98-4-0269	82-814-00 (Kahungu Creek)	Ancient	S3	634968	6428840	Open site	Valid	Archaeo-	Open Camp Site	4378	
	Contact	Recorders	Central West Archaeological and Heritage Services Pty Ltd/Ark Environmental					Permits	1271,1277		
98-4-0270	82-814-00 (Kahungu Creek)	Ancient	S3	634968	6428840	Open site	Valid	Archaeo-	Open Camp Site	4378	
	Contact	Recorders	Central West Archaeological and Heritage Services Pty Ltd/Ark Environmental					Permits	1271,1277		
98-4-0271	82-814-00 (Kahungu Creek)	Ancient	S3	634968	6428840	Open site	Valid	Archaeo-	Open Camp Site	4378	
	Contact	Recorders	Central West Archaeological and Heritage Services Pty Ltd/Ark Environmental					Permits	1271,1277		
98-4-0272	82-814-00 (Kahungu Creek)	Ancient	S3	634968	6428840	Open site	Valid	Archaeo-	Open Camp Site	4378	
	Contact	Recorders	Central West Archaeological and Heritage Services Pty Ltd/Ark Environmental					Permits	1271,1277		

Report generated by AHIMS Web Services on 08/04/2028 for Harrison Woodford for the following area of Return: GDA, Zone: S3, Eastings: 633968 - 637643, Northings: 6425991 - 6429963 with a Buffer of 0 meters. Additional Info: DB: Number of Aboriginal sites and Aboriginal objects found is 22

AHIMS Web Services (AWS)											Your Ref/PO Number: Keswick
Extensive search - Site list report											Client Service ID: 436286
Ident	Site Name	Status	Zone	Listing	Northings	Eastings	Site Status	Site Features	Site Type	Remarks	
98-4-0490	82-814	Ancient	S3	634968	6428840	Open site	Valid	Historical Tree (Gnarled or Scattered)	Scattered Tree	1200	
	Contact	Recorders	Central West Archaeological and Heritage Services Pty Ltd					Permits			
98-4-0491	82-814	Ancient	S3	634968	6428840	Open site	Valid	Historical Tree (Gnarled or Scattered)	Scattered Tree	1200	
	Contact	Recorders	Central West Archaeological and Heritage Services Pty Ltd					Permits			
98-4-0492	82-814	Ancient	S3	634968	6428840	Open site	Valid	Historical Tree (Gnarled or Scattered)	Scattered Tree	1200	
	Contact	Recorders	Central West Archaeological and Heritage Services Pty Ltd					Permits			
98-4-0493	82-814	Ancient	S3	634968	6428840	Open site	Valid	Archaeo-	Scattered Tree	0546,012,063	
	Contact	Recorders	Jen Roberts					Permits			
98-4-0494	82-814	Ancient	S3	634968	6428840	Open site	Valid	Archaeo-	Open Camp Site	094,043,094	
	Contact	Recorders	Jen Roberts					Permits			
98-4-0495	82-814	Ancient	S3	634968	6428840	Open site	Valid	Archaeo-	Open Camp Site	0048,005,008,007,009	
	Contact	Recorders	Jen Roberts					Permits			
98-4-0496	82-814	Ancient	S3	634968	6428840	Open site	Decayed	Archaeo-	Open Camp Site	094,043,094	
	Contact	Recorders	Jen Roberts					Permits			
98-4-0497	82-814	Ancient	S3	634968	6428840	Open site	Valid	Archaeo-	0471	04013	
	Contact	Recorders	Dorothy Bala-Benita					Permits			
98-4-0498	82-814	Ancient	S3	634968	6428840	Open site	Valid	Archaeo-	1402598		
	Contact	Recorders	Outback Environmental and Heritage Management/Deakin/Laird/Laird					Permits			

Report generated by AHIMS Web Services on 08/04/2028 for Harrison Woodford for the following area of Return: GDA, Zone: S3, Eastings: 633968 - 637643, Northings: 6425991 - 6429963 with a Buffer of 0 meters. Additional Info: DB: Number of Aboriginal sites and Aboriginal objects found is 22

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**APPENDIX 2: ABORIGINAL HERITAGE: UNANTICIPATED FINDS PROTOCOL**

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An Aboriginal artefact is anything which is the result of past Aboriginal activity. This includes stone (artefacts, rock engravings etc.), plant (culturally scarred trees) and animal (if showing signs of modification; i.e. smoothing, use). Human bone (skeletal) remains may also be uncovered while onsite.

Cultural heritage significance is assessed by the Aboriginal community and is typically based on traditional and contemporary lore, spiritual values, and oral history, and may also take into account scientific and educational value.

Protocol to be followed in the event that previously unrecorded or unanticipated Aboriginal object(s) are encountered:

1. If any Aboriginal object is discovered and/or harmed in, or under the land, while undertaking the proposed development activities, the proponent must:
  - a. Not further harm the object;
  - b. Immediately cease all work at the particular location;
  - c. Secure the area so as to avoid further harm to the Aboriginal object;
  - d. Notify Heritage NSW as soon as practical on 131 555, providing any details of the Aboriginal object and its location; and
  - e. Not recommence any work at the particular location unless authorised in writing by Heritage NSW.
2. In the event that Aboriginal burials are unexpectedly encountered during the activity, work must stop immediately, the area secured to prevent unauthorised access and NSW Police and Heritage NSW contacted.
3. Cooperate with the appropriate authorities and relevant Aboriginal community representatives to facilitate:
  - a. The recording and assessment of the find(s);
  - b. The fulfilment of any legal constraints arising from the find(s), including complying with Heritage NSW directions; and
  - c. The development and implementation of appropriate management strategies, including consultation with stakeholders and the assessment of the significance of the find(s).
4. Where the find(s) are determined to be Aboriginal object(s), recommencement of work in the area of the find(s) can only occur in accordance with any consequential legal requirements and after gaining written approval from Heritage NSW (normally an Aboriginal Heritage Impact Permit).

APPENDIX 3: ABORIGINAL HERITAGE: ARTEFACT IDENTIFICATION

	
<p>Retouched blades (scale = 1cm)</p>	<p>Flakes</p>
	
<p>Microliths (scale = 1cm)</p>	<p>Scraper (scale = 1cm)</p>
	
<p>Flake characteristics (scale = 1cm)</p>	<p>Core from which flakes have been removed (scale = 1cm)</p>



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**Document Registration**

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001	DRAFT	27/04/20	Alexandra Chung	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
002	FINAL	29/05/20	Andrew Tweedie	<input type="checkbox"/>	<input type="checkbox"/>
003	FINAL	11/07/20	Andrew Tweedie	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
004	FINAL	29/09/20	Andrew Tweedie	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>



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- Appendix A**            Extract from Boundary Road Extension Stage 2 – Civil Package
- Appendix B**            Dial Before You Dig Records
- Appendix C**            Email Correspondence - Chris Godfrey 20th April 2020





## 1. Introduction

### 1.1 Background

AT&L has been commissioned by Dubbo Memorial Club Pty Ltd to prepare a Civil Engineering Servicing Report to support the planning proposal for the New Club Development, Dubbo RSL Club. The planning proposal is to amend the Dubbo Local Environmental Plan (Dubbo LEP) 2011 to accommodate a new registered club facility and associated recreational facilities.

The subject site is situated in the suburb of Dubbo, within the Dubbo Regional Council Local Government Area. The proposed site currently forms part of a larger site that will be subdivided to accommodate the proposal. The larger site is commonly known as Volta Avenue, Dubbo, legally described as Lot 502, DP 1255115. Figure 1 below indicates the relative location of the site.



Figure 1: Subject Site Locality (The Planning Hub 2020)

The purpose of this report is to provide preliminary advice regarding:

- Dial Before you Dig (DBYD) records;
- Locations of existing services;
- Review of Dubbo Council's Stage 2 Boundary Road extension documentation;
- Proposed service upgrades as part of the Stage 2 works; and
- Potential service upgrades required to ensure adequate supply to the site.

### 1.2 Existing Site

The subject site currently forms part of Lot 502, DP1255115. There is currently no road or utility services leading to the proposed site.

Following the proposed subdivision, the site will be bound by the future extension of Boundary Road to the South and Stream Avenue to the East. Lands located immediately North and West of the site are nominated for Future Keswick Estate Lands. Refer Appendix A showing relative locations of Keswick Estate and the proposed Boundary Road.



The proposed development site covers a total area of approximately 3.3ha containing no existing infrastructure and is covered in light to medium grass cover.

### 1.3 Proposed Development

This planning proposal is being produced to rezone the site to include the additional permitted use of a registered club and recreation facilities. The proposal will facilitate the future development of a new registered club facility and associated recreational facilities. The key design features include:

- Club Building;
- Kids play and family area;
- Sports and recreation facilities;
- Off street on-grade Parking; and
- Sports field and supporting external amenities.

Refer Figure 2 for the proposed site layout prepared by Curtin Architects.

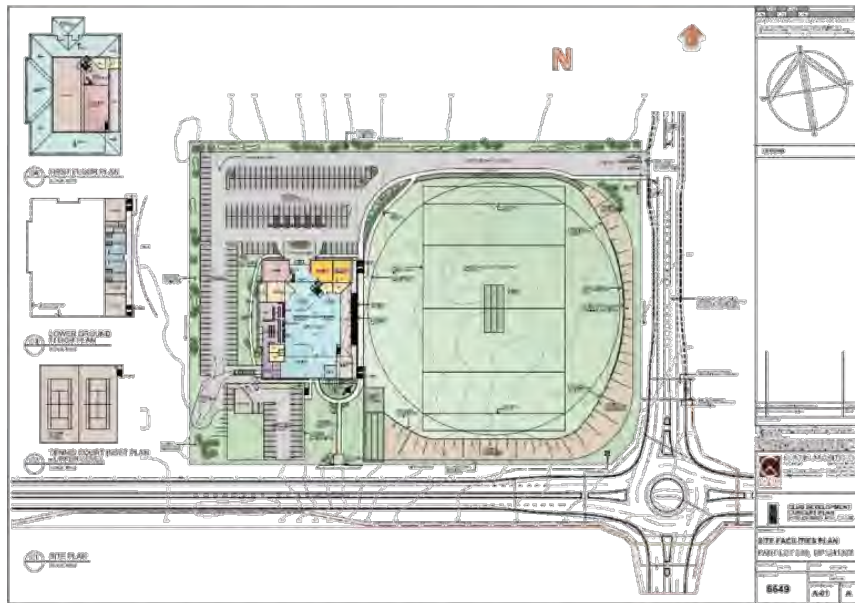


Figure 2: Proposed Development Site Plan (Curtin Architect September 2020)



## 2. Boundary Road Extension

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As part of Dubbo Council's investment of capital projects, the Boundary Road Extension project is proposed to provide connection between Wheelers and Sheraton Road to the east. The purpose of this extension was to provide access to developing The Kewsick and South Lake housing estates and improve access for residents to Dubbo's growth areas.

Stage 1 of the Boundary Road Extension Project, between Wheelers Lane and Alexandria Ave was completed by Council in late 2018. Stage 2, between Alexandria Ave and Sheraton Road is currently being reviewed for Construction Certificate approval and construction is anticipated to begin within Q2 2020.

The Stage 2 extension is a 1.2km long two-lane sealed and fully kerbed extension with integrated bike lanes and a footpath on the southern side. The following utilities will be installed as part of the works;

- Stormwater;
- Potable Water;
- Sewer;
- Street lighting and underground electricity;
- Telecommunications; and
- Gas.

Refer Appendix A for Boundary Road Extension Stage 2 documentation.



### 3. Services Strategy

In order to provide a servicing strategy for the proposed lot, a desktop review of the existing services in the area was carried out using Nearmap and DBYD results. Refer Appendix 2 for all DBYD results.

The following existing services and associated asset owners were found within the wider vicinity of the site:

- Stormwater – Dubbo Regional Council;
- Water – Dubbo Regional Council;
- Sewer – Dubbo Regional Council;
- Electrical – Essential Energy;
- Gas – Jemena; and
- Telecommunications – Telstra, NBN.

In addition, Dubbo Council also provided information and construction documentation relating to the proposed Boundary Road Stage 2 Extension works. Refer Appendix A for Boundary Road Construction Drawings and Appendix C for Council advice received from Chris Godfrey, Acting Manager Infrastructure Strategy and Design on 20th April 2020.

#### 3.1. Stormwater Drainage

Dial Before You Dig (DBYD) records from Dubbo Regional Council indicate there is no existing piped stormwater infrastructure on the site or within the proposed street frontages to the site.

As part of the Boundary Road extension works scheduled for completion by Dubbo Council, stormwater drainage has been proposed within the road reserve. The proposed network indicates a DN525mm pipe will be installed in the south-east corner of the lot fronting Stream Ave and a DN300mm pipe will be installed in the south-east corner of the lot fronting Boundary Road. These two connection locations ultimately drain into the same trunk drainage network to the east. Council have advised it will be possible to connect the proposed lot into this system, subject to their consultation and approval. Refer Figure 3 indicating the Stormwater network proposed as part of the Dubbo Council Boundary Road Stage 2 Extension Works.

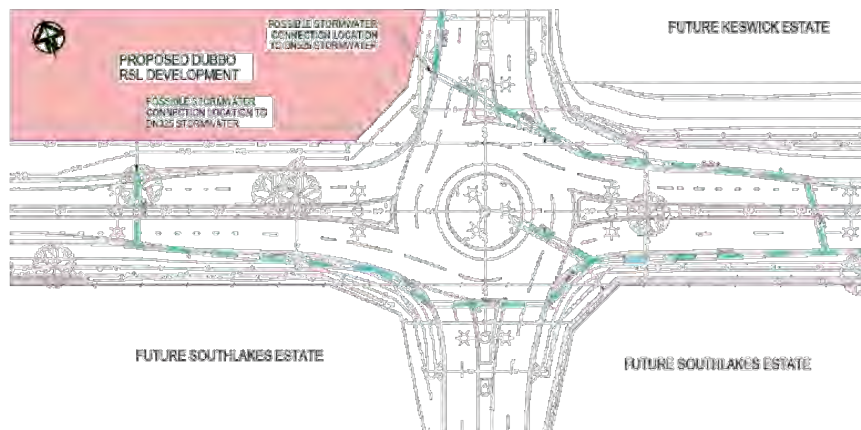


Figure 3: Boundary Road Extension Proposed Stormwater Network



### 3.1.1 On-site detention

In order to control stormwater runoff, a new stormwater drainage network will be constructed within the proposed site to service the development. Prior to discharging into Council's street trunk drainage system, on-site detention will be provided to satisfy the permissible discharge requirements for the site.

All stormwater drainage infrastructure will be designed in accordance with the requirements of the relevant engineering standards including the Dubbo Development Control Plan 2013 and AS3500.3.

### 3.1.2 Stormwater Quality Treatment

In order to ensure disturbance to natural stream systems are minimised, water quality treatment measures will be installed to treat the surface water prior to discharging into Council's street trunk drainage system.

All stormwater quality infrastructure will be designed in accordance with the requirements of the relevant engineering standards including the Dubbo Development Control Plan 2013.

## 3.2. Potable Water

Dial Before You Dig (DBYD) records from Dubbo Regional Council indicate there is no existing potable water infrastructure on the site or within the proposed street frontages to the site. There is however an existing potable water service at the intersection of Alexandria Avenue and Boundary Road.

As part of the Boundary Road extension works, Dubbo Council have advised a DN150mm PVC potable water main will extend from the potable water service at the intersection of Alexandria Avenue and Boundary Road and be provided within the verge fronting the south east corner of the lot. Council have advised connection to this potable water service is possible, subject to their consultation and approval. Refer Figure 4 showing the Potable Water network proposed as part of the Dubbo Council Boundary Road Stage 2 Extension Works.

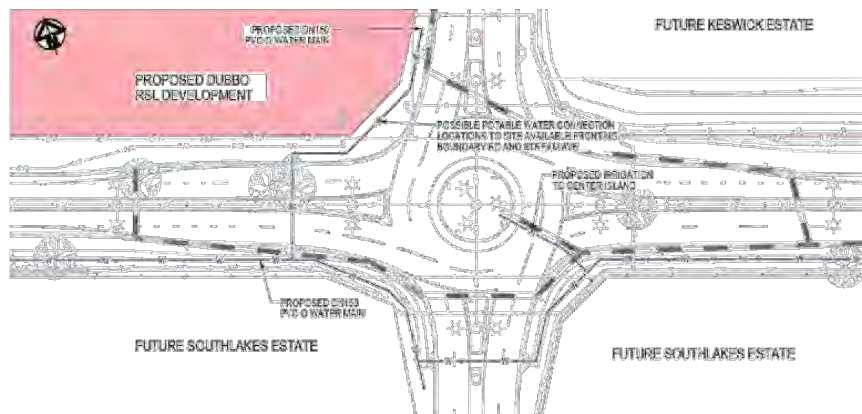


Figure 4: Boundary Road Extension Proposed Potable Water Network





### 3.3. Sewer

Dial Before You Dig (DBYD) records from Dubbo Council indicate there is no existing sewer infrastructure on the site or within the proposed street frontages to the site.

As part of the Boundary Road extension works, Dubbo Council propose a HDPE DN50mm pressure sewer connection and pressure sewer boundary kit will be made available to the lot. Council have advised connection to the pressured sewer network is possible, subject to the construction of an on-site sewer pump station and their consultation and approval.

In addition to the pressurised system, a DN150mm gravity sewer connection will also be provided to the lot. Connection to this service will not be available for use until such a time the Southlakes Residential subdivision to the south of Boundary Road extends its internal sewer network. Once the gravity sewer is made live, the lot can be disconnected from the pressure sewer network and connected to the gravity sewer. Refer Figure 5 showing the Sewer network proposed as part of the Dubbo Council Boundary Road Stage 2 Extension Works.

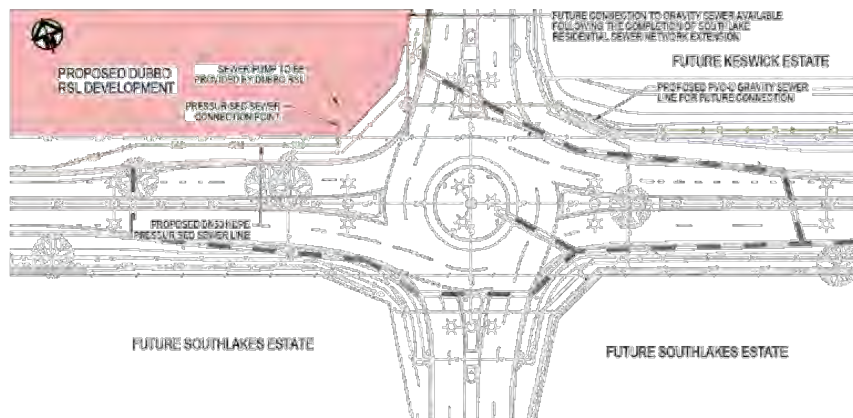


Figure 5: Boundary Road Extension Proposed Sewer Network

### 3.4. Electrical

Dial Before You Dig (DBYD) records from Essential Energy indicate there is no existing electrical infrastructure on the site or within the proposed street frontages to the site. However, Council's Boundary Road extension documentation show 2 x 11kV existing underground feeders from the Sheraton Road Solar Farm to the east of the proposed site. Connection to these feeders are not available and need to be protected during construction.

As part of the Boundary Road extension works, Dubbo Council propose the installation of underground electrical conduits located within the centre median and the southern verge of Boundary Road, and within a crossing connection on Stream Avenue. Council have not confirmed the capacity within these conduits, however, have expressed both high (11kV) and low voltage (415V) conduits are likely to be provided. Connection to this service is available, subject to the approval of the Essential Energy. Refer Figure 6 showing the Electrical network proposed as part of the Dubbo Council Boundary Road Stage 2 Extension Works.



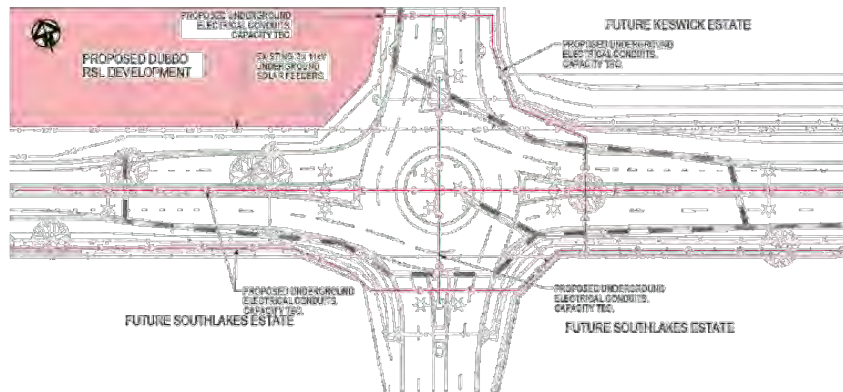


Figure 6: Boundary Road extension proposed Electrical Network

### 3.5. Natural Gas

Dial Before You Dig (DBYD) records indicate there is no existing gas infrastructure on the site or within the proposed street frontages to the site.

As part of the Boundary Road extension works, Dubbo Council propose a low-pressure natural gas main in the southern verge of Boundary Road and within a crossing connection on Stream Avenue. The diameter of the gas main has not been finalised, however will likely be either DN32mm or DN50mm. Connection to this gas main will be available in the south-east corner of the site within the Stream Avenue verge. Refer Figure 7 showing the Gas network proposed as part of the Dubbo Council Boundary Road Stage 2 Extension Works.

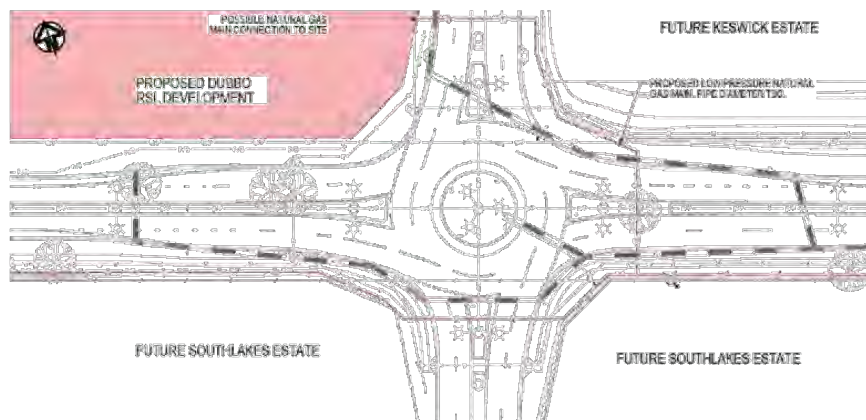


Figure 7: Boundary Road Extension Proposed Natural Gas Network



### 3.6. Telecommunications

Dial Before You Dig (DBYD) results from NBN indicate there is no existing telecommunications infrastructure on the site or within the proposed street frontages to the site.

As part of the Boundary Road extension works, Dubbo Council propose NBN pit and pipe network in the southern verge of Boundary Road and within a crossing connection on Stream Avenue. The network will provide conduits only and fibres are to be provided by the proposed development in consultation with the NBN. Refer Figure 8 below showing the Telecommunications pit and pipe network proposed as part of the Dubbo Council Boundary Road Stage 2 Extension Works.



Figure 8: Boundary Road Extension Proposed Telecommunications Pit and Pipe Gas Network



## 4. Summary

This Servicing Strategy report Civil Engineering Servicing report has been completed for the proposed new Club development and facilities for Dubbo RSL at Lot 502, DP 1255115. Key findings from AT&L's Servicing Strategy assessment and analysis are summarised below:

- Desktop review and DBYD records indicate the proposed development does not currently have a road or any services leading to the proposed frontage of the site.
- As part of Dubbo Council's investment of capital projects, the Boundary Road Extension Stage 2 of the project is due to commence in this current quarter, Q2 2020.
- The Boundary Road Stage 2 Extension extends from Alexandria Avenue to Sheraton Road, approximately 1.2km long.
- The Stage 2 extension is a 1.2km two-lane sealed and fully kerbed extension with integrated bike lanes, a footpath and utilities.
- Following the completion of the Boundary Road extensions:
  - Two (2) **stormwater** connections will be available for connection in the south-east corner of the site;
  - A DN150mm PVC **potable water** main will be available for connection in the south east corner of the site;
  - A HDPE DN50mm pressure **sewer** connection and pressure sewer boundary kit will be made available to the lot. Use of the connection will require the developer provision of an on-site sewer pump out station;
  - A DN150mm gravity **sewer** connection will also be provided to the lot. Disconnection from the pressurised system and connection to this service will not be available for use until the Southlakes Residential subdivision extends its internal sewer network; and
  - **Underground electrical** conduits, a **low-pressure gas** main and an **NBN pit and pipe system** will be available for connection in the south east corner of the site.

The connections to the above services are subject to the requirements and approval of the relevant authorities.

Based on the above findings, it can be concluded that all essential utility services are available from the south-eastern frontage of the proposed site following the completion of the Boundary Road Stage 2 extension works. It is not anticipated that any lead-in infrastructure will be required to service the site.



# Appendix A

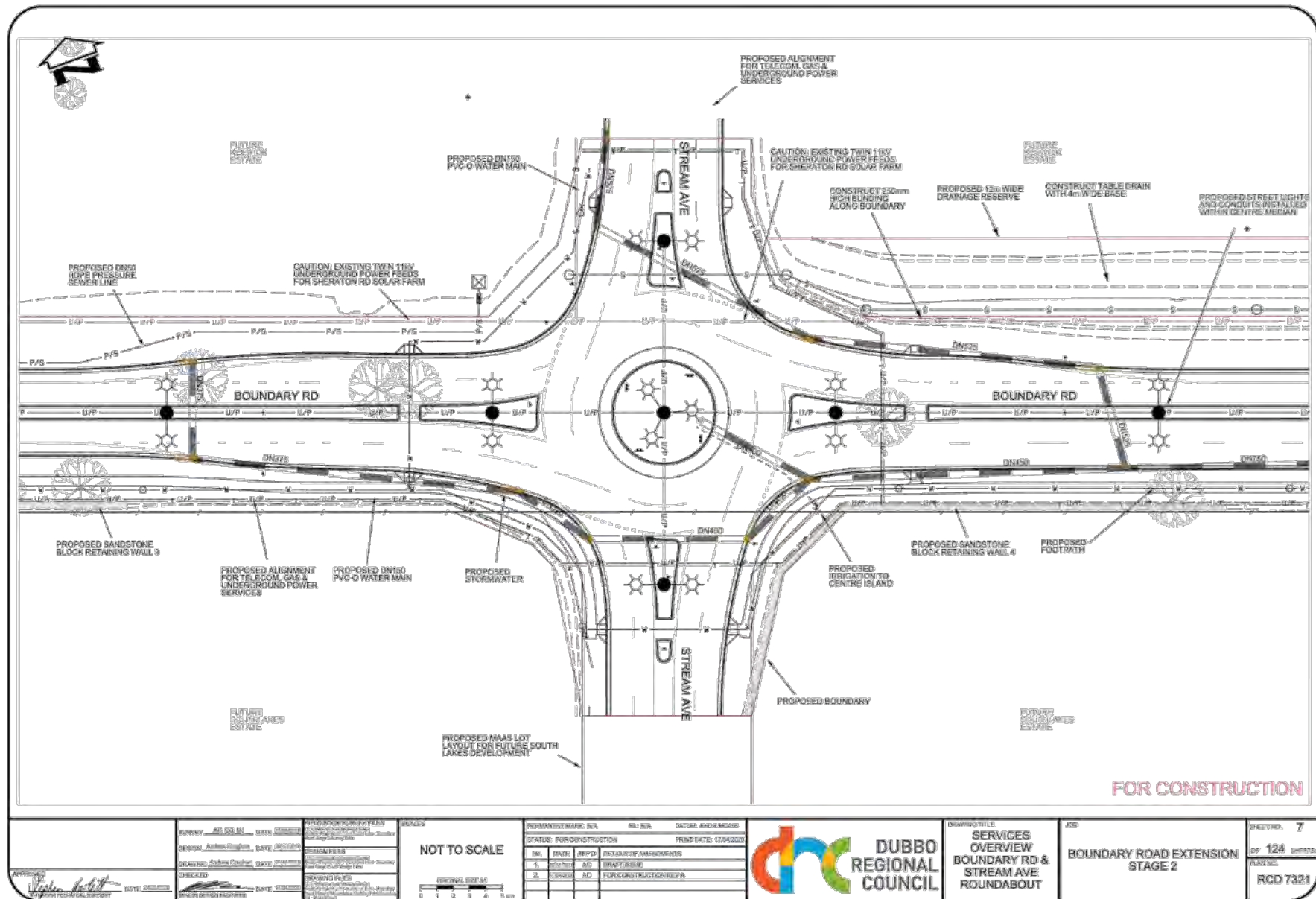
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Extract from Boundary Road Extension Stage 2 – Civil  
Package

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Civil & Structural Engineers | Project Managers | Water Services Coordinator

Page 13





# Appendix B

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Dial Before You Dig Records

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Civil & Structural Engineers | Project Managers | Water Services Coordinator

Page 14





27/03/2020

Mr Roshan Paheerathan  
AT&L  
level 7 153 Walker Street  
North Sydney NSW 2060

Attention Mr Roshan Paheerathan

**Job number:** 19276334  
**Sequence number:** 96188197  
**Location:** Boundary Road, Dubbo  
**Date received:** 27/03/2020

**RESPONSE FROM SERVICES AUTHORITY:**

After referring to the Dubbo Regional Council asset mapping system (see attached extract for the relevant area), Dubbo Regional Council advises that within the vicinity of the proposed works there are:

**WATER SUPPLY, STORMWATER DRAINAGE AND SEWERAGE ASSETS IN THE AREA.**

Note: Pipe maps do not include property water services or roof drainage pipes and private stormwater systems not under Council's control

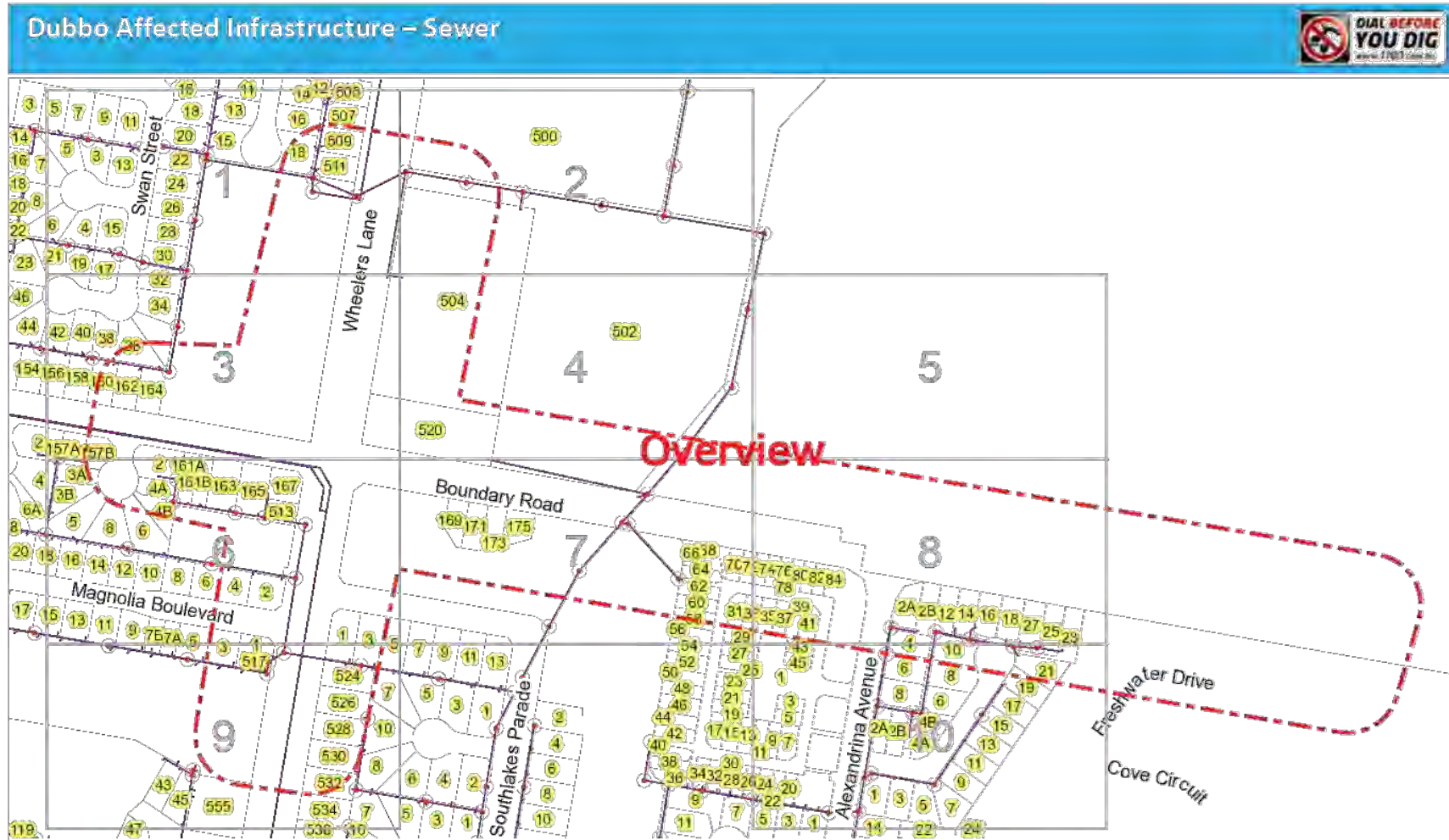
If proposed excavation is likely to be in close proximity to Council's undergrounds services, it is recommended that you arrange for a Dubbo Regional Council representative to meet on site to identify the location of DRC assets. Please telephone (02) 6801 4000 and allow at least 48 hours notice for a Council officer to attend.

The initial site visit will not normally incur a charge however subsequent visits may, at the discretion of Dubbo Regional Council, incur a charge at an hourly rate.

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DBYD Job: **19276334**  
 DBYD Seq: **96188197**  
 Location: **Boundary Road, Dubbo, NSW 2830**

**Legend**

-  Sewer Manhole
-  Sewer line

Map Scale: 1:4100

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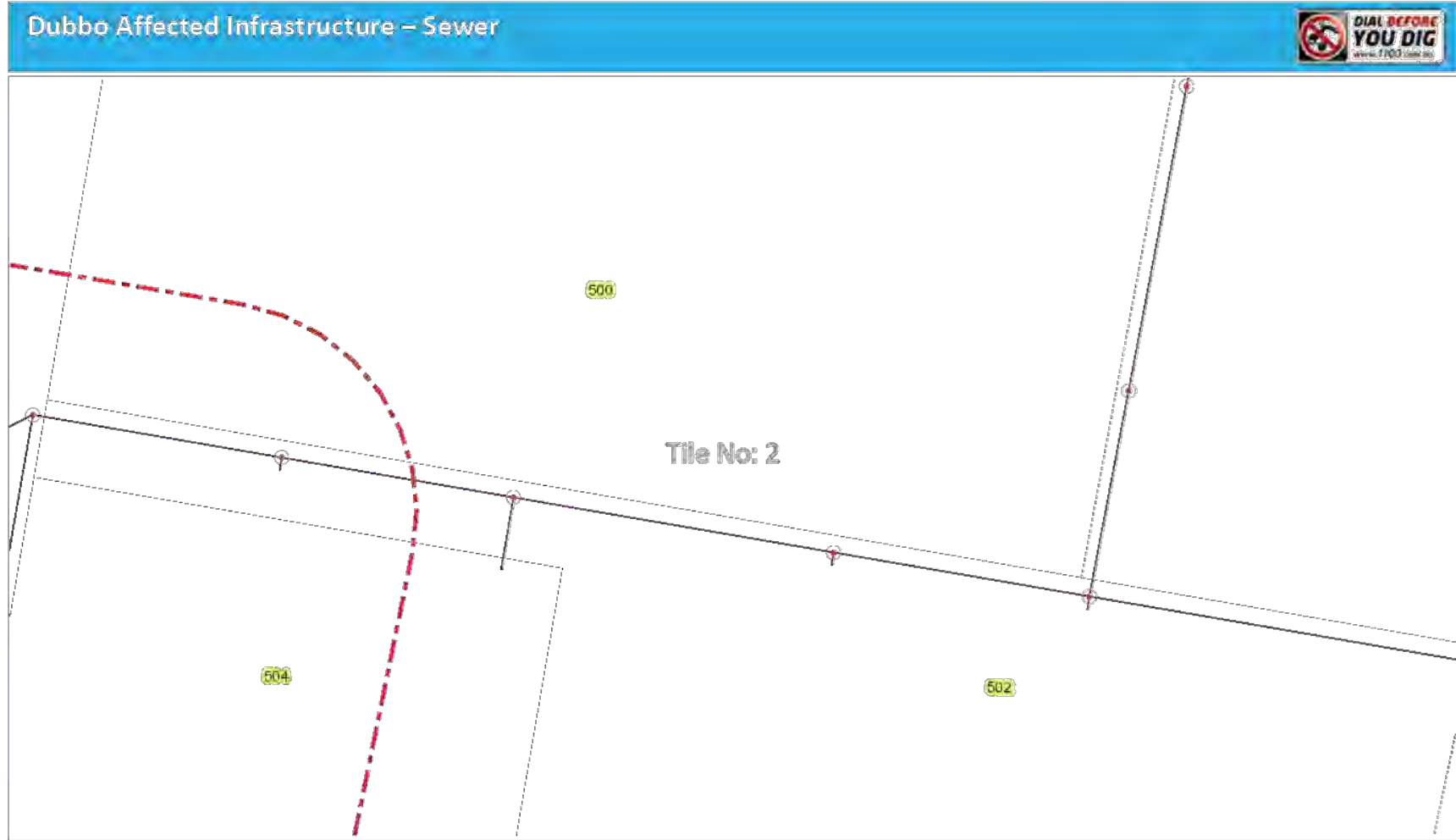
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**Legend**

-  Sewer Manhole
-  Sewer line

Map Scale: 1:1000



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DBYD Seq: **96188197**  
Location: **Boundary Road, Dubbo, NSW 2830**

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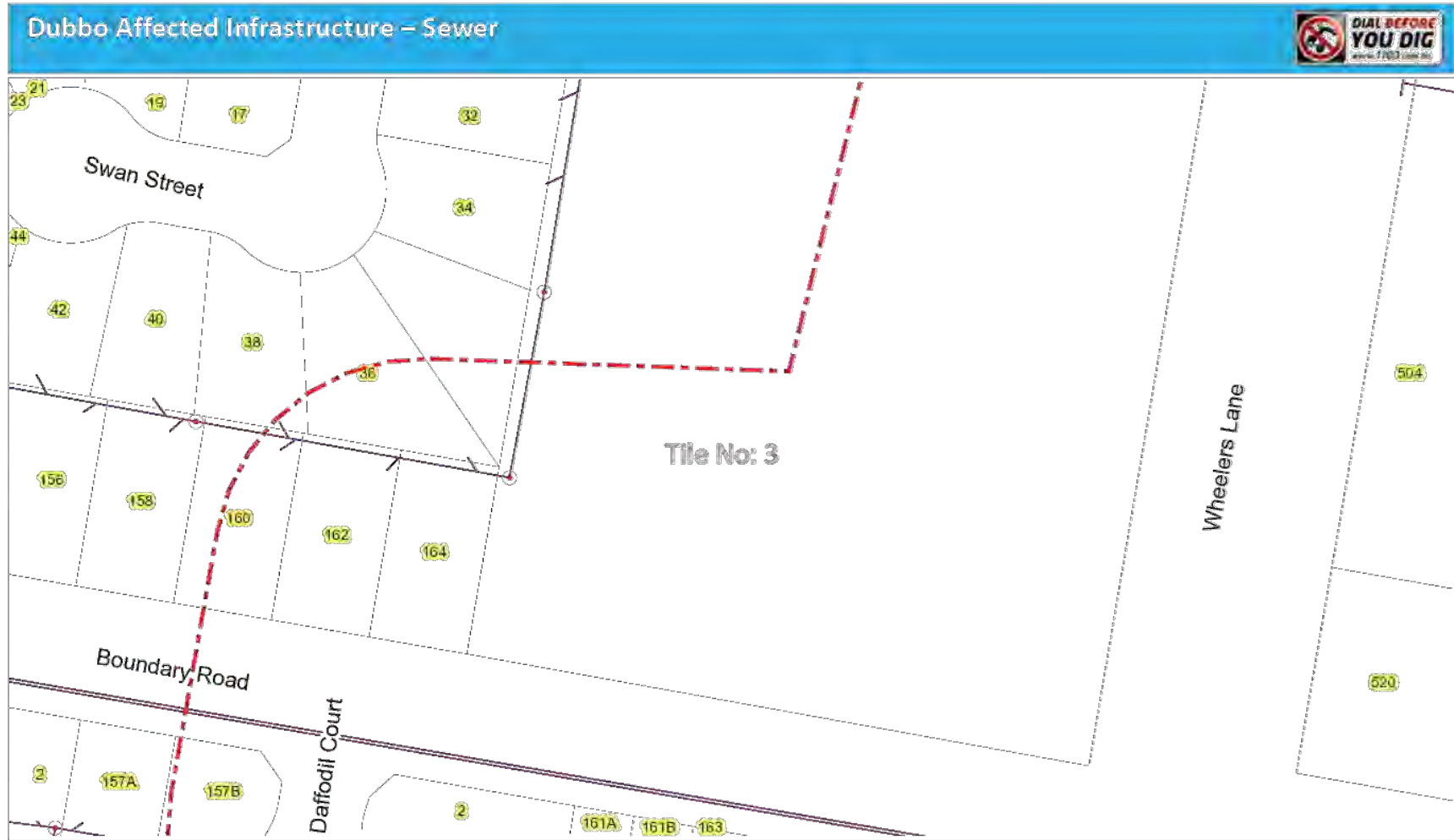
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**Legend**

 Sewer Manhole  Sewer line

Map Scale: 1:1000



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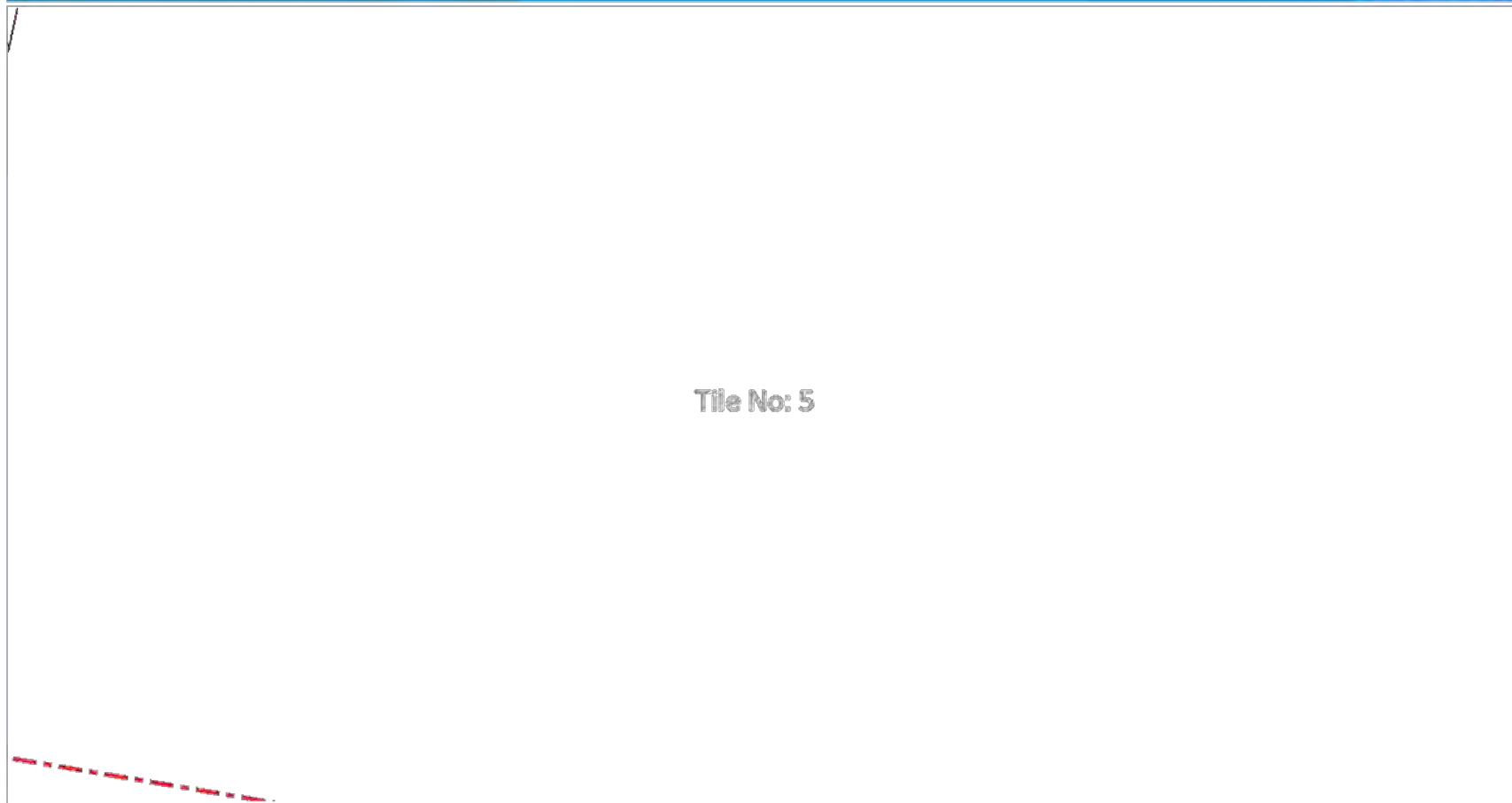
**Legend**

-  Sewer Manhole
-  Sewer line

Map Scale: 1:1000



### Dubbo Affected Infrastructure – Sewer



Tile No: 5



DBYD Job: **19276334**  
DBYD Seq: **96188197**  
Location: **Boundary Road, Dubbo, NSW 2830**

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**Legend**



Sewer Manhole



Sewer line

Map Scale: 1:1000



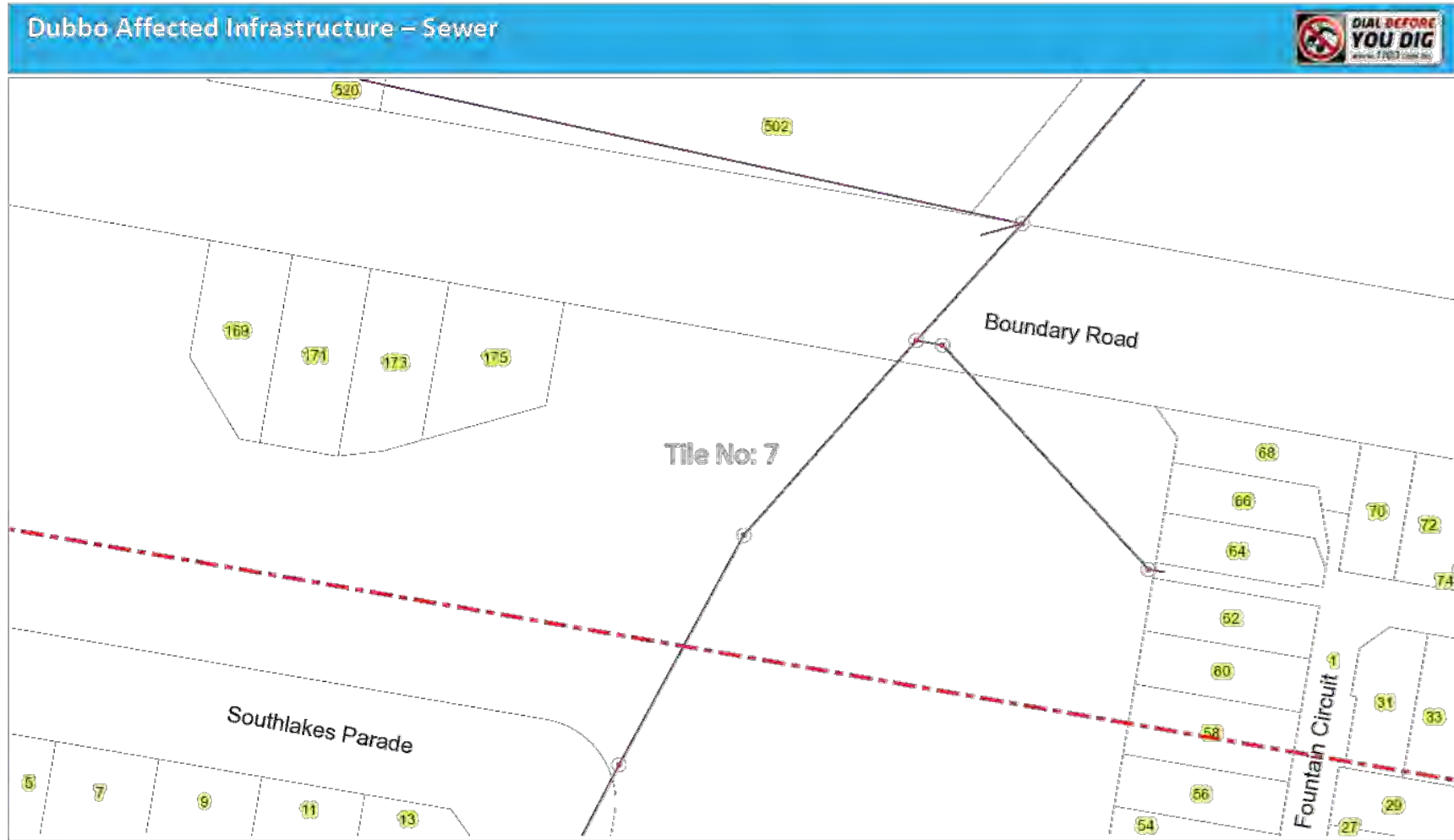
DBYD Job: **19276334**  
 DBYD Seq: **96188197**  
 Location: **Boundary Road, Dubbo, NSW 2830**

**Legend**

Sewer Manhole      Sewer line

Map Scale: **1:1000**

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 Location: **Boundary Road, Dubbo, NSW 2830**

**Legend**

-  Sewer Manhole
-  Sewer line

Map Scale: 1:1000

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**Legend**

- Sewer Manhole
- Sewer line

Map Scale: 1:1000



DBYD Job: 19276334  
DBYD Seq: 96188197  
Location: Boundary Road, Dubbo, NSW 2830

Legend

 Sewer Manhole  Sewer line

Map Scale: 1:1000

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**Legend**

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Map Scale: 1:1000

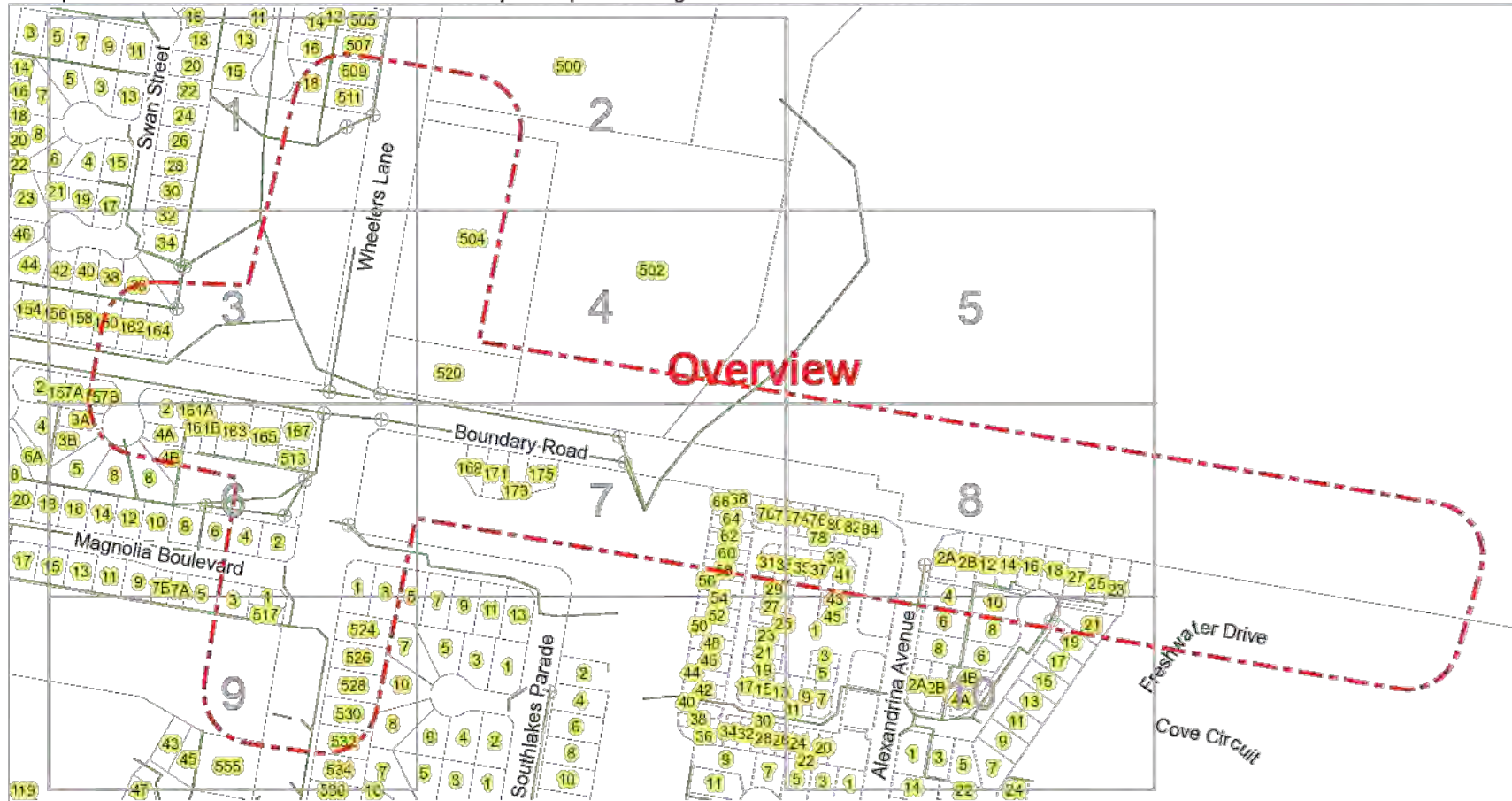
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### Dubbo Affected Infrastructure – Stormwater



This plan shows stormwater mains under Council control only. Other private underground stormwater mains not shown.



DBYD Job: **19276334**  
 DBYD Seq: **96188197**  
 Location: **Boundary Road, Dubbo, NSW 2830**

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**Legend**

- Stormwater Pit
- Stormwater Line

Map Scale: 1:4100

Dubbo Affected Infrastructure – Stormwater



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**Legend**

Stormwater Pit

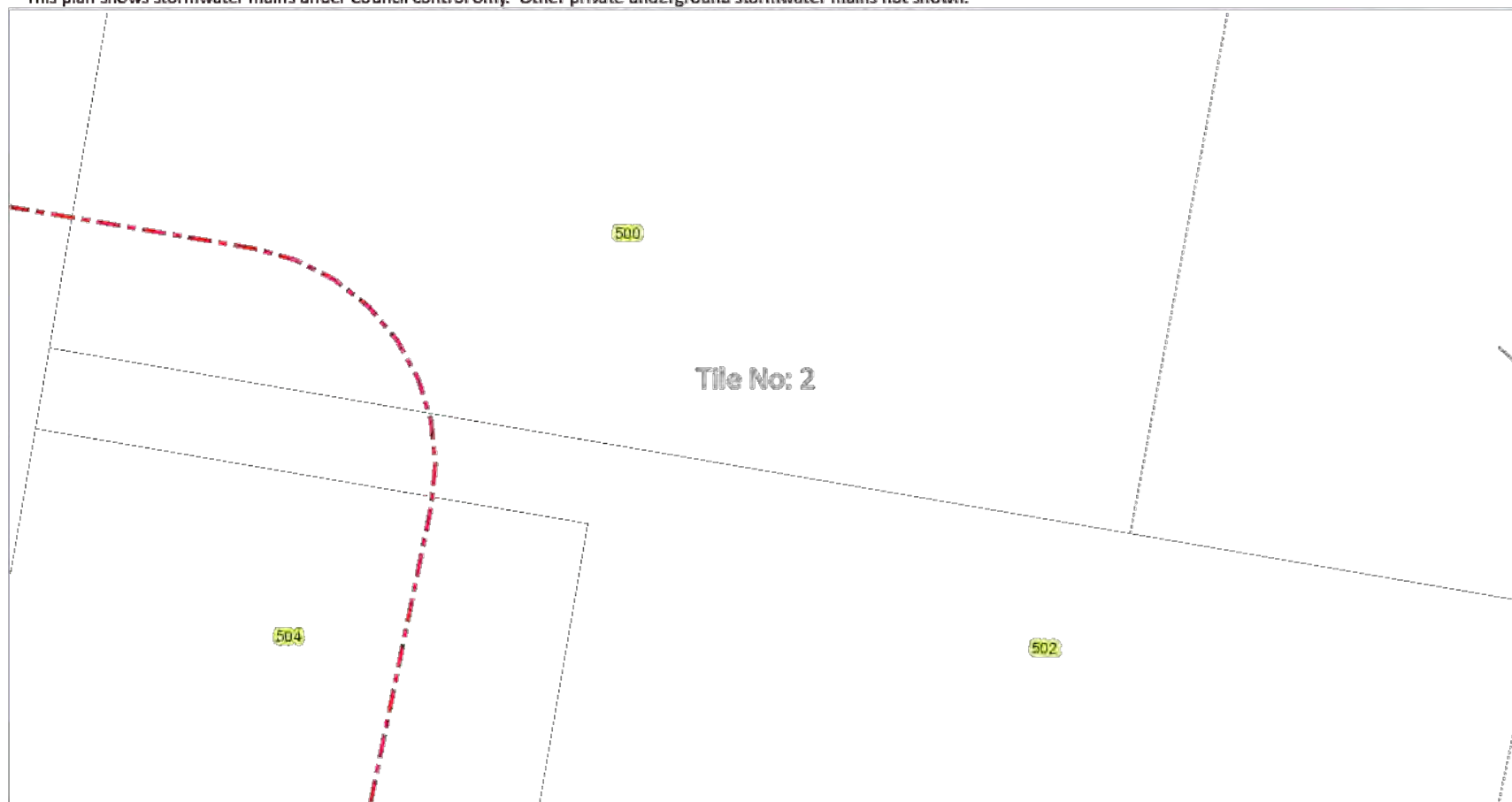
Map Scale: **1:1000**

Stormwater Line

### Dubbo Affected Infrastructure – Stormwater



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Stormwater Pit

Map Scale: **1:1000**

Stormwater Line

Dubbo Affected Infrastructure – Stormwater



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**Legend**

- Stormwater Pit
- Stormwater Line

Map Scale: 1:1000

### Dubbo Affected Infrastructure – Stormwater



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**Legend**

Stormwater Pit

Stormwater Line

Map Scale: 1:1000

### Dubbo Affected Infrastructure – Stormwater



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Tile No: 5



DBYD Job: **19276334**  
DBYD Seq: **96188197**  
Location: **Boundary Road, Dubbo, NSW 2830**

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**Legend**

Stormwater Pit

Map Scale: 1:1000

Stormwater Line



Dubbo Affected Infrastructure – Stormwater



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**Legend**

Stormwater Pit

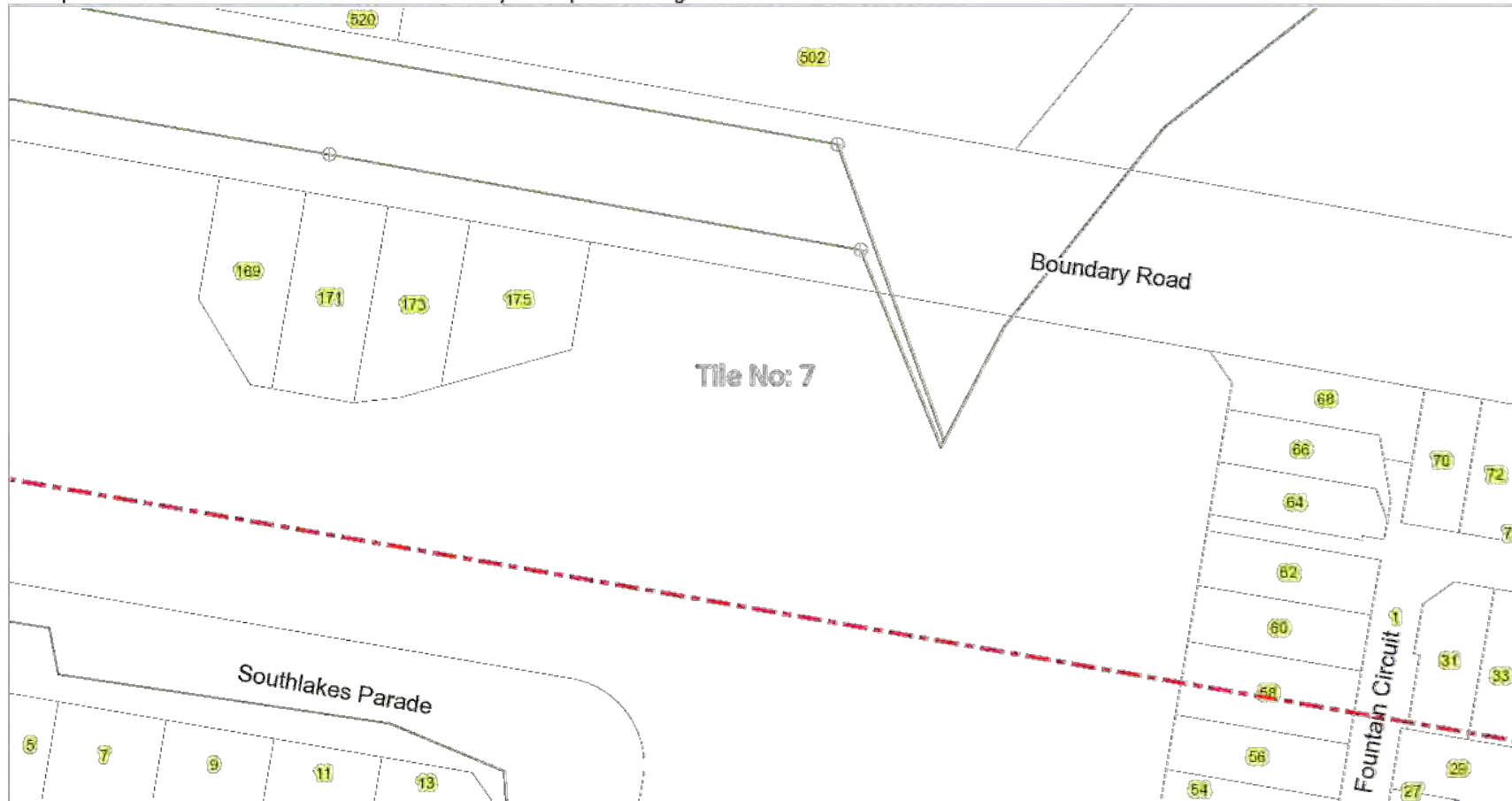
Map Scale: 1:1000

Stormwater Line

### Dubbo Affected Infrastructure – Stormwater



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 Location: **Boundary Road, Dubbo, NSW 2830**

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**Legend**

- Stormwater Pit
- Stormwater Line

Map Scale: 1:1000

Dubbo Affected Infrastructure – Stormwater



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**Legend**

Stormwater Pit

Map Scale: **1:1000**

Stormwater Line

Dubbo Affected Infrastructure – Stormwater



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- Stormwater Pit
- Stormwater Line

Map Scale: 1:1000

Dubbo Affected Infrastructure – Stormwater



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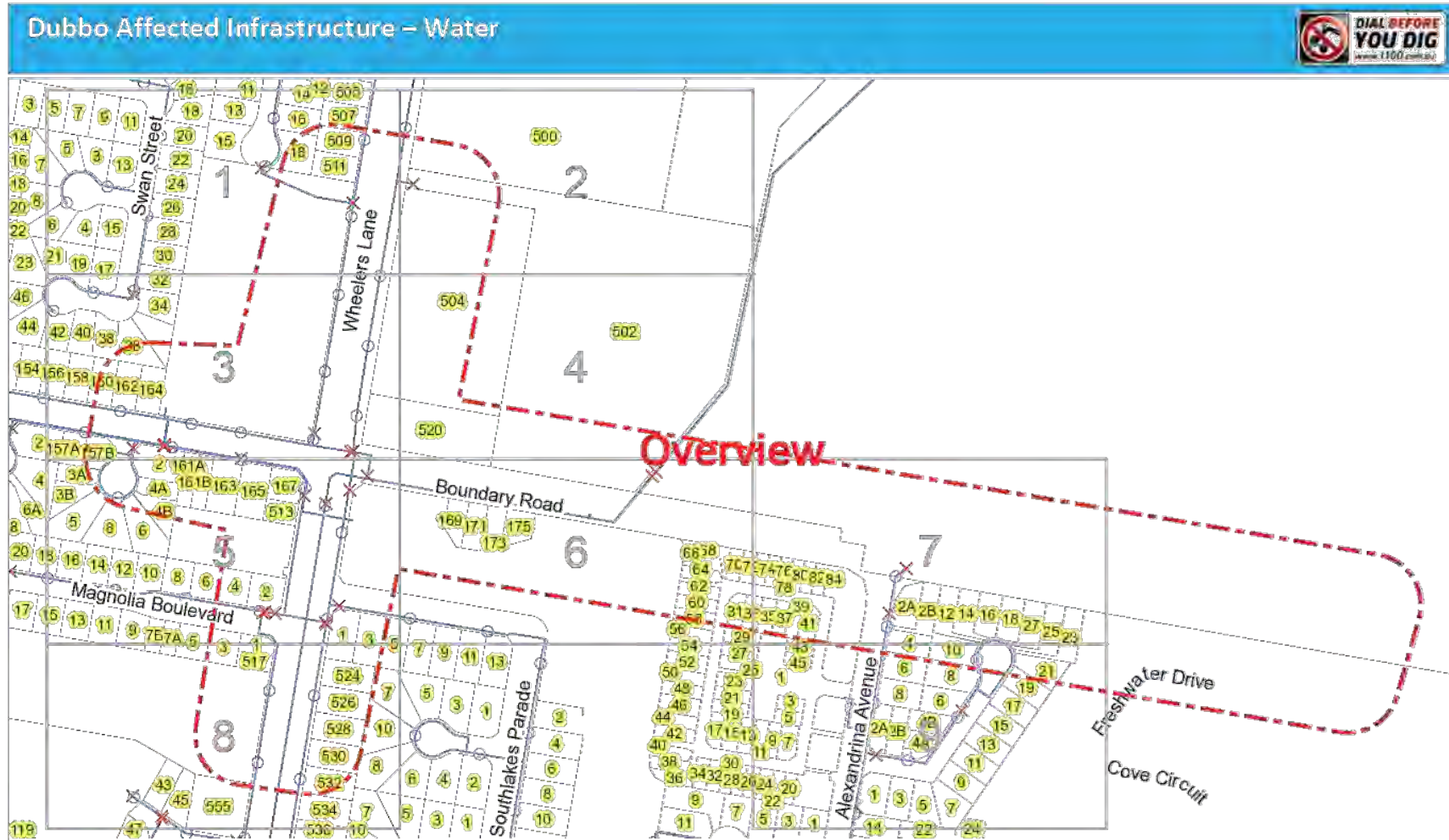
**Legend**

Stormwater Pit

Map Scale: 1:1000

Stormwater Line





DBYD Job: **19276334**  
 DBYD Seq: **96188197**  
 Location: **Boundary Road, Dubbo, NSW 2830**

**Legend**  
 ○ Hydrant    ✕ Stop Valve    — Water Line  
 Map Scale: 1:4100

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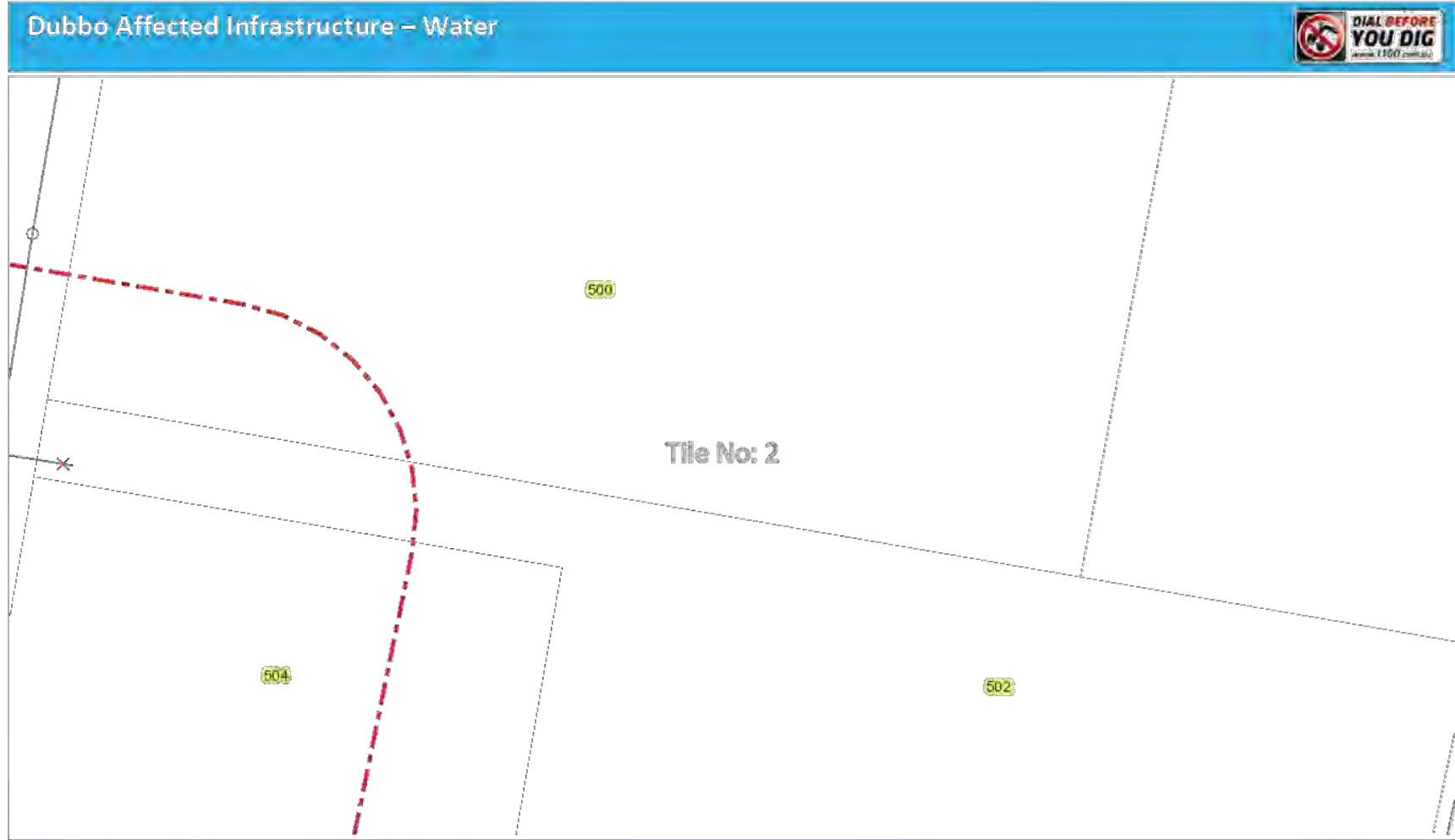
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**Legend**

-  Hydrant
-  Stop Valve
-  Water Line

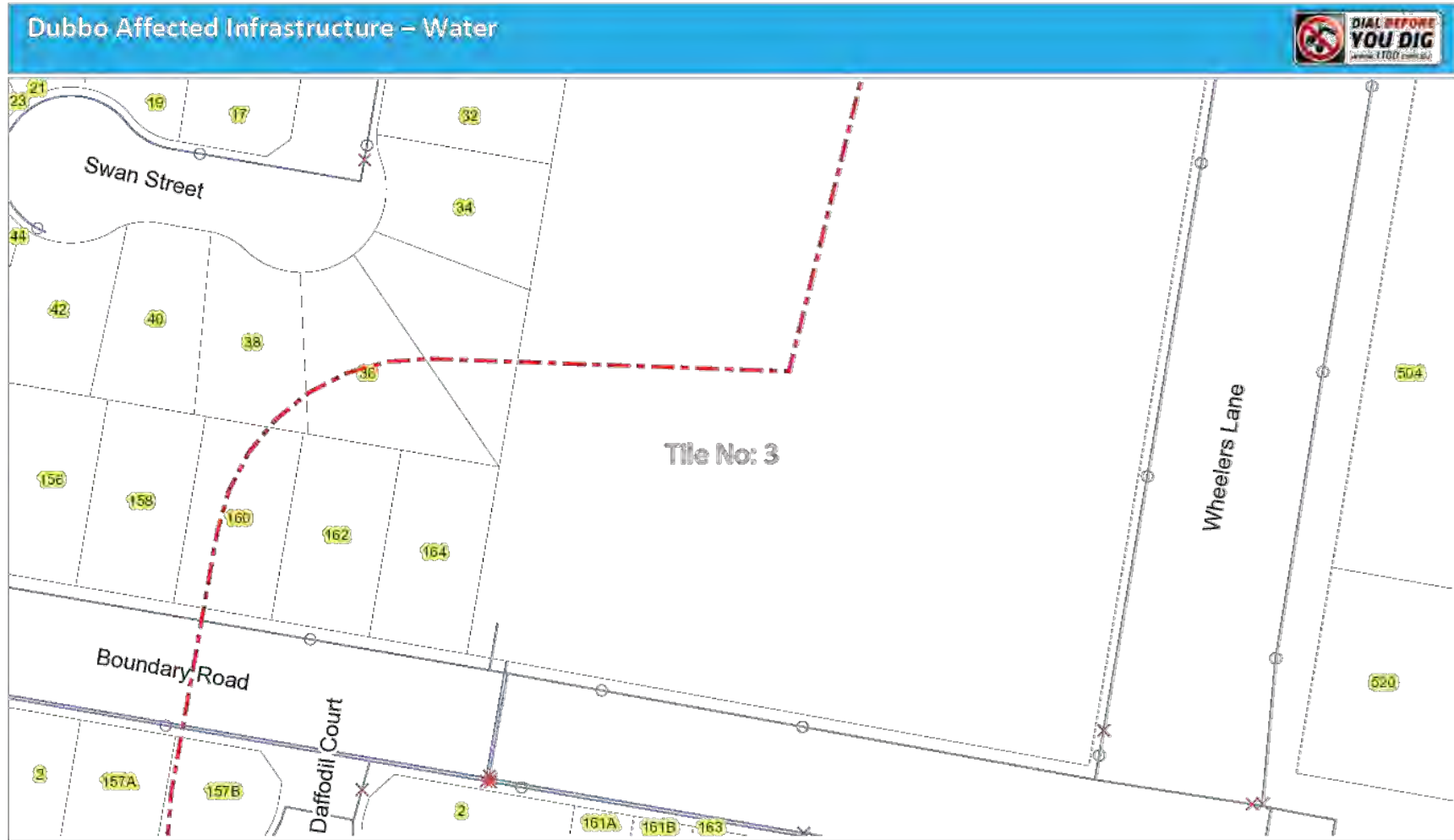
Map Scale: 1:1000



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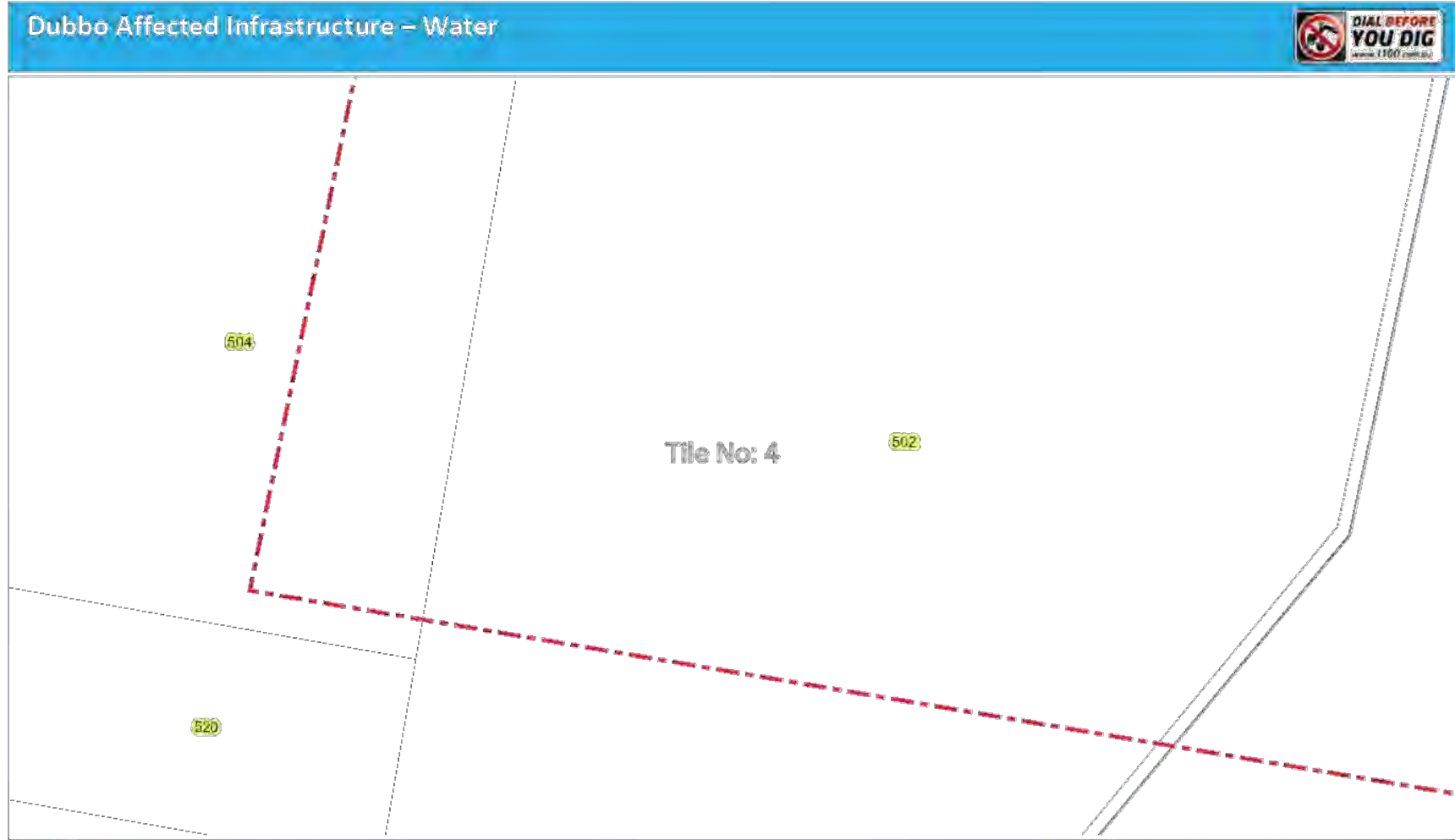
**Legend**  
○ Hydrant    ✕ Stop Valve    — Water Line    **Map Scale: 1:1000**



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**Legend**

- Hydrant
- Stop Valve
- Water Line

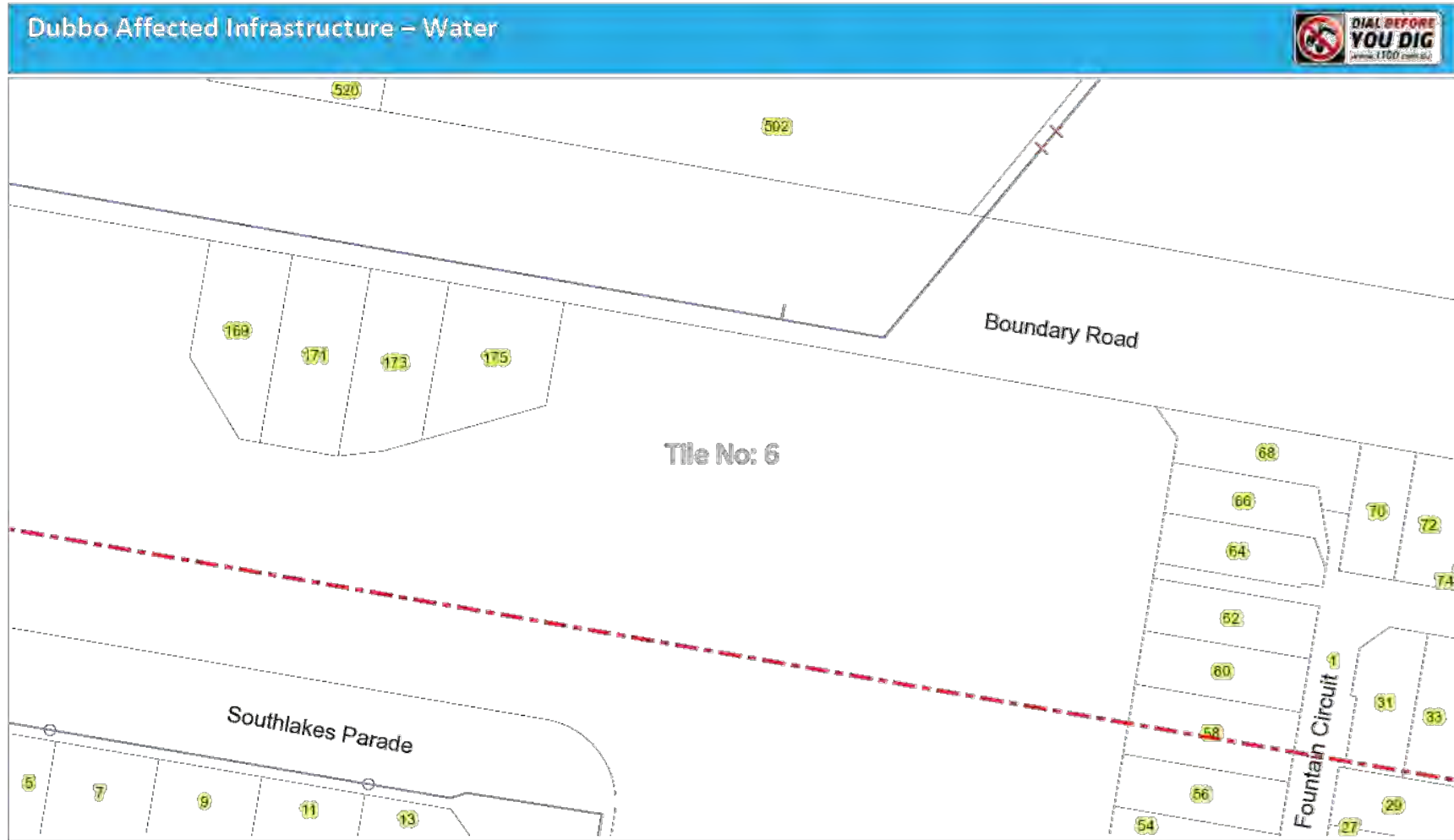
Map Scale: 1:1000



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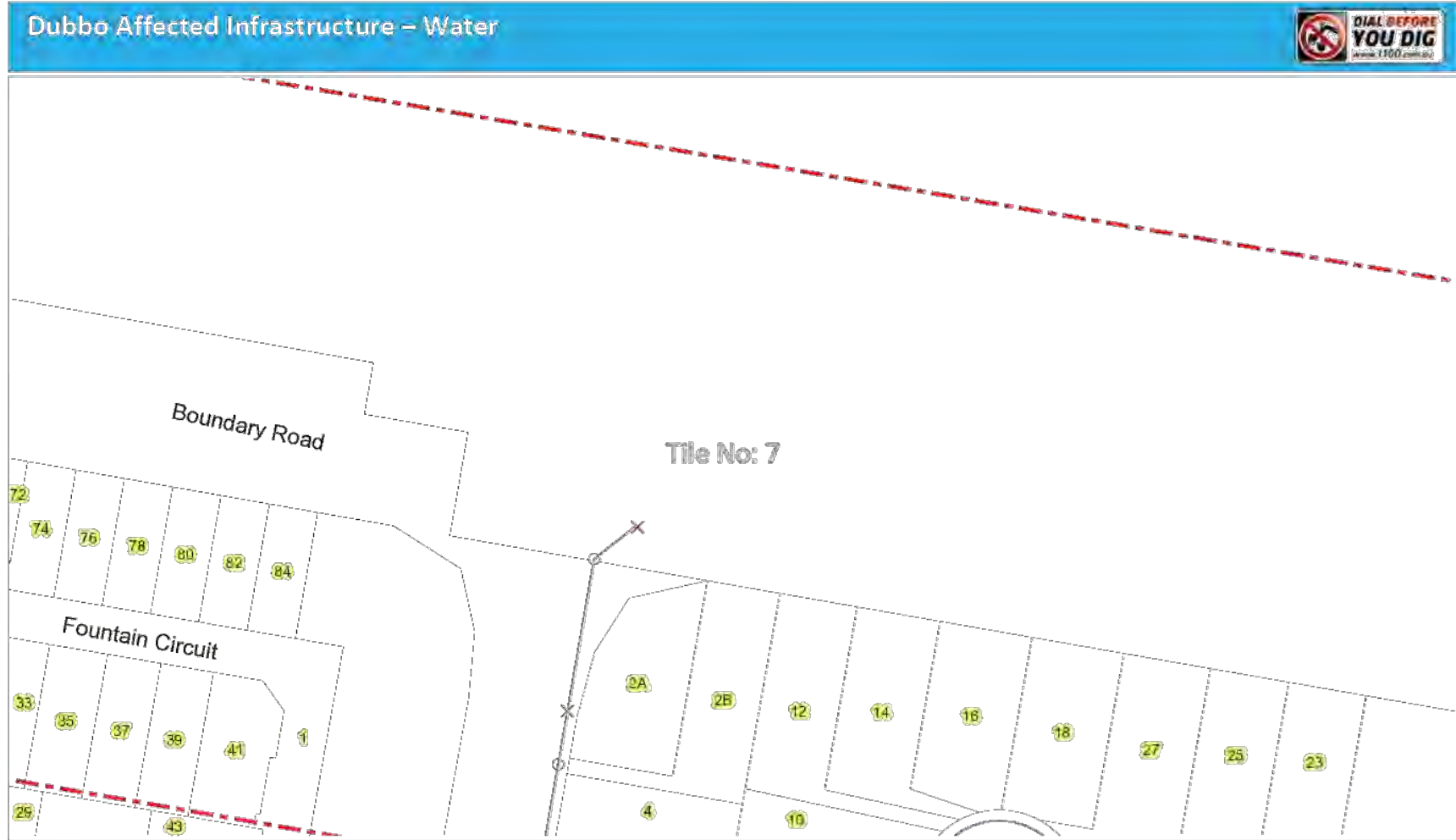
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**Legend**

- Hydrant
- ✕ Stop Valve
- Water Line

Map Scale: 1:1000



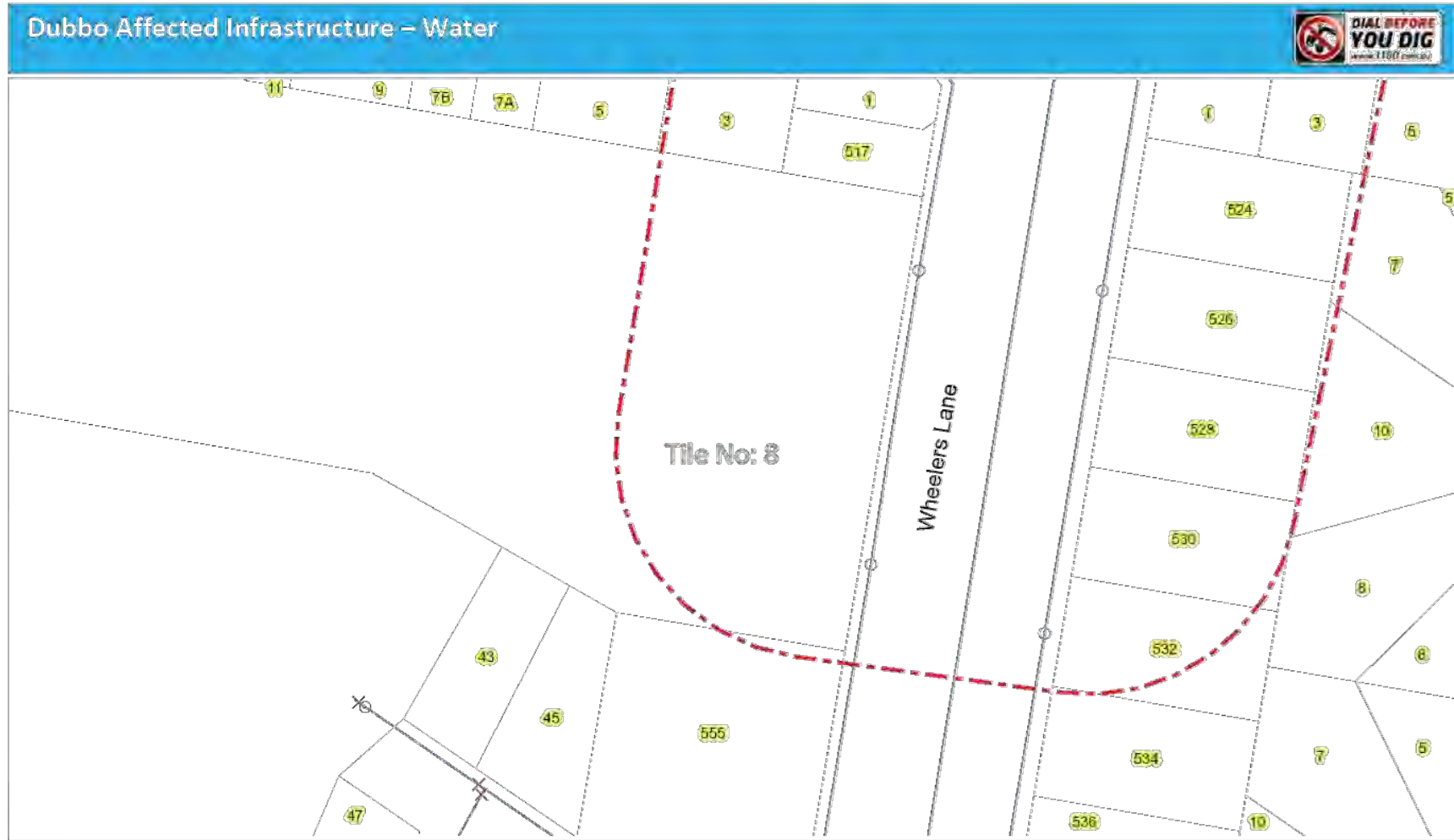


DBYD Job: **19276334**  
 DBYD Seq: **96188197**  
 Location: **Boundary Road, Dubbo, NSW 2830**

**Legend**  
 ○ Hydrant    X Stop Valve    — Water Line

Map Scale: **1:1000**

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**Legend** Map Scale: 1:1000  
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Date: Friday, 27 March 2020

To: Mr Roshan Paheerathan

Company: AT&L

Address: level 7 153 Walker Street North Sydney NSW 2060

Email: alex.c@atl.net.au

Fax: Not Supplied

ELECTRICAL CABLE LOCATION

Dear Mr Roshan Paheerathan

With reference to your enquiry:

- Location: Boundary Road Dubbo NSW 2830
- Sequence No: 96188198
- Dial Before You Dig Job No: 19276334
- Dial Before You Dig Customer No: 2241644

A large red rectangular sign with the word "Warning!" written in white, bold, sans-serif font in the center.

**CRITICAL UNDERGROUND ASSETS IN AREA – DO NOT  
COMMENCE EXCAVATION BEFORE CALLING TECHNICAL  
ENQUIRIES ON 13 23 91.**



Date: Friday, 27 March 2020

To: Mr Roshan Paheerathan

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ELECTRICAL CABLE LOCATION

Dear Mr Roshan Paheerathan

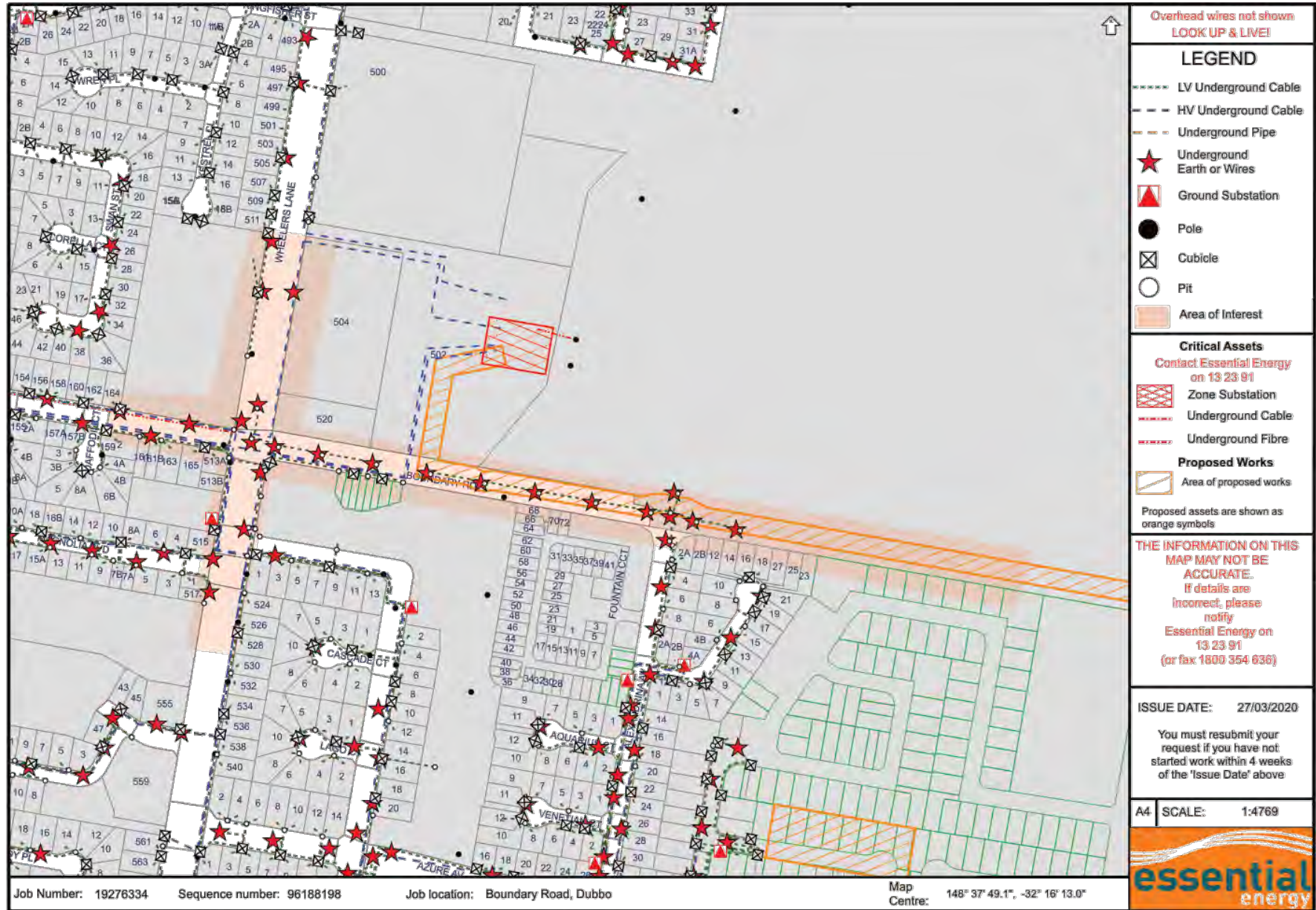
With reference to your enquiry:

- Location: Boundary Road Dubbo NSW 2830
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- Dial Before You Dig Job No: 19276334
- Dial Before You Dig Customer No: 2241644

A large red rectangular sign with the word "Caution!" written in white, bold, sans-serif font.

**PLAN DOES NOT IDENTIFY ALL UNDERGROUND ASSETS IN THIS AREA. DO NOT COMMENCE EXCAVATION BEFORE CALLING TECHNICAL ENQUIRIES ON 13 23 91.**









**nbn** has partnered with Dial Before You Dig to give you a single point of contact to get information about **nbn** underground services owned by **nbn** and other utility/service provider in your area including communications, electricity, gas and other services. Contact with underground power cables and gas services can result in serious injury to the worker, and damage and costly repairs. You must familiarise yourself with all of the Referral Conditions (meaning the referral conditions referred to in the DBYD Notice provided by **nbn**).

## Practice safe work habits

Once the DBYD plans are reviewed, the Five P's of Excavation should be adopted in conjunction with your safe work practices (which must be compliant with the relevant state Electrical Safety Act and Safe Work Australia "Excavation Work Code of Practice", as a minimum) to ensure the risk of any contact with underground **nbn** assets are minimised.



**Plan:** Plan your job ensuring the plans received are current and apply to the work to be performed. Also check for any visual cues that may indicate the presence of services not covered in the DBYD plans.



**Prepare:** Prepare for your job by engaging a DBYD qualified Plant Locator to help interpret plans and identify on-site assets. Contact **nbn** should you require further assistance.



**Pothole:** Non-destructive potholing (i.e. hand digging or hydro excavation) should be used to positively locate **nbn** underground assets with minimal risk of contact and service damage.



**Protect:** Protecting and supporting the exposed **nbn** underground asset is the responsibility of the worker. Exclusion zones for **nbn** assets are clearly stated in the plan and appropriate controls must be implemented to ensure that encroachment into the exclusion zone by machinery or activities with the potential to damage the asset is prevented.



**Proceed:** Proceed only when the appropriate planning, preparation, potholing and protective measures are in place.

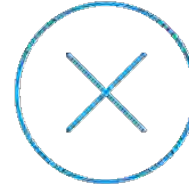
# Working near **nbn**<sup>TM</sup> cables



Identify all electrical hazards, assess the risks and establish control measures.



When using excavators and other machinery, also check the location of overhead power lines.



Workers and equipment must maintain safety exclusion zones around power lines.

Once all work is completed, the excavation should be re-instated with the same type of excavated material unless specified by **nbn**. Please note:

- Construction Partners of **nbn** may require additional controls to be in place when performing excavation activities.
- The information contained within this pamphlet must be used in conjunction with other material supplied as part of this request for information to adequately control the risk of potential asset damage.

## Contact

In the event of the **nbn**<sup>TM</sup> network facility damage please call 1800 626 329

### Disclaimer

This brochure is a guide only. It does not address all the matters you need to consider when working near our cables. You must familiarise yourself with other material provided (including the Referral Conditions) and make your own inquiries as appropriate.


**nbn** will not be liable or responsible for any loss, damage or costs incurred as a result of reliance on this brochure.

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### Indicative Plans

<b>Issue Date:</b>	27/03/2020	 The logo features a red circle with a diagonal slash over a black silhouette of a person digging. To the right, the text 'DIAL BEFORE YOU DIG' is written in bold, with 'DIAL BEFORE' in red and 'YOU DIG' in black. Below this, the website 'www.1100.com.au' is printed in a smaller font.
<b>Location:</b>	Boundary Road , Dubbo , NSW , 2830	

1	4	7
2	5	8
3	6	9



<b>LEGEND</b>	
	Parcel and the location
	Pit with size "5"
	Power Pit with size "2E". Valid PIT Size: e.g. 2E, 5E, 6E, 8E, 9E, E, null.
	Manhole
	Pillar
	Cable count of trench is 2. One "Other size" PVC conduit (PO) owned by Telstra (-T-), between pits of sizes, "5" and "9" are 25.0m apart. One 40mm PVC conduit (P40) owned by NBN, between pits of sizes, "5" and "9" are 20.0m apart.
	2 Direct buried cables between pits of sizes, "5" and "9" are 10.0m apart.
	Trench containing any <b>INSERVICE/CONSTRUCTED</b> (Copper/RF/Fibre) cables.
	Trench containing only <b>DESIGNED/PLANNED</b> (Copper/RF/Fibre/Power) cables.
	Trench containing any <b>INSERVICE/CONSTRUCTED</b> (Power) cables.
	Road and the street name "Broadway ST"
<b>Scale</b>	0 20 40 60 Meters 1:2000 1 cm equals 20 m



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Email [info@nbn.com.au](mailto:info@nbn.com.au)

Web [nbn.com.au](http://nbn.com.au)





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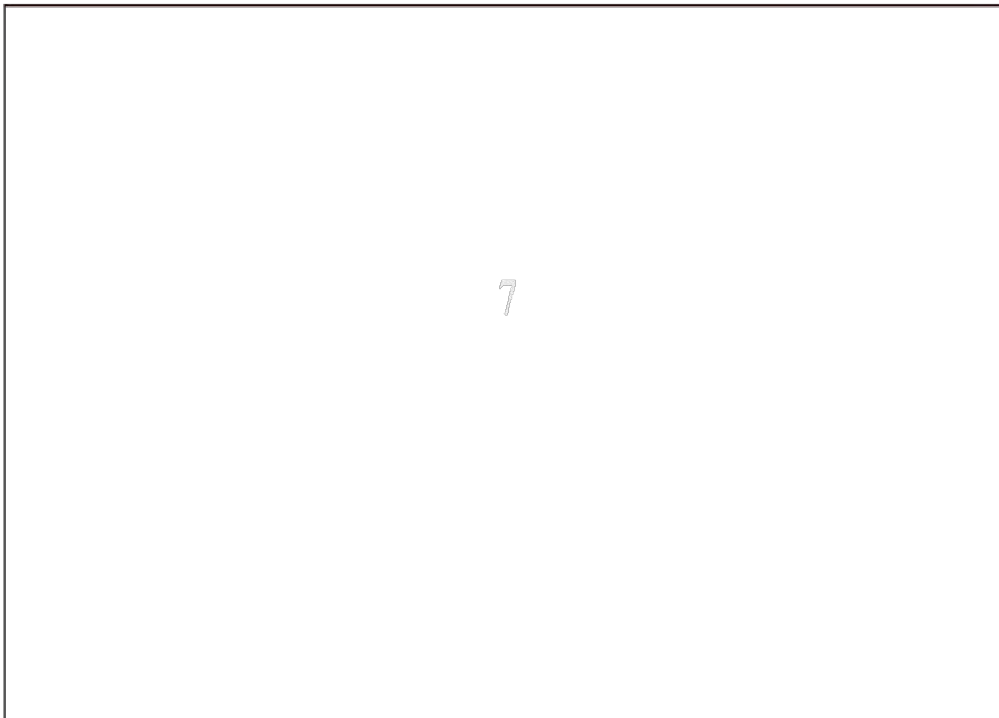
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7

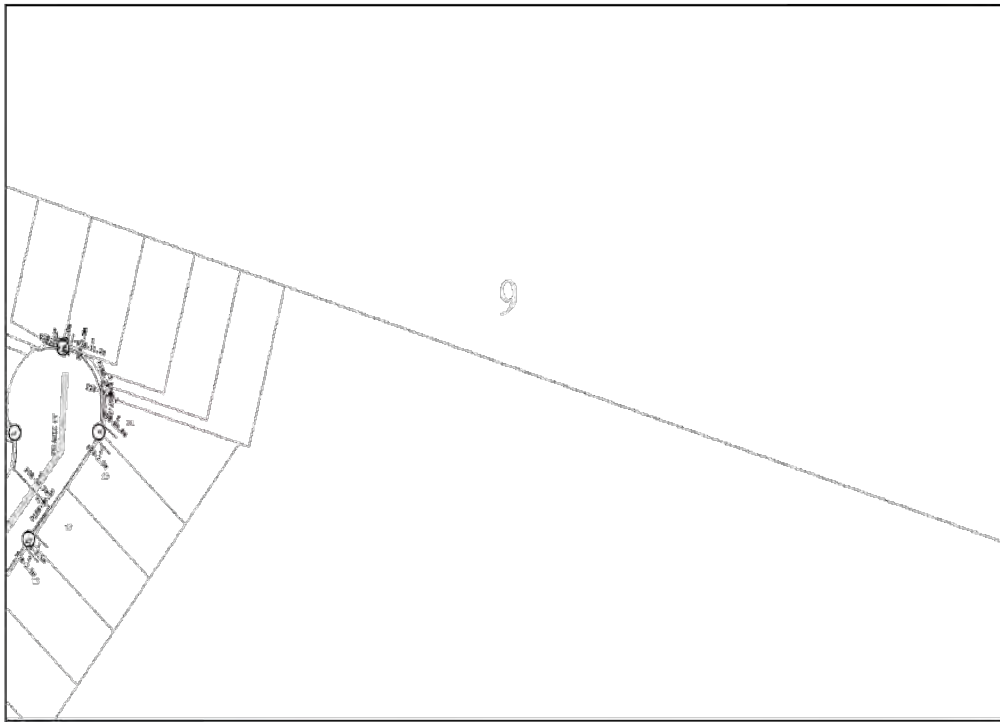


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### Emergency Contacts

You must immediately report any damage to **nbn™** network that you are/become aware of. Notification may be by telephone - 1800 626 329.


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	Manhole
	Pillar
	Cable count of trench is 2. One "Other size" PVC conduit (PO) owned by Telstra (-T-), between pits of sizes, "5" and "9" are 25.0m apart. One 40mm PVC conduit (P40) owned by NBN, between pits of sizes, "5" and "9" are 20.0m apart.
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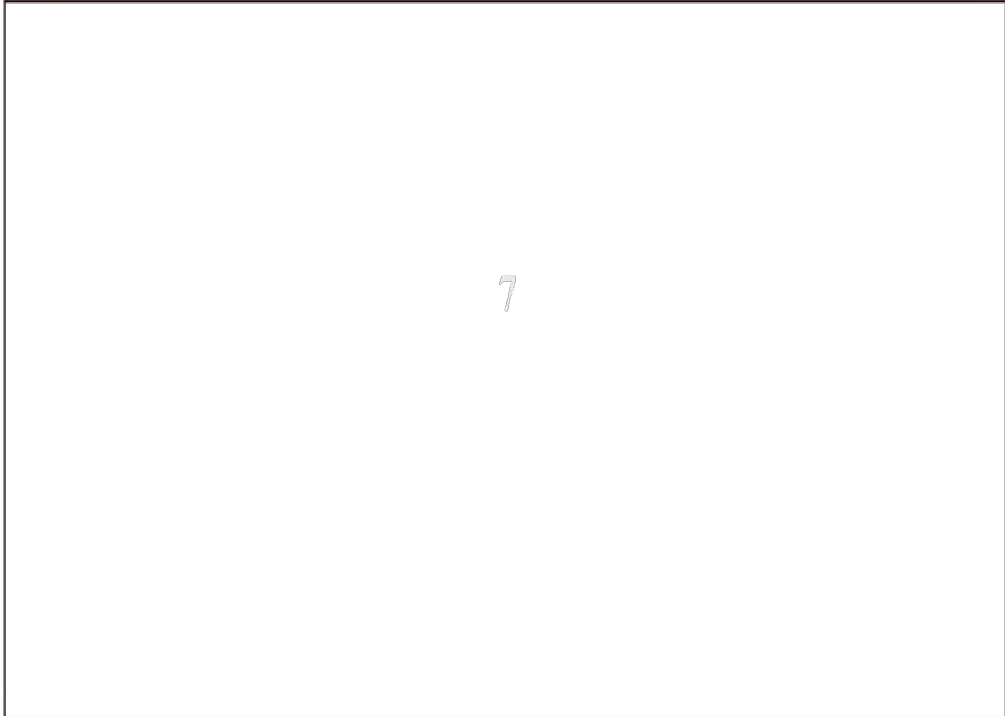
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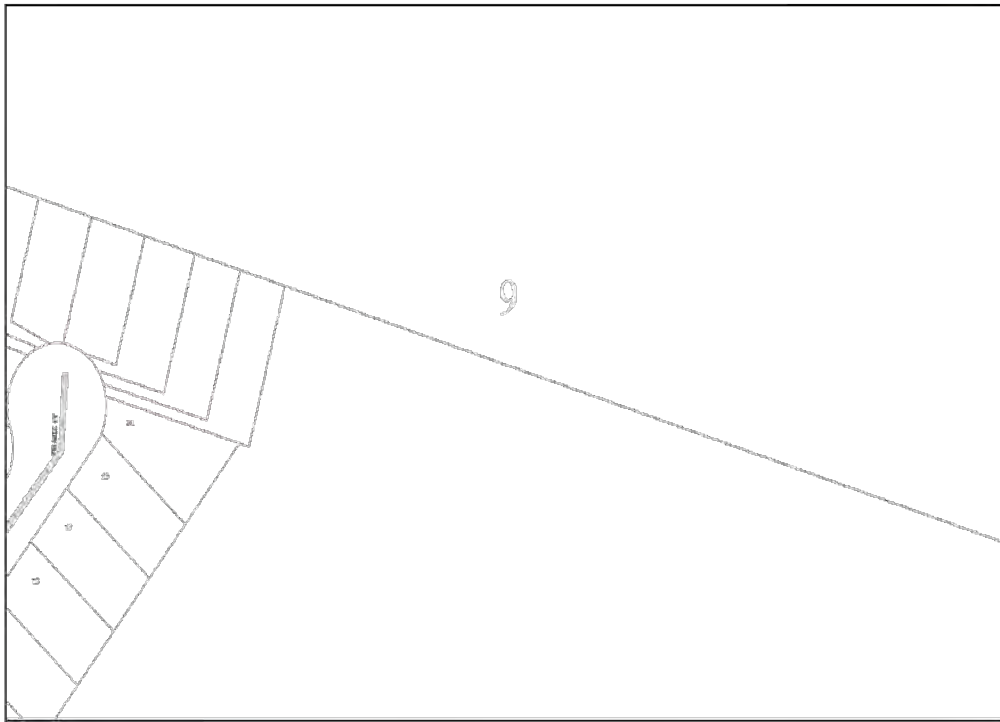




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**To:** Mr Roshan Paheerathan  
**Phone:** Not Supplied  
**Fax:** Not Supplied  
**Email:** alex.c@atl.net.au

<b>Dial before you dig Job #:</b>	19276334	
<b>Sequence #</b>	96188201	
<b>Issue Date:</b>	27/03/2020	
<b>Location:</b>	Boundary Road , Dubbo , NSW , 2830	

## Information

The area of interest requested by you contains one or more assets.

nbn Assets	Search Results
Communications	Asset identified
Electricity	Asset identified

In this notice **NBN Facilities** means *underground fibre optic, telecommunications and/or power facilities, including but not limited to cables, owned and controlled by nbn*

## Location of Underground Power Facilities

We thank you for your enquiry. In relation to your enquiry at the above address:

- nbn's records indicate that there **ARE** nbn Facilities in the vicinity of the location identified above ("Location").
- nbn indicative plan/s are attached with this notice ("Indicative Plans").
- The Indicative Plan/s show general depth and alignment information only and are not an exact, scale or accurate depiction of the location, depth and alignment of nbn Facilities shown on the Plan/s.
- In particular, the fact that the Indicative Plans show that a facility is installed in a straight line, or at uniform depth along its length cannot be relied upon as evidence that the facility is, in fact, installed in a straight line or at uniform depth.
- You should read the Indicative Plans in conjunction with this notice and in particular, the notes below.
- You should note that, at the present time, the Indicative Plans are likely to be more accurate in showing location of fibre optics and telecommunications cables than power cables. There may be a variation between the line depicted on the Indicative Plans and the location of any power cables. As such, consistent with the notes below, particular care must be taken by you to make your own enquiries and investigations to precisely locate any power cables and manage the risk arising from such cables accordingly.
- The information contained in the Indicative Plan/s is valid for 28 days from the date of issue set out



above. You are expected to make your own inquiries and perform your own investigations (including engaging appropriately qualified plant locators at your cost to locate **nbn** Facilities during any activities you carry out on site).

We thank you for your enquiry and appreciate your continued use of the Dial Before You Dig Service. If you are planning to excavate and require further information, please contact **nbn** on 1800 626 329. For any enquiries related to moving assets or Planning and Design activities, please visit the **nbn** [Commercial Works](#) website to complete the online application form.

**Notes:**

1. You are now aware that there are **nbn** Facilities in the vicinity of the above property that could be damaged as a result of activities carried out (or proposed to be carried out) by you in the vicinity of the Location.
2. You should have regard to section 474.6 and 474.7 of the *Criminal Code Act 1995 (CoA)* which deals with the consequences of interfering or tampering with a telecommunications facility. Only persons authorised by **nbn** can interact with **nbn's** network facilities.
3. Any information provided is valid only for **28 days** from the date of issue set out above.

## Referral Conditions

The following are conditions on which **nbn** provides you with the Indicative Plans. By accepting the plans, you are agreeing to these conditions. These conditions are in addition, and not in replacement of, any duties and obligations you have under applicable law.

1. **nbn** does not accept any responsibility for any inaccuracies of its plans including the Indicative Plans. You are expected to make your own inquiries and perform your own investigations (including engaging appropriately qualified plant locators at your expense to locate **nbn** Facilities during any activities you carry out on site).
2. You acknowledge that **nbn** has specifically notified you above that the Indicative Plans are likely to be more accurate in showing location of fibre optics and telecommunications cables than power cables. There may be a variation between the line depicted on the Indicative Plans and the location of any power cables.
3. You should not assume that **nbn** Facilities follow straight lines or are installed at uniformed depths along their lengths, even if they are indicated on plans provided to you. Careful onsite investigations are essential to locate the exact position of cables.
4. In carrying out any works in the vicinity of **nbn** Facilities, you must maintain the following minimum clearances:
  - 300mm when laying assets inline, horizontally or vertically.
  - 500mm when operating vibrating equipment, for example: jackhammers or vibrating plates.
  - 1000mm when operating mechanical excavators.
  - Adherence to clearances as directed by other asset owner's instructions and take into account any uncertainty for power cables.
5. You are aware that there are inherent risks and dangers associated with carrying out work in the vicinity of underground facilities (such as **nbn** fibre optic, copper and coaxial cables, and power cable feed to **nbn** assets). Damage to underground electric cables may result in:
  - Injury from electric shock or severe burns, with the possibility of death.
  - Interruption of the electricity supply to wide areas of the city.
  - Damage to your excavating plant.
  - Responsibility for the cost of repairs.
6. You must take all reasonable precautions to avoid damaging **nbn** Facilities. These precautions may include but not limited to the following:
  - All excavation sites should be examined for underground cables by careful hand excavation. Cable cover slabs if present must not be disturbed. Hand excavation needs to be undertaken with extreme care to



minimise the likelihood of damage to the cable, for example: the blades of hand equipment should be aligned parallel to the line of the cable rather than digging across the cable.

- If any undisclosed underground cables are located, notify **nbn** immediately.
  - All personnel must be properly briefed, particularly those associated with the use of earth-moving equipment, trenching, boring and pneumatic equipment.
  - The safety of the public and other workers must be ensured.
  - All excavations must be undertaken in accordance with all relevant legislation and regulations.
7. You will be responsible for all damage to **nbn** Facilities that are connected whether directly, or indirectly with work you carry out (or work that is carried out for you or on your behalf) at the Location. This will include, without limitation, all losses expenses incurred by **nbn** as a result of any such damage.
  8. You must immediately report any damage to **nbn**<sup>TM</sup> network that you are/become aware of. Notification may be by telephone - 1800 626 329.
  9. Except to the extent that liability may not be capable of lawful exclusion, **nbn** and its servants and agents and the related bodies corporate of **nbn** and their servants and agents shall be under no liability whatsoever to any person for any loss or damage (including indirect or consequential loss or damage) however caused (including, without limitation, breach of contract negligence and/or breach of statute) which may be suffered or incurred from or in connection with this information sheet or any plans (including Indicative Plans) attached hereto. Except as expressly provided to the contrary in this information sheet or the attached plans (including Indicative Plans), all terms, conditions, warranties, undertakings or representations (whether expressed or implied) are excluded to the fullest extent permitted by law.

All works undertaken shall be in accordance with all relevant legislations, acts and regulations applicable to the particular state or territory of the Location. The following table lists all relevant documents that shall be considered and adhered to.

State/Territory	Documents
<b>National</b>	Work Health and Safety Act 2011
	Work Health and Safety Regulations 2011
	Safe Work Australia - Working in the Vicinity of Overhead and Underground Electric Lines (Draft)
	Occupational Health and Safety Act 1991
<b>NSW</b>	Electricity Supply Act 1995
	Work Cover NSW - Work Near Underground Assets Guide
	Work Cover NSW - Excavation Work: Code of Practice
<b>VIC</b>	Electricity Safety Act 1998
	Electricity Safety (Network Asset) Regulations 1999
<b>QLD</b>	Electrical Safety Act 2002
	Code of Practice for Working Near Exposed Live Parts
<b>SA</b>	Electricity Act 1996
<b>TAS</b>	Tasmanian Electricity Supply Industry Act 1995
<b>WA</b>	Electricity Act 1945
	Electricity Regulations 1947
<b>NT</b>	Electricity Reform Act 2005
	Electricity Reform (Safety and Technical) Regulations 2005
<b>ACT</b>	Electricity Act 1971

Thank You,

**Network Operations Centre - Assurance**



Date: 27/03/2020

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# Appendix C

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Email Correspondence - Chris Godfrey 20th April 2020

**From:** [Chris Godfrey](#)  
**To:** [Alexandra Chung](#)  
**Subject:** RE: Attn: Civil Engineering Dept - Information on proposed Boundary Rd  
**Date:** Friday, 17 April 2020 3:45:03 PM  
**Attachments:** [Image002.png](#)  
[Image004.png](#)  
[Image005.png](#)  
[Image006.png](#)  
[Image007.png](#)  
[Image008.png](#)  
[Image009.png](#)  
[ATT00001.png](#)

---

Good afternoon Alexandra,

With regard to the RSL lot on Boundary Road, the following service connections will be made available:

**Sewer** – A HDPE DN50 pressure sewer connection will be made available to the lot. A pressure sewer boundary kit will be provided. Pressure sewer pump station to be constructed by others. A DN150 gravity sewer connection will also be provided to the lot although it will not be available for use until such a time that the Southlakes residential subdivision to the south of Boundary Road extends its internal sewer network. Once the gravity sewer is made live, the pressure sewer system can be disconnected and the RSL lot redirected.

**Potable Water** – A DN150 main will be provided in the footpath area on the south eastern corner of the lot. A service connection can then be made with the lot.

**Natural Gas** – A low pressure natural gas main will be made available to the lot. The final diameter of this pipeline is still being considered. It is likely to be either DN32 or DN50 however.

**Stormwater** – A DN525 main will be installed in the footpath area in front of the south eastern corner of the lot. This pipeline will provide drainage to the road corridor. It will be possible to connect the lot to this system however.

**Telecommunications** – Council is currently arranging NBN pit and pipe work for the extension of Boundary Road. A communications pit will be provided somewhere in the footpath reserve of the south eastern corner of the lot. No fibres will be installed within the pit however.

**Electricity** – It is Council's intention to install electrical conduits as part of the Boundary Road extension project. These conduits would provide a connection point to the south eastern corner of the RLS lot. This aspect of the project is still being finalised however although it is likely that both high (11kV) and low voltage (415V) conduits will be provided.

In addition, I will provide you with the construction plans for the Boundary Road extension project once I have finalised reviewing the document.



Happy to discuss anything further if you like.

Thanks and regards,

**Chris Godfrey**  
Acting Manager Infrastructure Strategy and Design  
Dubbo Regional Council  
P 02 6801 4911 M 0400 842 143  
E [Chris.Godfrey@dubbo.nsw.gov.au](mailto:Chris.Godfrey@dubbo.nsw.gov.au)



<http://dubbo.nsw.gov.au>

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---

**From:** Alexandra Chung <[Alex.C@atl.net.au](mailto:Alex.C@atl.net.au)>  
**Sent:** Thursday, 16 April 2020 10:47 AM  
**To:** Dubbo Regional Council <[council@dubbo.nsw.gov.au](mailto:council@dubbo.nsw.gov.au)>  
**Subject:** Attn: Civil Engineering Dept - Information on proposed Boundary Rd

**[EXTERNAL Message: Be cautious of clicking on links or opening attachments.]**


I am writing on behalf of my Client, Dubbo RSL who is proposing works on the following Boundary Rd extension.

I am wanting to get some information on the proposed Boundary road extension and the services that will be installed within the frontage. Could someone please contact me with any information on this Road?


My mobile is best – 0402019313.



**Alexandra Chung**  
Civil Engineer

 **Level 7, 153 Walker Street  
North Sydney NSW 2060**

 **e: [Alex.C@atl.net.au](mailto:Alex.C@atl.net.au)**

 **p: 02 9439 1777  
m: 0402 019 313**

 **w: [www.atl.net.au](http://www.atl.net.au)**

With kind and my checkmarks are confidential. If you are not the intended recipient or you have



we are pleased to be recognized in this way, please email us at [info@atrel.com.au](mailto:info@atrel.com.au) if you require any further information. We are proud to be recognized by the industry and we are pleased to be recognized by the industry and we are pleased to be recognized by the industry.



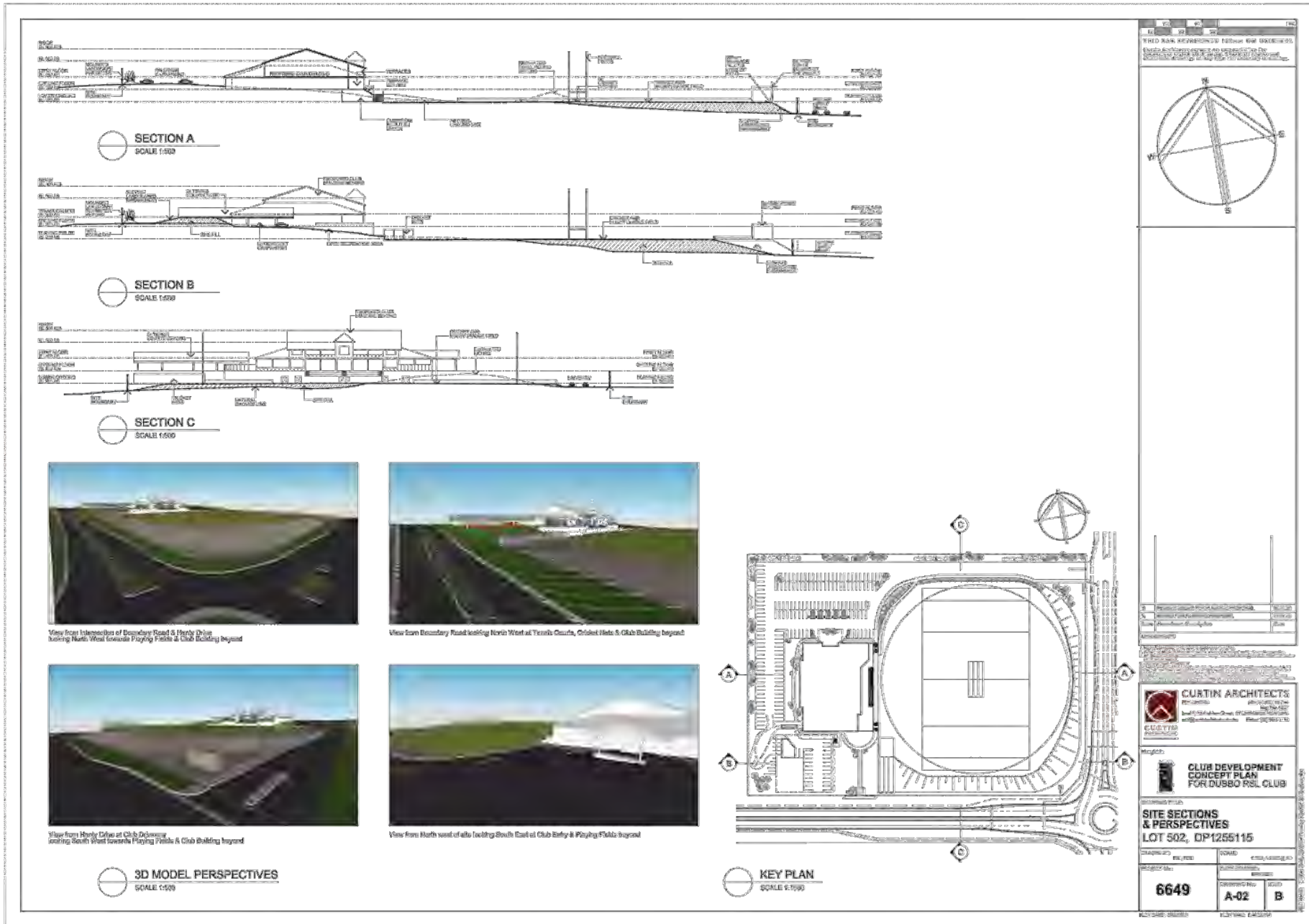
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# Preliminary Opportunities and Constraints Noise Assessment

Land Rezoning  
Boundary Road, Dubbo, NSW.

Prepared for: The Planning Hub  
September 2020  
MAC191030-01RP1V4





## Document Information



### Preliminary Opportunities and Constraints

### Noise Assessment

Boundary Road, Dubbo, NSW.

Prepared for: The Planning Hub  
Suite 4, Level 4  
35 Buckingham Street  
Surry Hills NSW 2010

Prepared by: Muller Acoustic Consulting Pty Ltd  
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DOCUMENT ID	STATUS	DATE	PREPARED BY	SIGNED	REVIEWED BY	SIGNED
MAC191030-01RP1V4	Final	22 September 2020	Robin Heaton		Oliver Muller	

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## 1 Introduction

Muller Acoustic Consulting Pty Ltd (MAC) has been commissioned by The Planning Hub (TPH) to complete a Preliminary Opportunities and Constraints Noise Assessment (the 'assessment') for the proposed rezoning of Lot 502, DP1255115, Boundary Road, Dubbo, NSW (the 'proposal').

The assessment has been undertaken to provide a summary of existing environmental noise and identifies opportunities and constraints related to the rezoning of the site to allow the development of a registered club (RC). The assessment will accompany the planning proposal for the site, which is being prepared by The Planning Hub.

The main aspects to be considered in the assessment to support the proposal include:

- Noise emissions during the construction phase of a potential registered club;
- Independent Liquor and Gaming Authority (ILGA) noise emissions from the proposal site;
- Noise emissions associated with the internal operation of a RC including likely facilities such as restaurant, bar and function room;
- Noise emissions associated with the potential external activities including the use of the sports facilities and outdoor terrace areas;
- Operational noise from the mechanical plant associated with a RC; and
- Road traffic noise from patron access and egress from the proposal site.

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



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MAC191030-01 RP1V4

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## 2 Project Description

The site is located within Lot 502, DP1255115, Boundary Road, Dubbo, NSW (the 'proposal site'), which has been subdivided as part of the Keswick Estate development. The Keswick Estate is a new development consisting of residential, commercial and infrastructure developments, approximately 4.5km south east of Dubbo town centre and is located within the Dubbo Regional Council (DRC) Local Government Area (LGA).

The proposal includes the rezoning of the undeveloped site to allow for the potential construction of a registered club. Typically a RC may include the following amenities:

- Main reception;
- Food Preparation Areas;
- Kids Play and Family Areas;
- Bar and Sports Lounge;
- Gaming Areas;
- Function Room;
- Outdoor decked terrace with terrace seating for sports events;
- Back-of house facilities;
- Sports field;
- cricket nets, tennis courts or similar;
- Car park; and
- Support facilities.





## 2.1 Proposed Activities

The proposal would allow for the potential development of a RC, which may include various services and support different sporting activities. Whilst the final operating times of any facility and service are yet to be confirmed, there are several typical key activities associated with such a proposal that have the potential to generate acoustic impacts on nearby receivers.

These may include the hosting of events on the sports field and the playing of amplified music in the gallery seating area. It is likely that the sports field will be utilised most weekday evenings for training sessions and will host games on the weekends typically during the daytime. Additionally, live and amplified music internally within the RC is typically only performed Friday to Sunday during the day and evening periods. The day to day operation of the site will include the use of the bar and sports lounge, gaming areas and restaurant.

Table 1 provides a summary of the potential proposal noise sources and their assumed assessment period in which they could occur. Once the final layout and operational times have been confirmed, it is recommended that these be provided for inclusion in the NIA.

Table 1 Noise Generating Activities		
Activity/Source	Period	Operational
Customer light vehicles	Day	✓
	Evening	✓
	Night	✓
Bar, Sports Lounge, Gaming Area and Restaurant	Day	✓
	Evening	✓
	Night	✓
Mechanical Plant	Day	✓
	Evening	✓
	Night	✓
Internal Live Music Events	Day	✓
	Evening	✓
	Night	X
Sporting Events with Amplified Music within the seating gallery	Day	✓
	Evening	✓
	Night	X
Goods Deliveries / Waste Collection	Day	✓
	Evening	✓
	Night	✓

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.



### 3 Receiver Review

The proposal locality is currently described as a rural environment with undeveloped lots located on all sides of the proposal site. The current noise environment is dominated by natural and wildlife noise sources.

It is however noted that as the estate develops, the ambient environment surrounding the proposal site will evolve from a rural to a suburban environment, with traffic and domestic noise becoming the dominating sources.

Once the estate is developed the site will be bound to the south by the Boundary Road extension and to the east by (proposed) Stream Avenue. The undeveloped lots to the west and north are expected to be residential or light commercial.

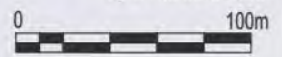
To assess noise levels at the nearest potential residences, hypothetical receiver points have been identified in close proximity to each side of the proposal site. The hypothetical receiver points are presented in **Table 2** along with the approximate setback distance from the proposal boundary. **Figure 1** presents the site location and the surrounding hypothetical receivers visually.

**Table 2 Receiver Locations**

Receiver	MGA 55 Coordinates		Approximate Set Back Distance (m)
R1	653908	6428290	35
R2	653923	6428284	35
R3	653948	6428281	35
R4	653964	6428278	35
R5	653984	6428276	35
R6	654015	6428274	35
R7	654080	6428261	35
R8	654191	6428241	75
R9	654191	6428324	35
R10	654202	6428396	35
R11	654146	6428460	15
R12	654070	6428477	15
R13	653999	6428486	15
R14	653940	6428452	15
R15	653928	6428379	15



FIGURE 1  
LOCALITY PLAN  
REF: MAC191030



## 4 Noise Policy and Guidelines

The following section summarises relevant policy and guidelines pertinent to undertaking a noise impact assessment for this type of proposal.

### 4.1 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, considering 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.

#### 4.1.1 Project Noise Trigger Levels (PNTLs)

The policy sets out the procedure to determine the PNTLs relevant to an industrial development. The PNTL is the lower (ie, the more stringent) 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.

#### 4.1.2 Project Intrusiveness Noise Level (PINLs)

The PINL (LAeq(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 from which RBLs are determined. 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.





#### 4.1.3 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.

Notwithstanding, where the PANL is applicable and can be satisfied, the assessment of cumulative industrial noise is not required. The recommended amenity noise levels as per Table 2.2 of the NPI are reproduced in **Table 3**. It is reiterated that the project site is currently located within a rural environment but as the Keswick Estate develops the area surrounding the site will likely evolve into a suburban noise environment.





Table 3: Amenity Criteria

Receiver Type	Noise Amenity Area	Time of day	Recommended amenity noise level
			L <sub>Aeq</sub> , dBA
Residential	Rural	Day	50
		Evening	45
		Night	40
	Suburban	Day	55
		Evening	45
		Night	40
Hotels, motels, caretakers' quarters, holiday accommodation, permanent resident caravan parks	See column 4	See column 4	5dBA above the recommended amenity noise level for a residence for the relevant noise amenity area and time of day
School classroom – internal	All	Noisiest 1-hour period when in use	35
Area specifically reserved for passive recreation (e.g. national park)	All	When in use	50
Active recreation area (e.g. school playground, golf course)	All	When in use	55
Commercial premises	All	When in use	65

Notes: The recommended amenity noise levels refer only to noise from industrial noise sources. However, they refer to noise from all noise 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.

Time of day is defined as follows: (These periods may be varied where appropriate, for example, see A3 in Fact Sheet A.)

- 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.

In the case where existing schools are affected by noise from existing industrial noise sources, the acceptable L<sub>Aeq</sub> noise level may be increased to 40dB L<sub>Aeq</sub>(1hr).



#### 4.2 Independent Liquor and Gaming Authority (ILGA)

The NSW EPA's Noise Guide for Local Government (NGFLG) (2013) summaries criteria related to licensed premises. The Independent Liquor and Gaming Authority (ILGA) (formerly OLGR) criteria are reproduced from NGFLG below and have been adopted as the principle criteria for residential receivers in this assessment:

*'The LA10 noise level emitted from the licensed premises shall not exceed the background noise level in an Octave Band Centre Frequency (31.5Hz – 8kHz inclusive) by more than 5dB between 7:00am and 12:00midnight at the boundary of any affected residence.*

*The LA10 noise level emitted from the licensed premises shall not exceed the background noise level in an Octave Band Centre Frequency (31.5Hz – 8kHz inclusive) between 12:00midnight and 7:00am at the boundary of any affected residence. Notwithstanding compliance with the above, the noise from the licensed premises shall not be audible within any habitable room in any residential premises between the hours of 12:00midnight and 7:00am.'*

#### 4.3 Road Noise Policy

The road traffic noise criteria are provided in the Department of Environment, Climate Change and Water NSW (DECCW), Road Noise Policy (RNP), 2011. The policy sets out noise criteria applicable to different road classifications for the purpose of quantifying traffic noise impacts. Road noise criteria relevant to this assessment are presented in detail in **Section 5.3**.

##### 4.3.1 Maximum Noise Trigger Level Assessment

The potential for sleep disturbance from maximum noise level events from a proposal 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.

#### 4.4 Interim Construction Noise Guideline

The assessment and management of noise from construction work is completed with reference to the Interim Construction Noise Guideline (ICNG). The ICNG is specifically aimed at managing noise from construction work regulated by the EPA and is used to assist in setting statutory conditions in licences or other regulatory instruments. The types of construction regulated by the EPA under the POEO Act (1997), include construction, maintenance and renewal activities carried out by a public authority, such as road upgrades as described in Schedule 1 of the POEO Act.

The ICNG provides two methodologies for the assessment of construction noise emissions:

- Quantitative, which is suited to major construction projects with typical durations of more than three weeks; or
- Qualitative, which is suited to short term infrastructure maintenance (for projects with a typical duration of less than three weeks).



4.4.1 Standard Hours for Construction

Table 4 summarises the ICNG recommended standard hours for construction activities where the noise from construction is audible at residential premises.

Table 4 Recommended Hours for Construction																								
Hour Commencing	12 AM	1 AM	2 AM	3 AM	4 AM	5 AM	6 AM	7 AM	8 AM	9 AM	10 AM	11 AM	12 PM	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM	8 PM	9 PM	10 PM	11 PM
Monday	OOH Period 2						Standard Hours						OOH Period 1											
Tuesday	OOH Period 2						Standard Hours						OOH Period 1											
Wednesday	OOH Period 2						Standard Hours						OOH Period 1											
Thursday	OOH Period 2						Standard Hours						OOH Period 1											
Friday	OOH Period 2						Standard Hours						OOH Period 1											
Saturday	OOH Period 2						OOH Period 1						OOH Period 2											
Sunday	OOH Period 2						OOH Period 1						OOH Period 2											
Public Holiday	OOH Period 2						OOH Period 1						OOH Period 2											

The recommended hours do not apply in the event of direction from police, or other relevant authorities, for safety reasons or where required in an emergency to avoid the loss of lives, property and/or to prevent environmental harm. Work conducted outside of standard hours are considered out of hours work (OOH). OOH periods are divided into two categories representing evening and night periods and cover the hours listed below:

**OOH Period 1 (evening/low risk period):** Monday to Friday – 6pm to 10pm, Saturdays – 1pm to 6pm, Sundays – 8am to 6pm.

**OOH Period 2 (night/medium to high risk period):** Monday to Friday – 10pm to 7am, Saturdays/Sundays – 6pm to 7am (8am on Sunday mornings).

Construction activities are anticipated to occur between 7am and 6pm, 7 days per week. As a result, works would occur during out of hours for this project.

4.4.2 Construction Noise Management Levels

Table 5 reproduces the ICNG management levels for residential receivers. The construction noise management levels are the sum of the management level and relevant rating background level (RBL) for each specific assessment period.



**Table 5 Noise Management Levels**

Time of Day	Management Level LAeq,15min1	How to Apply
Recommended standard hours: Monday to Friday 7am to 6pm Saturday 8am to 1pm No work on Sundays or public holidays.	Noise affected RBL + 10dB.	The noise affected level represents the point above which there may be some community reaction to noise.  Where the predicted or measured LAeq(15min) is greater than the noise affected level, the proponent should apply all feasible and reasonable work practices to meet the noise affected level.  The proponent should also inform all potentially impacted residents of the nature of work to be carried out, the expected noise levels and duration, as well as contact details.
	Highly noise affected 75dBA.	The highly noise affected level represents the point above which there may be strong community reaction to noise.  Where noise is above this level, the relevant authority (consent, determining or regulatory) may require respite periods by restricting the hours that the very noisy activities can occur, taking into account times identified by the community when they are less sensitive to noise such as before and after school for work near schools, or mid-morning or mid-afternoon for work near residences; and if the community is prepared to accept a longer period of construction in exchange for restrictions on construction times.
Outside recommended standard hours.	Noise affected RBL + 5dB.	A strong justification would typically be required for work outside the recommended standard hours.  The proponent should apply all feasible and reasonable work practices to meet the noise affected level.  Where all feasible and reasonable practices have been applied and noise is more than 5dBA above the noise affected level, the proponent should negotiate with the community.  For guidance on negotiating agreements see section 7.2.2.

Note 1: 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 construction noise management levels for noise assessment purposes and is the median of the AEL's.



5 Noise Assessment Criteria

5.1 Operational Noise Criteria

5.1.1 Project Intrusiveness Noise Levels

Due to the rural nature of the locality surrounding the proposal site existing background noise levels have been assumed to likely be lower than the minimum applicable Rating Background Levels (RBL) described in Section 2.3 of the NPI. Therefore, the minimum applicable RBLs of 35dBA for the day period and 30dBA for the evening and night periods would be adopted for the proposal

It is noted that pending progression of the development, noise monitoring may be undertaken prior to the preparation of the NIA to ascertain the ambient noise environment in the area due to the development of Keswick Estate. Notwithstanding, the PINLs based on the minimum RBLs outlined in the NPI are presented in Table 6 and have been determined based on the RBLs +5dBA.

Table 6 Project Intrusiveness Noise Levels

Receiver	Period <sup>1</sup>	Adopted RBL dB LAeq	PINL dB LAeq(15min)
Residential Receivers	Day	35	40
	Evening	30	35
	Night	30	35

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.

5.1.2 Project Amenity Noise Levels

The PANLs for receivers potentially affected by the project are presented in Table 7.

Table 7 Project Amenity Noise Levels

Receiver Type	Noise Amenity Area	Assessment Period <sup>1</sup>	Recommended ANL dB LAeq(period) <sup>2</sup>	PANL dB LAeq(period) <sup>3</sup>	PANL dB LAeq(15min) <sup>4</sup>
Residential	Rural	Day	50	50	53
		Evening	45	45	48
		Night	40	40	43
Commercial	All	When In Use	65	65	68

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: Project Amenity Noise Level equals the amenity noise level as there is no other industry in the area.

Note 4: 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.





### 5.1.3 Project Noise Trigger Levels

The PNTLs are the lower of either the PINLs or the PANLs. **Table 8** presents the derivation of the PNTLs in accordance with the methodologies outlined in the NPI.

**Table 8 Project Noise Trigger Levels**

Receiver Type	Assessment Period <sup>1</sup>	PINL dB LAeq(15min)	PANL dB LAeq(15min)	PNTL dB LAeq(15min)
	Residential	Day	40	53
Evening		35	48	35
Night		35	43	35
Commercial	When In Use	N/A	68	68

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.

### 5.2 Independent Liquor and Gaming Authority (ILGA) Criteria

The relevant ILGA criteria for a period is derived by analysing the single octave LA90 statistical levels of unattended noise monitoring data. The periods typically analysed are 6pm to 10pm for the evening period and 12am to 1.30am for the night period. As unattended noise logging for the project has not been completed at this point, single octave LA90 statistical levels are not available and ILGA criteria cannot be set. Therefore, it is recommended that ambient octave data is identified so conservative level criteria are avoided.

### 5.3 Road Traffic Noise Criteria

The road traffic noise criteria are provided in the NSW EPA's Road Noise Policy (RNP) (2011).

The local roads categories as specified in the RNP will be adopted for this assessment. **Table 9** reproduces the road traffic noise assessment criteria reproduced from the RNP relevant for this road type. It is noted that the criteria is applicable for existing residences only, but as a best practice approach this criteria is accepted for the future residences along Boundary Road, as future dwellings may be occupied prior to the completion of proposal construction works.

**Table 9 Road Traffic Noise Assessment Criteria for Residential Land Uses**

Road category	Type of project/development	Assessment Criteria - dBA	
		Day (7am to 10pm)	Night (10pm to 7am)
Local Road	Existing Residences affected by additional traffic on existing local roads generated by land use developments	55dBA	50dBA
		LAeq(1hr)	LAeq(1hr)



### 5.3.1 Maximum Noise Trigger Levels

The maximum noise trigger levels shown in **Table 10** is 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 10 Maximum Noise Assessment Trigger Levels**

Residential Receivers			
LAeq(15min)		LAmaz	
40dB LAeq(15min) or RBL + 5dB		52dB LAmaz or RBL + 15dB	
Trigger	40	Trigger	52
RBL +5dB	35	RBL +15dB	45
Highest	40	Highest	52

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

### 5.4 Construction Noise Management Levels

The Noise Management Levels (NMLs) for construction activities for standard construction hours and out of hours periods are summarised in **Table 11**.

**Table 11 Construction Noise Management Levels**

Location	Assessment Period	RBL dBA	NML dB LAeq(15min)
All Residential Receivers	Day (Standard Hours)	35	45 (RBL+10dBA)
	Evening (OOH Period 1)	30	35 (RBL+5dBA)
	Night (OOH Period 2)	30	35 (RBL+5dBA)
Commercial	Day (All Periods)	N/A	70dBA

Note: See Table 4 of this report for Recommended Standard Hours for Construction.



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## 6 Noise Sources

### 6.1 Sound Power Levels

Table 12 presents the typical sound power level for noise sources which may be associated with the operation of the RC.

It is noted that sound power levels are indicative only to identify constraints for the proposal and 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 12 Acoustically Significant Sources – Sound Power Levels (re 10<sup>-12</sup> Watts)**

Item and number modelled per 15-minutes	Individual Sound Power Level dB LAeq(15min)	Total source Sound Power Level dB LAeq(15min)	Assumed Source Location
<b>Operation</b>			
Mechanical Plant (x6)	75	83	Rooftop
Truck deliveries (x1)	92	92	Loading Bay
Patron light Vehicles (x50)	73	90	Car Park
PA/REF Whistle Noise (x1)	90	90	Sports Fields
Spectator Crowd Noise (x1)	100	100	Gallery Seating
Medium Level Amplified Music (x3)	97	102	Gallery Seating/ Internal/Terrace
Group of 4 Patrons (x25)	70	84	Terrace
<b>Sleep disturbance assessment (LAmax), Night time periods (10pm to 7am)</b>			
Delivery Impact		102	Loading Bay
Car Door Slam		85	Car Park
Patron Yelling		92	Terrace/Entrance
<b>Construction Fleet</b>			
Combined Construction Fleet		108	Entire Site



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## 7 Constraints Summary

This review has identified several preliminary constraints for the proposal relating to noise emissions which are summarised below. It is anticipated a detailed Noise Impact Assessment (NIA) will provide details on management and mitigation measures to address potential noise exceedances.

### 7.1 Residential Receivers

A review of potential residential receivers surrounding the proposal site identifies that the nearest potential residential receiver is approximately 15m to the north of the proposal site. Given the short separation distance, it is anticipated that the potential risk of operational noise impacts associated with the proposal would be moderate to high, particularly during to weekend sports and internal live music events. It is however noted that noise sources in closest proximity to the northern boundary, are related to vehicle movements and sporting events on the proposed pitch and are typically undertaken during the day and evening periods only.

Receivers to the east and south at a set back distance of approximately 35m or greater and have the potential to be affected by noise from offsite proposal generated traffic.

### 7.2 Noise Environment and Project Noise Trigger Levels

Due to the rural nature of the locality and the absence of any existing significant noise generating activities in the area such as commercial or industrial facilities, it is considered that the construction and operational phase noise criteria would be based on minimum background noise levels as per the NPI.

Notwithstanding, as the Keswick Estate is established it is likely that noise levels will rise during all periods and it is recommended that updated noise monitoring be undertaken prior to the preparation of the NIA to measure contemporary background levels and to ascertain single octave LA90 statistical levels to set ILGA criteria.

### 7.3 Intervening Topography

A review of the local topography indicates that the proposal site is located on a relatively flat terrain with no intervening topography between the site and future noise sensitive receivers. Accordingly, the future receivers in close to the proposal would not benefit from the shielding effect of the intervening topography. The construction of intervening buildings or the installation of noise barriers or bunds can be used to reduce the received noise levels at surrounding noise sensitive receivers.





#### 7.4 Operational Noise Impacts

The potential for operational noise impacts are dependent on the period of operation and the events being held at the site. Accordingly, the operations are broken up into two typical indicative scenarios outlined below:

- Daily Operation of the proposal; and
- Sporting Events.

##### 7.4.1 Daily Operations

Significant noise sources at the proposal site during daytime periods include mechanical plant and car park noise generated by customer vehicles. Considering the draft site layout and offset distances to the surrounding receivers, it is possible that the site will exceed the applicable PNTLs. Therefore, mitigation measures such as acoustic screens surrounding the rooftop mechanical plant and along the south eastern boundary may be required. This will be confirmed when a final site layout can be assessed.

##### 7.4.2 Sporting Events

During sporting events, the significant noise sources at the proposal site include possible crowd noise within the gallery seating, PA, amplified music noise at the gallery and the terrace of the club, and referee/umpire whistle noise. Receivers surrounding the sports field may be affected by such noise sources however, typically small sports fields may be surrounded by earth mounds to assist spectator view the game. Such mounds would be beneficial for the proposal to mitigate noise emissions from the site coupled with intervening buildings like the clubhouse. Amplified music being played through the PA system may also be managed with the use of a noise limiter which controls the output of the system and selection of PA location with respect to orientation and receivers.



### 7.5 Traffic Noise Summary

A key noise source associated with this proposal is offsite traffic, especially during events such as sporting matches being played on the proposed sports field.

As the area is undeveloped there is negligible existing road traffic. During sports events there is the potential for up to a total of 200 vehicle movements per hour to and from the proposal site.

A review of the future receiver locations indicates that the separation distance to the centre of the proposed estate roads is less than 20m. Based on the separation distance between the road and the residential receivers, noise levels from traffic are expected to comply with the relevant road noise criteria during the daytime, however large events during the night period have the potential to exceed the applicable criteria. Notwithstanding, it is unlikely that the RC would generate 200 vehicles movements an hour during the night period, however this should be reviewed and confirmed as part of a formal NIA.

### 7.6 ILGA Summary

As the ILGA criteria cannot be accurately established in the absence of unattended noise data, an initial constraints assessment is not possible, it however noted that external ILGA sources such as patrons and music in external areas would be a dominant noise source. Based on the current site layout and taking into account the set back distance to surrounding receivers and intervening buildings, the risk to the receivers is low to medium.

### 7.7 Construction Noise Impacts

MAC understands that construction activities associated with the proposal would include construction of a RC including buildings, gallery seating, formation of sports facilities, and the laying of asphalt for the car park. The use of heavy machinery for these activities may potentially result in community reaction to the noise.

It is noted that due to the separation distances, the risk of noise impacts during construction of any RC structures would likely be low to moderate. Furthermore, the area is currently being developed as part of the Keswick Estate and construction activities are expected to be undertaken in the surrounding area for an extended period as part of the estate development. Accordingly, the daytime construction noise would be typical for the area in the foreseeable future. Furthermore, the surrounding receivers may not be completed prior to the project associated construction works and accordingly may not be occupied.



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## 8 Conclusion

Muller Acoustic Consulting Pty Ltd (MAC) has conducted a Preliminary Opportunities and Constraints Noise Assessment for the proposed rezoning of Lot 502, DP1255115, Boundary Road, Dubbo, NSW. The assessment reviewed opportunities and constraints associated with rezoning to allow future potential developments on the site including of a registered club in regard to noise impacts on the community.

The review identified that the rural nature of the locality, short separation distances between the proposal site and nearby receivers, and the nature of the proposal activities would result in a moderate to high risk of noise impacts, particularly from sports/external events and road traffic noise.

The review does note that as Keswick Estate develops it is likely that the ambient rural noise environment will evolve into a typical suburban noise environment.

The review has concluded that during the construction phase of a potential registered club, there is potential that the generated noise levels may be above the relevant criteria, however as the area is currently undergoing development, construction noise may be typical for the area for the foreseeable future. It is also noted that the lots surrounding the project site are undeveloped and that many receivers would not be completed or occupied prior to construction of the facility.

During operation of a potential registered club, there is a moderate to high risk of noise impacts within the community. The risk of potential impacts would be greater during the evening and night period as a result of the more stringent period criteria. It is therefore considered that management and mitigation measures may be required to reduce the potential impacts on the community.

The management and mitigation measures will be provided in more detail in the Noise Impact Assessment report for the project.

In summary pending final layout plans for any future registered club development, the proposal site is considered suitable for rezoning to allow for the potential future development of a registered club.



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## Appendix A – Glossary of Terms



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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 <sub>0</sub> is the sound reference power at 10 <sup>-12</sup> watts.



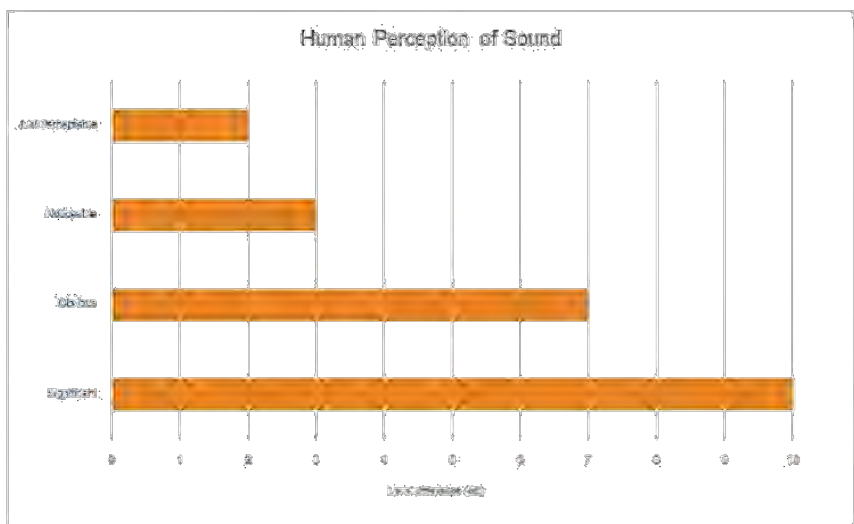
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Table A2 provides a list of common noise sources and their typical sound level.

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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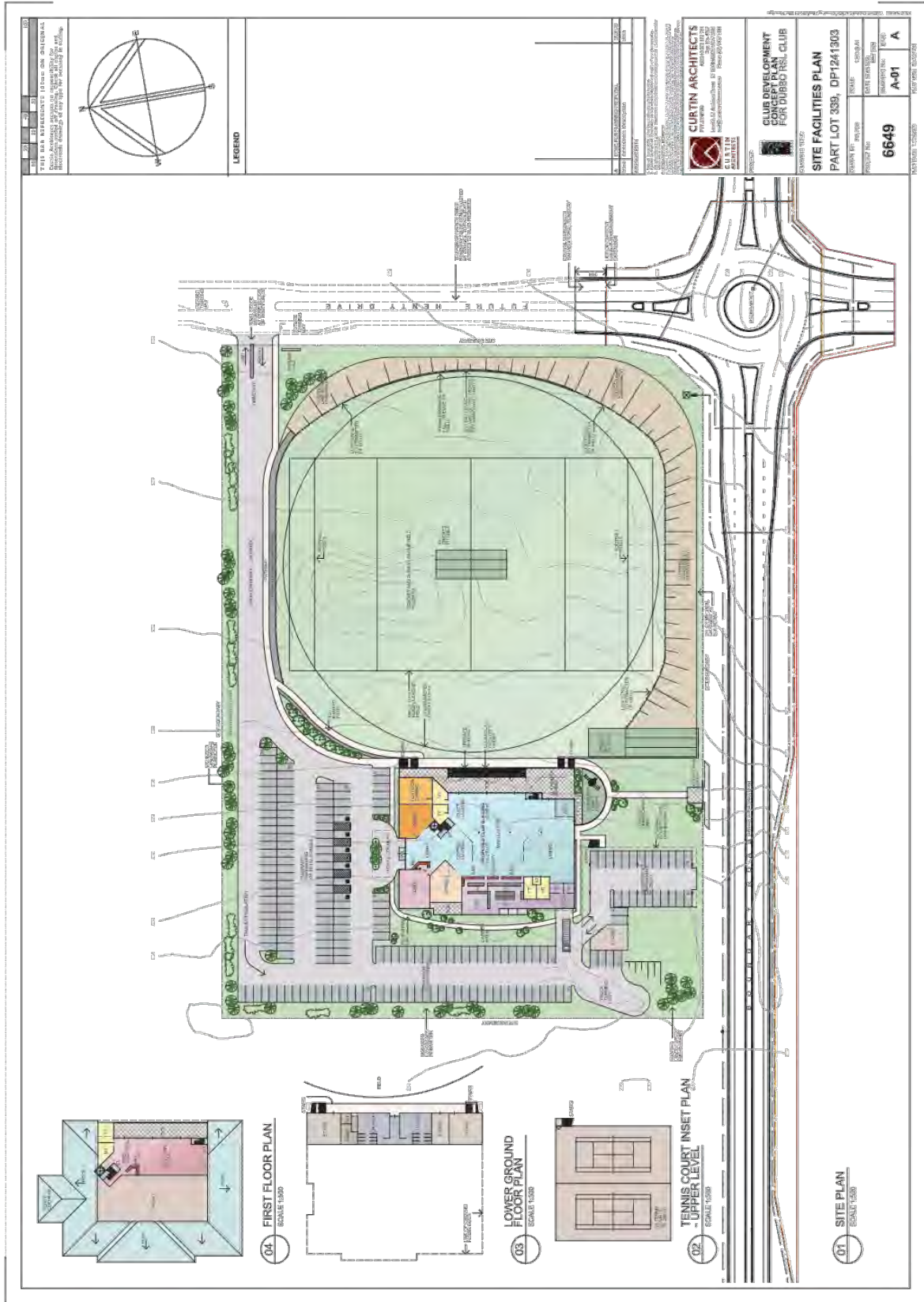


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## Appendix B – Site Plans



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### Preliminary contamination investigation

Proposed RSL Club, part Lot 502 DP1255115 Boundary Road, Dubbo



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## Summary report

### Background

A registered club facility and associated recreational facilities are proposed for a 3.3ha parcel of land located within Lot 502 DP1255115 Boundary Road, Dubbo NSW. The development will include the club building, kids play and family area, football/cricket field and carpark. The facility is located on former farmland and has had fill introduced from various sources. The former land-uses are potential sources of contamination. A preliminary contamination investigation is required for the site to determine requirements for additional investigations.

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### Objectives of investigation

The objective of the investigation was to determine suitability of the site for the proposed land-use.

---

### Scope

The scope was to identify past potentially contaminating activities, identify potential types of contamination, discuss the site condition, provide a preliminary assessment of site contamination and assess the need for further investigation to determine suitability for recreational and commercial land use. The scope of works included site inspection, soil sampling and analysis of the soil samples for contaminants of concern.

---

### Summary

A site assessment was conducted on 19 May 2020 consisting of a site walkover, desktop study and limited soil sampling.

The preliminary contamination assessment comprised a soil sampling and laboratory analysis program. A total of sixteen locations were assessed across the site. Six boreholes were drilled to rock, the soil profile described and indicators of potential contamination identified. Ten soil samples were collected from stockpiles to provide an indicator of potential contamination.

The site was dominated by the presence of numerous stockpiles of unknown origin. The stockpiles generally contained reddish brown sandy clay. Gravel was identified in some stockpiles. Foreign materials including concrete, timber, asphalt, bricks and car bodies were also identified on the site. Vegetated surface cover was near 100%. Bare areas were present in areas of gravel. Fill material was identified in two boreholes to depths of 900mm. Refusal due to basalt was encountered in four boreholes at depths from 0.1m.

Vegetation cover restricted inspection of the soil surface for asbestos containing materials. No asbestos containing materials were identified in the borehole cuttings.

Levels of chromium (III) exceeded adopted thresholds in one stockpile sample. Additional investigations are required to delineate impacted material. The levels of all other analytes evaluated in the soil samples were below the adopted health and ecological investigation and screening levels for recreational and commercial land-use.

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### Recommendations

It is expected that the site can be made suitable for the proposed land-use following additional investigations, completion of remediation works and validation assessment.

The additional investigations should be undertaken following surveying of the proposed site boundary to ensure to entire site is sampled.

Natural soils on the site should be assessed at 45 locations on a 30m systematic sampling pattern in accordance with NEPM (1999) guidelines. Soil samples should be collected using an excavator and analysed for a range of potential contaminants including heavy metals, hydrocarbons and asbestos.

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Stockpiles on the site should be assessed in accordance with waste classification guidelines including the *Excavated Natural Material (ENM) Exemption* by use of an excavator to remove vegetation and allow inspection of the material. Stockpiles containing similar material as determined visually should be determined and soil samples collected. Number of soil samples will be based on volume of material identified. Soil samples should be analysed for electrical conductivity, pH, heavy metals, hydrocarbons, organochlorine pesticides, polychlorinated biphenyls and foreign materials. Gravimetric assessment for asbestos is also recommended.

Additional boreholes or excavator pits should be constructed to confirm a quarry or landfill is not present on the site.

Additional investigations are required to delineate chromium (III) impacted soils at sampling location C5.

A detailed investigation report should be prepared describing the results and suitability for the proposed land-use or requirements for remediation.

Remediation at the stockpile sample C5 was collected will be required to enable the proposed land-use. Remediation should be undertaken in accordance with a remediation action plan (RAP).

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### 1. Introduction

A registered club facility and associated recreational facilities are proposed for a 3.3ha parcel of land located within Lot 502 DP1255115 Boundary Road, Dubbo NSW. The development will include the club building, kids play and family area, football/cricket field and carpark. The facility is located on former farmland and has had fill introduced from various sources. The former land-uses are potential sources of contamination. A preliminary contamination investigation is required for the site to determine requirements for additional investigations.

### 2. Objectives

The objective of the investigation was to determine suitability of the site for the proposed land-use.

### 3. Scope of work

Envirowest Consulting Pty Ltd was commissioned by The Planning Hub to undertake a preliminary contamination investigation, in accordance with the contaminated land management planning guidelines, from the *Contaminated Land Management Act 1997* and the *State Environmental Policy No. 55 (SEPP 55)*, for a 3.3ha parcel of land located within Lot 502 DP1255115 Boundary Road, Dubbo NSW. The objective was to identify past potentially contaminating activities, identify potential contamination types, discuss the site condition, provide a preliminary assessment of site contamination and assess the need for further investigation. The scope of works included site inspection, soil sampling and analysis of the soil samples for contaminants of concern.

### 4. Site identification

Address	Lot 502 DP1255115 Boundary Road Dubbo NSW
Deposited plans	Lot 502 DP1255115
Latitude and longitude	-32.27° 148.64°
Geographic coordinates	55H E654111m N6428365m
Client	The Planning Hub
Owner	Dubbo Regional Council
Current occupier	Vacant
Area	Approximately 3.3 hectares
Local government area	Dubbo Regional Council
Current zoning	R2 – Low density residential (Dubbo LEP 2011)
Trigger for investigation	Change in land-use
Locality map	Figure 1

## **5. Site history**

### **5.1 Land-uses**

The historical land-use of the site is grazing with stockpiling of materials occurring in the 1990s.

### **5.2 Summary of council records**

The site is mapped in a moderately high groundwater vulnerability area (Dubbo LEP 2011).

### **5.3 EPA contaminated sites list**

The investigation area is not listed on the NSW EPA register of contaminated sites or sites notified to the EPA.

### **5.4 Sources of information**

Site inspection 19 May 2020 by Luke Niven of Envirowest Consulting

NSW EPA records of public notices under the CLM Act 1997

Soil and geological maps

Spatial information exchange historic parish maps

Historical aerial photographs

Dubbo LEP 2011

### **5.5 Review of historic aerial photographs, maps and plans**

#### **5.6 Chronological list of site uses**

Aerial photographs indicate the site has been used as grazing land until the late 1980's. The 1991 aerial photograph depicts disturbance on the site and is potentially the stockpiles identified on the site at the time of inspection. The fill is from various unknown sources.

The 1986 topographic map developed from 1980 aerial imagery identifies a rubbish tip on the site.

No horticultural activities, mines, sheep dips, underground storage tanks (UST), bunkers or contaminating industrial activities are known to have been located on the site from the site inspection and site history.

#### **5.7 Buildings and infrastructure**

No buildings were identified within the investigation area. The southern boundary of the investigation area has been fenced in the past. The fence has been removed to allow for construction of the Boundary Road extension.

#### **5.8 Spills, losses or discharges**

No records for spills or losses on the site were available. No records for discharges to land, water or air were available.

#### **5.9 Relevant complaint history**

Nil

#### **5.10 Previous investigations**

No previous investigations are known to have been undertaken on the site.

#### **5.11 Historical neighbouring land-use**

North – Grazing

South – Grazing

East – Grazing

West – Grazing

Historical neighbouring land-uses are not expected to impact of the site.

#### 5.12 Contaminant sources

Numerous stockpiles containing soil located across the site is the identified source of contamination. Fill material was also present on the site at depths of up to 900mm from an unknown source. A landfill was potentially located on the site and is a source of contamination.

It is unlikely biosolids have been applied to the area. Site inspection, historical review and analytical results indicate that biosolids are unlikely to have been applied to the area.

#### 5.13 Contaminants of concern

Based on historical activities and site inspection, potential contaminants have been identified as;

- Heavy metals (arsenic, cadmium, chromium, copper, nickel, lead, zinc, mercury)
- Total recoverable hydrocarbons (TRH C6-C40)
- Benzene, toluene, ethylbenzene, xylenes, and naphthalene (BTEXN)
- Polycyclic aromatic hydrocarbons (PAH)
- Asbestos
- Foreign materials

#### 5.14 Integrity assessment

The site history was obtained from a site inspection and history review. The information is consistent with the current site condition and to the best of the assessor's knowledge is accurate.

## 6. Site condition and surrounding environment

### 6.1 Site inspection

The site was inspected by Luke Niven of Envirowest Consulting Pty Ltd on 19 May 2020.

### 6.2 Land-use

The site was a vacant lot with a historical land-use of grazing. Numerous stockpiles are located on the site.

### 6.3 Current neighbouring land-use

North – Vacant, former farmland  
 South – Boundary Road under construction  
 East – Vacant, former farmland  
 West – Vacant, former farmland

### 6.4 Surface cover and vegetation

Surface cover was dominated by ruderal weeds including mallow, skeleton weed, hedge mustard, paddy melon and other broadleaved weeds. An eucalypt tree and several small robinias are scattered across the site. The site was covered by vegetation.

### 6.5 Evidence of visible contamination

Fill material is present on the site to depths of up to 0.9m and as stockpiles.

Disturbed areas were identified in the 1991 aerial photograph.

No signs of settlement or subsidence was identified on the site.

No signs of visible contamination such as discolouration or staining was identified on the surface of the site or within borehole cuttings.



### 6.6 Topography

The site is predominantly located on an upper slope. Aspect is predominantly east and slopes are gently inclined and generally less than 5%. Elevation ranges between 285 and 293 metres above sea level. The lowest elevation occurs on the eastern boundary.

### 6.7 Soils and geology

The site is located within the Bunglegumbie Soil Landscape (Murphy *et al.* 1998).

Soil in the Bunglegumbie landscape consists of red brown earths, red earth, non-calci brown soils and yellow podzolic/solodic soils. Parent material is weathered alluvium. Soil salinity problems are absent. Erosion hazard is low on slopes less than 3%.

Lithology of the southern section of the site is Napperby Formation comprising siltstone thinly interbedded with fine-medium grained lithic quartz sandstone with minor conglomerate. Lithology of the northern section is Cainozoic Basalt comprising tholeiite, alkali basalt and alkali ultramafic (Colquhoun *et al.* 1997).

Soils on the site comprised reddish brown sandy clay over yellowish brown to light brown sandy clay. Basalt rock was encountered in all boreholes at depths between 0.1m and 1.7m. Basalt rock was encountered at 1.1m and 1.7m in the central section of the site and at 0.1m to 0.6m in the western and northern sections of the site.

No erosion was identified on the site.

### 6.8 Water

#### 6.8.1 Surface water

The surface of the site is uneven as a result of numerous stockpiles on the site. Water is expected to pond between stockpiles. Surface water flows are expected to generally flow east and south. Eulomogo Creek is located approximately 2.2km south of the site.

Eulomogo Creek empties into the Macquarie River approximately 3.0km south of the site.

#### 6.8.2 Groundwater

Two registered water abstraction bores were identified within a 500m radius of the site on the NSW Government Water NSW website (2020). One bore is a monitoring bore and has been constructed to intercept unconfined shallow water. Water-bearing zones (WBZ's) were from 7m. The second bore is licensed for public use and was constructed to 100m with water bearing zones from 30m and standing water level at 33m.

No.	Date drilled	Location	SWL (m)	Use	Status
GW802624	2005	380m NW	-	Monitoring	Current
GW803790	1988	480m SW	32.9	Public	Current

### 6.9 Evidence of possible naturally occurring contaminants

No natural sources of PAH were identified.

The site is not mapped as an acid sulphate soil risk (NSW SEED Portal accessed 10 June 2020).

A groundwater and salinity assessment undertaken on the site by Envirowest Consulting Pty Ltd (report number R11858s) did not identify saline soils.

The site is not mapped as a geological unit with asbestos potential (NSW SEED Portal accessed 10 June 2020).

#### **6.10 Environmentally sensitive features or habitats**

No environmentally sensitive features or habitats were identified on the site. Remnant bushland is located to the north. Eulomogo Creek is located approximately 2.2km to the south and is impacted by upstream farmland.

#### **6.11 Integrity assessment**

The site history was obtained from a site inspection and history review. The information is consistent with the current site condition and to the best of the assessor's knowledge is accurate.

### **7. Conceptual site model**

#### **7.1 Contaminant sources**

Potential exists for contaminating activities to have been undertaken on site which may impact on the suitability for the proposed land-use. The historical land-use and placement of fill across the site may have resulted in application of contaminants.

#### **7.2 Contaminants of concern**

Based on historical activities and site inspection the contaminants of concern across the site are:

- Heavy metals (arsenic, cadmium, chromium, copper, nickel, lead, zinc and mercury)
- Total recoverable hydrocarbons (TRH)
- Benzene, toluene, ethylbenzene, xylene, naphthalene (BTEXN)
- Polycyclic aromatic hydrocarbons (PAH)
- Asbestos
- Foreign materials

#### **7.3 Potential receptors**

The proposed land-use of the site is recreational and commercial. The site has historically been used as agricultural land and stockpiling of imported material.

Human receptors include:

- Visitors (adults and children)
- Staff (adults)
- Site workers
- Construction workers
- Intrusive maintenance workers

Ecological receptors include

- Flora and fauna on the site and adjacent to the site
- Aquatic flora and fauna receptors off-site

#### **7.4 Exposure pathways**

Pathways for exposure to contaminants are:

- Dermal contact following soil disturbance
- Ingestion and inhalation after soil disturbance
- Surface water and sediment runoff into waterways
- Leaching of contaminants into the groundwater
- Direct contact of flora and fauna with the soil

### 7.5 Source receptor linkages

Potential source pathway receptor linkages are identified to enable evaluation of any adverse impact on human health or ecology.

The proposed land-use of the site is recreational and commercial and human receptors to the investigation area are likely. Proposed users of the site may have a risk of exposure if contaminants are present and the soil is disturbed. Construction workers, visitors, staff and intrusive maintenance workers to the site may potentially be receptors to soil contaminants through direct contact to soil which includes ingestion and dermal contact.

Inhalation may occur as a result of vaporisation, soil disturbance and dust production. Major soil disturbance before and after the development of the site is considered unlikely. Soil disturbance during construction and development of the site is expected to be accompanied by erosion control measures which will reduce the incidence of dust production.

Vegetation on the site may be potential receptors to soil contamination through direct uptake of contaminants.

The source receptor linkage to aquatic organisms and ecosystems is considered incomplete as the site is well vegetated and movement of sediments from the site is unlikely. During construction work it is expected that erosion control measures will be implemented and movement of sediment off site will be unlikely. Following development of the site it is expected that vegetation will be re-established or hard surfaces constructed which will control sediment movement from the site. The nearest waterway to the site is Eulomogo Creek which is located approximately 2.2km south and it is not expected that contaminants from the site will be transported to aquatic receptors within Eulomogo Creek.

Groundwater is not identified as a potential receptor to contamination. Groundwater bores are located greater than 250m from the site. Contaminants are expected to originate from the soil surface and groundwater levels in the area are at depths greater than 3m below the soil surface.

Source/contaminant	Transport	Potential exposure pathways	Receptors
<input checked="" type="checkbox"/> Use of pesticides (heavy metals) <input checked="" type="checkbox"/> Fill material unknown source	<input type="checkbox"/> Wind <input checked="" type="checkbox"/> Sedimentation <input checked="" type="checkbox"/> Groundwater	<input checked="" type="checkbox"/> Direct contact (ingestion and absorption) (human and environment) <input checked="" type="checkbox"/> Inhalation <input type="checkbox"/> Runoff <input type="checkbox"/> Leaching	<input checked="" type="checkbox"/> Construction workers <input checked="" type="checkbox"/> Workers <input checked="" type="checkbox"/> Visitors <input checked="" type="checkbox"/> Intrusive maintenance workers <input checked="" type="checkbox"/> Vegetation
<input checked="" type="checkbox"/> Potential, <input type="checkbox"/> unknown/unlikely			

## 8. Data quality objectives (DQO)

### 8.1 State the problem

A registered club facility and associated recreational facilities is proposed for the site. Land-use will change from vacant to recreational and commercial. The property has historically been used as agricultural land and storage of imported materials which may have resulted in contaminating activities. The site requires investigation to ensure suitability for the proposed land-use.

### 8.2 Identify the decision

The land-use proposed is recreational and commercial and the levels of contaminants should be less than the thresholds listed in Section 11. The decision problem is, do the levels of potential contaminants exceed the assessment criteria listed in Section 11.

### 8.3 Identify the inputs decision

Investigations of the site is required to identify any potential contaminants from historical land-use.

**8.4 Define the boundaries of the study**

The investigation area is a 3.3ha parcel of land located within Lot 502 DP1255115 Boundary Road, Dubbo NSW.

**8.5 Develop a decision rule**

The decision rule for suitability for recreational and commercial land-use is based on the thresholds listed in Schedule B1 of the NEPM (1999) *Guideline on Investigation Levels for Soil and Groundwater*.

**8.6 Specify acceptable limits on the decision errors.**

The 95% upper confidence limit of average levels of samples collected is less than the threshold levels and the results are less than 250% of relevant thresholds.

**8.7 Optimize the design for obtaining data**

Soil samples were collected from the site on judgemental pattern from areas where indicators of contamination were identified.

Analytes included heavy metals, hydrocarbons and PAH. Asbestos was visually assessed.

**9. Sampling analysis plan and sampling methodology****9.1. Sampling design**

A judgemental sampling pattern was adopted to provide a preliminary assessment of the contamination status of imported material.

**9.1.1 Sampling locations**

Ten discrete soil samples were collected from the stockpiles across the site on judgemental sampling pattern (Figure 2). Six boreholes were constructed to enable the soil profile to be described including the presence of fill and other indicators of contamination.

A visual inspection was undertaken over the site for evidence of contamination.

**9.1.2 Sampling density**

The sampling density will enable a preliminary assessment of contamination resulting from importation of materials.

**9.1.3 Sampling depth**

Sampling depth within stockpiles was 100 to 200mm below the surface. Boreholes were drilled on the site to drill refusal and ranged from 0.1m to 1.7m.

**9.2 Analytes**

The discrete soil samples were evaluated for arsenic, cadmium, chromium, copper, lead, nickel, zinc and mercury, total recoverable hydrocarbons (TRH C6-C40), benzene, toluene, ethylbenzene, xylenes, naphthalene (BTEXN) and polycyclic aromatic hydrocarbons (PAH) as these were identified as the contaminants of concern possibly present as a result of previous activities and presence of fill material (Table 1). One sample was additionally analysed for chromium III and chromium VI.

The site surface, soil borings and the fill material was visually inspected for the presence of asbestos containing material (ACM).

**Table 1. Schedule of samples and analyses**

Sample ID	Location	Source	Analysis undertaken
C1	North western section	Fill	Arsenic (As), cadmium (Cd), chromium (Cr), copper (Cu), lead (Pb), nickel (Ni), zinc (Zn), mercury (Hg), polycyclic aromatic hydrocarbons (PAH), total recoverable hydrocarbon (TRH) (C6-C40), benzene, ethylbenzene, toluene, xylenes and naphthalene (BTEXN)
C2	South western section	Fill	As, Cd, Cr, Cu, Pb, Ni, Zn, Hg, PAH, TRH(C6-C40), BTEXN
C3	South western section	Fill	As, Cd, Cr, Cu, Pb, Ni, Zn, Hg, PAH, TRH(C6-C40), BTEXN
C4	Central section	Fill	As, Cd, Cr, Cu, Pb, Ni, Zn, Hg, PAH, TRH(C6-C40), BTEXN
C5	Central section	Fill	As, Cd, Cr, Cu, Pb, Ni, Zn, Hg, PAH, TRH(C6-C40), BTEXN, Cr III and Cr VI
C6	North eastern section	Fill	As, Cd, Cr, Cu, Pb, Ni, Zn, Hg, PAH, TRH(C6-C40), BTEXN
C7	Central southern section	Fill	As, Cd, Cr, Cu, Pb, Ni, Zn, Hg, PAH, TRH(C6-C40), BTEXN
C8	Central southern section	Fill	As, Cd, Cr, Cu, Pb, Ni, Zn, Hg, PAH, TRH(C6-C40), BTEXN
C9	South eastern section	Fill	As, Cd, Cr, Cu, Pb, Ni, Zn, Hg, PAH, TRH(C6-C40), BTEXN
C10	South eastern section	Fill	As, Cd, Cr, Cu, Pb, Ni, Zn, Hg, PAH, TRH(C6-C40), BTEXN

### 9.3 Sampling methods

Soil samples were taken using a stainless-steel hand shovel. Soil was taken at each individual sampling location below the vegetated and detrital layer. The soil was transferred to a solvent rinsed glass jar with a Teflon lid using clean latex gloves. The sampling jars were filled with no airspace to prevent loss of volatiles.

Tools were decontaminated between sampling locations to prevent cross contamination by brushing to remove and rinsing with clean tap water and drying with clean towel. Sampling protocols are presented in Appendix 5.

Boreholes were drilled with an EVH hydraulic drill rig with solid auger.

## 10. Quality assurance and quality control

### 10.1 Sampling design

The sampling program is intended to provide preliminary data as to the presence and levels of contaminants.

Discrete soil samples were collected on a judgemental pattern from stockpiles across the site. The sampling density is considered sufficient to provide a preliminary assessment of contamination within the stockpiles.

### 10.2 Field

The collection of samples was undertaken in accordance with industry accepted standard protocols (NEPC 1999). The details of the samples collected are presented in Table 1. Discrete samples were collected and analysed.

Sampling equipment was decontaminated between each sampling event. Samples were stored and transported under refrigeration and in insulated containers. Appropriate storage duration was observed. A chain of custody form tracked the samples to the laboratory (Appendix 4).

A single sampler was used to collect the samples using standard methods. Soil collected was a fresh sample from the hand shovel. After collection the samples were immediately placed in new glass sampling jars and placed in a cooler. Sample jars were filled to minimise headspace and maintain sample integrity.

One intra laboratory duplicate sample was analysed to evaluate sample integrity and data comparability. The frequency of field duplicates is greater than the NEPM (1999) recommendation of 5%. Samples from all batches did not contain contaminants which confirm the absence of cross contamination during transport and storage. A field sampling log is presented in Appendix 3.

### 10.3 Laboratory

Chemical analysis was conducted by SGS Laboratories, Sydney, which is NATA accredited for the tests undertaken. The laboratories have quality assurance and quality control programs in place, which include internal replication and analysis of spike samples and recoveries.

Method blanks, matrix duplicates and laboratory control samples were within acceptance criteria. The quality assurance and quality control report is presented together with the laboratory report as Appendix 4.

### 10.4 Data evaluation

The laboratory quality control report indicates the data variability is within acceptable industry limits. The data is considered representative and usable for the purposes of the investigation. Data quality indicators are presented in Appendix 4.

## 11. Assessment criteria

The proposed land-use of the site is a registered club facility which will include the club building, kids play and family area, football/cricket field and carpark. All areas of the site will be used by patrons including children intermittently. Staff members are considered adults and will access the site daily. The proposed land-use is considered to be public open space. NEPC (1999) describes public open space as parks, playgrounds, recreational areas and playing fields that are accessible to the public and where the public may spend a large amount of time. It includes areas where young children may have supervised access and use the area outside of the home for frequent short periods of time. Some areas of the site are considered commercial land-use.

The assessment criteria for the soil data in recreational and commercial sites is described in Table 1A(1) of *Guideline on Investigation Levels for Soil and Groundwater* (NEPC 1999). The criteria lists health investigation levels (HIL) for a range of land-uses. The appropriate initial comparison for the site is *Recreational (HIL C)*. The HIL C threshold is considered appropriate for the proposed land-use (Table 3). Assessment criteria for commercial sites (HIL D) has been provided as a comparison.

The NEPM (1999) provides health screening levels (HSL) for hydrocarbons in soil. The HSLs have been developed to be protective of human health for soil types, depths below surface and apply to exposure to hydrocarbons through the predominant vapour exposure pathway. The appropriate HSL for the site is listed in Table 4. TRH>16 have physical properties which make the TRH fractions non-volatiles and therefore these TRH fractions are not applicable for vapour intrusion.

Ecological investigation levels (EIL) have been developed for the protection of terrestrial ecosystems for selected metals and organic substances in the soil in the guideline (NEPC 1999). EILs vary with land-use and apply to contaminants up to 2m depth below the surface. The EIL for arsenic and lead is not dependant on soil type. The EILs were determined using the ASC NEPM Toolbox EIL calculation sheet (accessed June 2020). The EILs for recreational and commercial land-use are listed in Tables 2 and 3.

Typical CEC values for soils in the locality are 10cmol(+)/kg. pH values of between 5.5 to 6, organic carbon of 1% and clay content of 20 to 25% (Espade 2016). The contaminants have been identified in the soil for at least two years and are considered aged.

Ambient background concentrations of metals have been determined based on results obtained from investigations within the locality.

Ecological screening levels (ESL) assess the risk to terrestrial ecosystems from petroleum hydrocarbons in the soil. The EILs and ESLs consider the properties of the soil and contaminants and the capacity of the local ecosystem to accommodate increases in contaminant levels (Table 4).

Management limits have been developed to assess petroleum hydrocarbons following evaluation of human health and ecological risks (NEPC 1999). Management units are applicable as screening levels after consideration of relevant ESLs and HSLs. The appropriate management limit for the site is listed in Table 4.

Chromium is analysed as total chromium which is the sum of chromium (III) and chromium (VI). Chromium (VI) is a potential contaminant from industrial processes including ferrochrome production, electroplating, pigment production and tanning (WHO 1998). Chromium (VI) is reduced to chromium (III) when it comes into contact with organic matter in biota, soil and water. Chromium in the environment is present in the trivalent state (WHO 1998).

Asbestos was assessed visually on a presence/absence basis.

**Table 2. EIL Calculation sheet, recreational land-use**

Analyte	Rationale	ACL (mg/kg)		ABC (mg/kg)	EIL (mg/kg)	
		Recreational	Commercial		Recreational	Commercial
Arsenic	Aged	100	160	-	100	160
Chromium (III)	Clay content 20-25%, aged	550	910	28	578	968
Copper	pH 6.0	210	300	12	222	312
Lead	Generic	1,100	1,800	7	1,107	1,807
Nickel	CEC 10cmol/kg	170	290	19	189	309
Zinc	CEC 10cmol/kg, pH 5.5	480	700	27	507	727

**Table 3. Assessment criteria for soil (mg/kg) (NEPC 1999)**

Analyte	HIL		EIL	
	Recreational	Commercial /Industrial	Urban residential and open public space	Commercial and industrial
Arsenic	300	3,000	100	160
Cadmium	90	900	-	-
Chromium	300 <sup>1</sup>	3,600 <sup>1</sup>	550 <sup>2</sup>	910 <sup>2</sup>
Copper	17,000	240,000	210	300
Lead	600	1,500	1,100	1,800
Nickel	1,200	6,000	170	290
Zinc	30,000	400,000	480	700
Mercury	80	730	-	-
PAH	300	4,000	-	-
Carcinogenic PAH	3	40	-	-
Naphthalene	-	-	170	370

<sup>1</sup> Threshold for Chromium (VI), <sup>2</sup> Threshold for Chromium (III), HIL – health investigation level, EIL – ecological investigation level



Table 4. Soil assessment criteria (mg/kg) (NEPC 1999)

Analyte	HSL Recreational / open space / clay soil	HSL Commercial / clay soil	ESL Urban residential and public open space/ fine soil	ESL Commercial / fine soil	Management limits for TRH in soil / Residential, parkland and public open space	Management limits for TRH in soil / commercial
	0m to <1m	0m to <1m				
TRH (C6-C10)	NL	310	180	215	800	800
TRH (>C10-C16)	NL	NL	120	170	1,000	1,000
TRH (>C16-C34)	NA	NA	1,300	2,500	3,500	5,000
TRH (>C34-C40)	NA	NA	5,600	6,600	10,000	10,000
Benzene	NL	4	65	95	-	-
Toluene	NL	NL	105	135	-	-
Ethylbenzene	NL	NL	125	185	-	-
Xylenes	NL	NL	45	95	-	-
Naphthalene	NL	NL	-	-	-	-
Benzo(a)pyrene	-	-	0.7	1.4	-	-

HSL – health screening level, EIL – ecological investigation level, ESL – ecological screening level, NL – non limiting, NA – not applicable

The chemical assessment of soil was also made under the Excavated Natural Material (ENM) exemption (2014) under the POEO Regulation 2014. The thresholds for the excavated natural material exemptions were compared with the results (Table 4).

Table 4. ENM thresholds (mg/kg)

Analyte	Units	ENM thresholds	
		Maximum average concentration	Absolute maximum concentration
Arsenic	mg/kg	20	40
Cadmium	mg/kg	0.5	1
Chromium (total)	mg/kg	75	150
Copper	mg/kg	100	200
Lead	mg/kg	50	100
Nickel	mg/kg	30	60
Zinc	mg/kg	150	300
Mercury	mg/kg	0.5	1
Electrical conductivity	dS/m	1.5	3
pH	pH units	5 to 9	4.5 to 10
TPH (C6-C9)	mg/kg	-	-
TPH (C10-C36)	mg/kg	250	500
Benzene	mg/kg	NA	0.5
Toluene	mg/kg	NA	65
Ethylbenzene	mg/kg	NA	25
Xylenes	mg/kg	NA	15
PAH	mg/kg	20	40
Benzo(a)pyrene	mg/kg	0.5	1
Rubber, plastic, bitumen, paper, cloth, paint and wood	%	0.05	0.10

## 12. Results and discussion

The site was dominated by stockpiles which had been imported from an unknown source. The stockpiles were predominantly reddish brown sandy clay. Foreign materials were identified across the site and within the stockpiles including concrete, timber, asphalt, bricks and car bodies. The foreign materials are an

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amenity hazard. Surface cover on the site was predominately 100% due to recent rain. Some bare areas were identified due to gravel. Boreholes drilled in the central section of the site identified fill from 0.6m to 1m. Basalt rock resulted in drill refusal from depths of 0.25m to 1.7m.

Presence of vegetation restricted visual inspection of the surface of the site and stockpiles. No odours were identified. No soil staining or asbestos containing materials were not identified in borehole cuttings.

Levels of chromium (III) in sample C5 exceeded the recreational HIL/EIL and commercial EIL (Table 5). Volume of impacted material was unable to be estimated due to the presence of vegetation. The levels of all other analytes analysed in the soil samples (Tables 5 and 6) were below the adopted health and ecological investigation levels for recreational and commercial land-use (NEPC 1999).

Maximum levels of chromium, lead and nickel and average levels of chromium exceeded the threshold for classification of ENM (Table 5). Average and maximum levels of other analytes were below the ENM thresholds (Tables 5 and 6).

**Table 5. Soil analysis results for metals and PAH (mg/kg)**

Sample ID	Location (Figure 2)	Arsenic	Cadmium	Total chromium	Copper	Lead	Nickel	Zinc	Mercury	PAH	Carcinogenic benzo(a)pyrene	Naphthalene
C1	North western section	4	<0.3	15	11	9	8.6	37	<0.05	<0.8	<0.3	<0.1
C2	South western section	3	<0.3	79	24	8	120	34	<0.05	<0.8	<0.3	<0.1
C3	South western section	2	<0.3	18	16	160	15	77	<0.05	5.9	0.8	<0.1
C4	Central section	1	<0.3	57	19	9	26	33	<0.05	8.2	1.4	<0.1
C5	Central section	11	<0.3	1,200 <sup>3</sup>	17	15	16	150	<0.05	1.4	<0.3	<0.1
C6	North eastern section	2	<0.3	9.9	13	4	23	57	<0.05	<0.8	<0.3	<0.1
C7	Central southern section	1	<0.3	33	14	150	22	56	0.45	<0.8	<0.3	<0.1
C8	Central southern section	1	<0.3	49	20	28	34	38	<0.05	<0.8	<0.3	<0.1
C9	South eastern section	5	<0.3	11	12	6	11	26	<0.05	<0.8	<0.3	<0.1
C10	South eastern section	5	<0.3	14	12	7	11	27	<0.05	<0.8	<0.3	<0.1
	Max average level	3.5	<0.3	148.6	15.8	39.6	28.7	53.5	0.09	2.1	-	-
	Absolute max level	11	<0.3	1,200	24	160	120	150	0.45	8.2	-	-
<b>Recreational land-use thresholds (NEPC 1999)</b>												
	HIL	300	90	300 <sup>1</sup>	17,000	600	1,200	30,000	80	300	3	-
	EIL	100	-	57 <sup>2</sup>	222	1,107	189	507	-	-	-	170
<b>Commercial/industrial land-use thresholds (NEPC 1999)</b>												
	HIL	3,000	900	3,600 <sup>1</sup>	240,000	1,500	6,000	400,000	730	4,000	40	-
	EIL	160	-	96 <sup>2</sup>	312	1,807	309	727	-	-	-	370
<b>ENM Exemption (2014)</b>												
	Max average level	20	0.5	75	100	50	30	150	0.5	20	-	-
	Absolute max level	40	1	150	200	100	60	300	1	40	-	-

<sup>1</sup> Threshold for Chromium (VI), <sup>2</sup> Threshold for Chromium (III), <sup>3</sup> Chromium (III), HIL – Health investigation levels, EIL – Ecological investigation levels

Table 6. Soil analysis results for TRH and BTEXN (mg/kg)

Sample ID	Location (Figure 2)	TRH (C6-C10)	TRH (>C10-C16)	TRH (>C16-C34)	TRH (>C34-C40)	TPH (C10-C36)	Benzene	Toluene	Ethyl-benzene	Xylenes	Naphthalene	Benzo(a)pyrene
C1	North western section	<25	<25	<90	<120	<110	<0.1	<0.1	<0.1	<0.3	<0.1	<0.1
C2	South western section	<25	<25	<90	<120	<110	<0.1	<0.1	<0.1	<0.3	<0.1	<0.1
C3	South western section	<25	<25	<90	<120	<110	<0.1	<0.1	<0.1	<0.3	<0.1	0.5
C4	Central section	<25	<25	<90	<120	<110	<0.1	<0.1	<0.1	<0.3	<0.1	0.9
C5	Central section	<25	<25	<90	<120	<110	<0.1	<0.1	<0.1	<0.3	<0.1	0.1
C6	North eastern section	<25	<25	<90	<120	<110	<0.1	<0.1	<0.1	<0.3	<0.1	<0.1
C7	Central southern section	<25	<25	<90	<120	<110	<0.1	<0.1	<0.1	<0.3	<0.1	<0.1
C8	Central southern section	<25	<25	<90	<120	<110	<0.1	<0.1	<0.1	<0.3	<0.1	<0.1
C9	South eastern section	<25	<25	<90	<120	<110	<0.1	<0.1	<0.1	<0.3	<0.1	<0.1
C10	South eastern section	<25	<25	<90	<120	<110	<0.1	<0.1	<0.1	<0.3	<0.1	<0.1
	Max average level	<25	<25	<90	<120	<110	<0.1	<0.1	<0.1	<0.3	<0.1	0.22
	Absolute max level	<25	<25	<90	<120	<110	<0.1	<0.1	<0.1	<0.3	<0.1	0.9
<b>Recreational land-use thresholds (NEPC 1999)</b>												
HSL	0m to <1m	310	NL	NA	NA	-	4	NL	NL	NL	NL	-
ESL		215	170	2,500	6,600	-	9	135	185	95	-	0.7
Management limits		800	1,000	5,000	10,000	-	-	-	-	-	-	-
<b>Commercial land-use thresholds (NEPC 1999)</b>												
HSL	0m to <1m	310	NL	NA	NA	-	4	NL	NL	NL	NL	-
ESL		215	170	2,500	6,600	-	9	135	185	95	-	1.4
Management limits		800	1,000	5,000	10,000	-	-	-	-	-	-	-
<b>ENM Exemption (2014)</b>												
Max average level		-	-	-	-	250	NA	NA	NA	NA	-	0.5
Absolute max level		-	-	-	-	500	0.5	65	25	15	-	1

HSL – health screening level, EIL – ecological investigation level, ESL – ecological screening level, NL – non limiting, NA – not applicable

### 13. Site characterisation

#### 13.1 Environmental contamination

Elevated levels of Chromium (III) in one sample.

Foreign materials located within stockpiles and across the site.

#### 13.2 Chemical degradation production

The contaminants will not degrade.

#### 13.3 Exposed population

No human health or ecological receptors exposed.

### 14. Conclusions and recommendations

#### 14.1 Summary

A site assessment was conducted on 19 May 2020 consisting of a site walkover, desktop study and limited soil sampling.

The preliminary contamination assessment comprised a soil sampling and laboratory analysis program. A total of sixteen locations were assessed across the site. Six boreholes were drilled to rock, the soil profile described and indicators of potential contamination identified. Ten soil samples were collected from stockpiles to provide an indicator of potential contamination.

The site was dominated by the presence of numerous stockpiles of unknown origin. The stockpiles generally contained reddish brown sandy clay. Gravel was identified in some stockpiles. Foreign materials including concrete, timber, asphalt, bricks and car bodies were also identified on the site. Vegetated surface cover was near 100%. Bare areas were present in areas of gravel. Fill material was identified in two boreholes to depths of 900mm. Refusal due to basalt was encountered in four boreholes at depths from 0.1m.

Vegetation cover restricted inspection of the soil surface for asbestos containing materials. No asbestos containing materials were identified in the borehole cuttings.

Levels of chromium (III) exceeded adopted thresholds in one stockpile sample. Additional investigations are required to delineate impacted material. The levels of all other analytes evaluated in the soil samples were below the adopted health and ecological investigation and screening levels for recreational and commercial land-use.

#### **14.2 Assumptions in reaching the conclusions**

It is assumed the sampling sites are representative of the site.

#### **14.3 Extent of uncertainties**

The analytical data relate only to the locations sampled. Soil conditions can vary both laterally and vertically and it cannot be excluded that unidentified contaminants may be present.

#### **14.4 Suitability for proposed use of the site**

Further investigations are required to determine suitability for the proposed land-use.

#### **14.5 Limitations and constraints on the use of the site**

Additional investigations of the site are required to determine suitability for the proposed land-use.

#### **14.6 Recommendation for further work**

It is expected that the site can be made suitable for the proposed land-use following additional investigations, completion of remediation works and validation assessment.

The investigations should be undertaken following surveying of the proposed site boundary to ensure to entire site is investigated.

Natural soils on the site should be assessed at 45 locations on a 30m systematic sampling pattern in accordance with NEPM (1999) guidelines. Soil samples should be collected using an excavator and analysed for a range of potential contaminants including heavy metals, hydrocarbons and asbestos.

Stockpiles on the site should be assessed in accordance with waste classification guidelines including the *Excavated Natural Material (ENM) Exemption* by use of an excavator to remove vegetation and allow inspection of the material. Stockpiles containing similar material as determined visually should be determined and soil samples collected. Number of soil samples will be based on volume of material identified. Soil samples should be analysed for electrical conductivity, pH, heavy metals, hydrocarbons, organochlorine pesticides, polychlorinated biphenyls and foreign materials. Gravimetric assessment for asbestos is also recommended.

Additional boreholes and excavator pits should be constructed to confirm a quarry or landfill is not present on the site.

Additional investigations are required to delineate chromium (III/VI) impacted soils at sampling location C5.

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A detailed investigation report should be prepared describing the results and suitability for the proposed land-use or requirements for remediation.

Remediation at the stockpile sample C5 was collected will be required to enable the proposed land-use. Remediation should be undertaken in accordance with a remediation action plan (RAP).

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**15. 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 level of confidence of the conclusion reached is governed by the scope of the investigation and the availability and quality of existing data. Where 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.

The investigation identifies the actual subsurface conditions only at those points where samples are taken, when they are taken. Data derived through sampling and subsequent laboratory testing is interpreted by geologists, engineers or scientists who then render an opinion about overall subsurface conditions, the nature and extent of the contamination, its likely impact on the proposed development and appropriate remediation measures. Actual conditions may differ from those inferred to exist, because no professional, no matter how well qualified, and no sub-surface exploration program, no matter how comprehensive, can reveal what is hidden by earth, rock or time. The actual interface between materials may be far more gradual or abrupt than a report indicates. Actual conditions in areas not sampled may differ from predictions. It is thus important to understand the limitations of the investigation and recognise that we are not responsible for these limitations.

This report, including data contained and its findings and conclusions, remains the intellectual property of Envirowest Consulting Pty Ltd. A licence to use the report for the specific purpose identified is granted for the persons identified in that section after full payment for the services involved in preparation of the report. This report should not be used by persons or for purposes other than those stated and should not be reproduced without the permission of Envirowest Consulting Pty Ltd.

**16. References**

Environment Protection Authority (1995) *Contaminated sites: Sampling Design Guidelines* (NSW Environment Protection Authority, Chatswood)

Environment Protection Authority (2020) *Consultants reporting on contaminated land* (NSW Environment Protection Authority, Chatswood)

Environment.nsw.gov.au, 'eSPADE | NSW Environment & Heritage' Version 2. N.p., 2019. Web. 15 May 2020.

Murphy BW and Lawrie JW (1998) *Soil Landscapes of the Dubbo 1:250 000 Sheet Report*, Department of Land and Water Conservation of NSW, Sydney

NEPC (1999 revised 2013) *National Environment Protection (Assessment of Site Contamination) Measure 1999* (National Environment Protection Council Service Corporation, Adelaide)

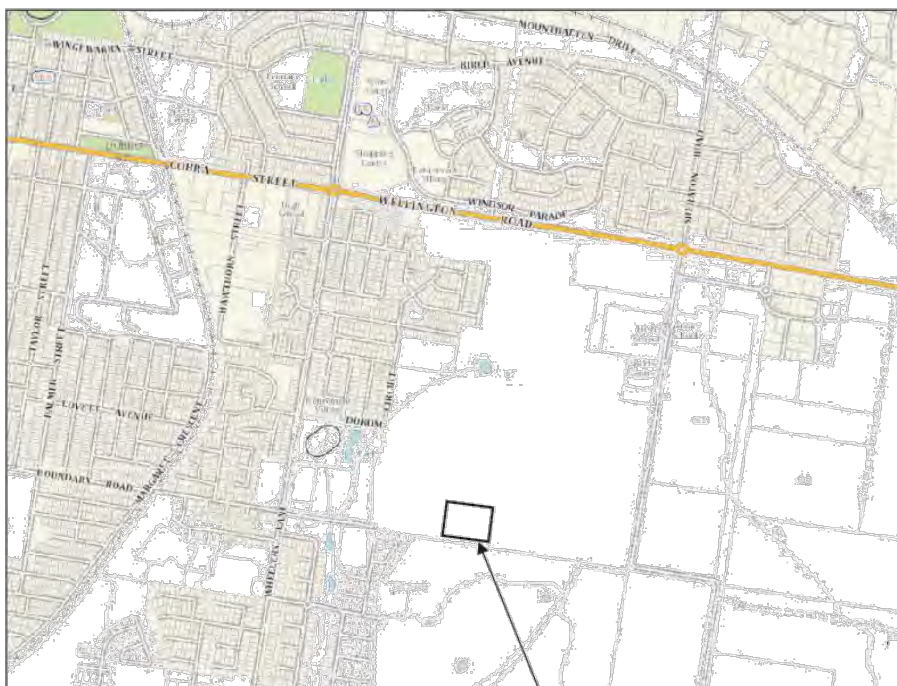


**Figures**

Figure 1. Locality map

Figure 2. Site plan and sampling locations

Figure 3. Photographs of the site



Investigation area

<b>Figure 1. Site locality</b>		
RSL Club, Part Lot 502 DP1255115, Boundary Road, Dubbo NSW		
	Envirowest Consulting Pty Ltd	
Job: R11858c .1	Drawn by: LD	Date: 16/6/2020



**Legend**

- Investigation area
- ⊗ Stockpile sampling location
- ⊠ Borehole

Approximate Scale 1: 2,800



<b>Figure 2. Sampling plan and borehole locations</b>		
RSL Club, Part Lot 502 DP1255115, Boundary Road, Dubbo NSW		
	Envirowest Consulting Pty Ltd	
Job: R11858c.1	Drawn by: LD	Date: 16/6/2020

Figure 3. Photographs of the site



**Appendices**

Appendix 1. Sample analysis, quality assurance and quality control (QAQC) report

Appendix 2. Borelogs

Appendix 3. Field sampling log

Appendix 4. Soil analysis results – SGS report number SE206541 and chain of custody form

Appendix 5. Soil sampling protocols

## Appendix 1. Sample analysis, quality assurance and quality control (QAQC) report

### 1. Data quality indicators (DQI) requirements

#### 1.1 Completeness

A measure of the amount of usable data for a data collection activity. Greater than 95% of the data must be reliable based on the quality objectives. Where greater than two quality objectives have less reliability than the acceptance criterion the data may be considered with uncertainty.

##### 1.1.1 Field

Consideration	Requirement
Locations and depths to be sampled	Described in the sampling plan. The acceptance criterion is 95% data retrieved compared with proposed. Acceptance criterion is 100% in crucial areas.
SOP appropriate and compiled	Described in the sampling plan.
Experienced sampler	Sampler or supervisor
Documentation correct	Sampling log and chain of custody completed

##### 1.1.2 Laboratory

Consideration	Requirement
Samples analysed	Number according to sampling and quality plan
Analytes	Number according to sampling and quality plan
Methods	EPA or other recognised methods with suitable PQL
Sample documentation	Complete including chain of custody and sample description
Sample holding times	Metals 6 months, OCP, PAH, TPH, PCB 14 days

#### 1.2 Comparability

The confidence that data may be considered to be equivalent for each sampling and analytical event. The data must show little or no inconsistencies with results and field observations.

##### 1.2.1 Field

Consideration	Requirement
SOP	Same sampling procedures to be used
Experienced sampler	Sampler or supervisor
Climatic conditions	Described as may influence results
Samples collected	Sample medium, size, preparation, storage, transport

##### 1.2.2 Laboratory

Consideration	Requirement
Analytical methods	Same methods, approved methods
PQL	Same
Same laboratory	Justify if different
Same units	Justify if different

#### 1.3 Representativeness

The confidence (expressed qualitatively) that data are representative of each media present on the site.

##### 1.3.1 Field

Consideration	Requirement
Appropriate media sampled	Sampled according to sampling and quality plan or in accordance with the EPA (1995) sampling guidelines.
All media identified	Sampling media identified in the sampling and quality plan. Where surface water bodies on the site sampled.

**1.3.2 Laboratory**

Consideration	Requirement
Samples analysed	Blanks

**1.4 Precision**

A quantitative measure of the variability (or reproduced of the data). Is measured by standard deviation or relative percent difference (RPD). A RPD analysis is calculated and compared to the practical quantitation limit (PQL) or absolute difference AD.

- Levels greater than 10 times the PQL the RPD is 50%
- Levels between 5 and 10 times the PQL the RPD is 75%
- Levels between 2 and 5 times the PQL the RPD is 100%
- Levels less than 2 times the PQL, the AD is less than 2.5 times the PQL

Data not conforming to the acceptance criterion will be examined for determination of suitability for the purpose of site characterisation.

**1.4.1 Field**

Consideration	Requirement
Field duplicates	Frequency of 5%, results to be within RPD or discussion required indicate the appropriateness of SOP

**1.4.2 Laboratory**

Consideration	Requirement
Laboratory and inter lab duplicates	Frequency of 5%, results to be within RPD or discussion required. Inter laboratory duplicates will be one sample per batch.
Field duplicates	Frequency of 5%, results to be within RPD or discussion required
Laboratory prepared volatile trip spikes	One per sampling batch, results to be within RPD or discussion required

**1.5 Accuracy**

A quantitative measure of the closeness of the reported data to the true value.

**1.5.1 Field**

Consideration	Requirement
SOP	Complied
Inter laboratory duplicates	Frequency of 5%. Analysis criterion 60% RPD for levels greater than 10 times the PQL 85% RPD for levels between 5 to 10 times the PQL 100% RPD at levels between 2 to 5 times the PQL Absolute difference, 3.5 times the PQL where levels are, 2 times PQL

**1.5.2 Laboratory**

Recovery data (surrogates, laboratory control samples and matrix spikes) data subject to the following control limits:

- 60 to 140% acceptable data
- 20-60% discussion required, may be considered acceptable
- 10-20% data should considered as estimates
- 10% data should be rejected



Consideration	Requirement
Field blanks	Frequency of 5%, <5 times the PQL, PQL may be adjusted
Rinsate blanks	Frequency of 5%, <5 times the PQL, PQL may be adjusted
Method blanks	Frequency of 5%, <5 times the PQL, PQL may be adjusted
Matrix spikes	Frequency of 5%, results to be within +/-40% or discussion required
Matrix duplicates	Sample injected with a known concentration of contaminants with tested. Frequency of 5%, results to be within +/-40% or discussion required
Surrogate spikes	QC monitoring spikes to be added to samples at the extraction process in the laboratory where applicable. Surrogates are closely related to the organic target analyte and not normally found in the natural environment. Frequency of 5%, results to be within +/-40% or discussion required
Laboratory control samples	Externally prepared reference material containing representative analytes under investigation. These will be undertaken at one per batch. It is to be within +/-40% or discussion required
Laboratory prepared spikes	Frequency of 5%, results to be within +/-40% or discussion required

## 2. Laboratory analysis summary

One analysis batch was undertaken over the preliminary investigation program. Samples were collected on 19 May 2020. A total of ten samples were submitted for analytical testing. The samples were collected in the field by an environmental scientist from Envirowest Consulting Pty Ltd, placed into laboratory prepared receptacles as recommended in NEPM (1999). The samples preservation and storage was undertaken using standard industry practices (NEPC 1999). A chain of custody form accompanied transport of the samples to the laboratory.

The samples were analysed at the laboratories of SGS Laboratories, Alexandria NSW which is National Association of Testing Authorities (NATA) accredited for the tests undertaken. The analyses undertaken, number of samples tested and methods are presented in the following tables:

Laboratory analysis schedule

Sample id. (sampling location)	Number of samples	Duplicate	Analyses	Date collected	Substrate	Laboratory report
C1, C2, C3, C4, C5, C6, C7, C8, C9, C10	10	1	As, Cd, Cr, Cu, Pb, Ni, Zn, Hg, PAH, TRH(C6-C40), BTEXN	19/5/2020	Soil	SE206541

Analytical methods

Analyte	Extraction	Laboratory methods
Metals	USEPA 200.2 Mod	APHA USEPA SW846-6010
Chromium (III)	-	APHA 3500 CR-A&B & 3120 and USEPA SW846-3060A
Chromium (VI)	USEPA SW846-3060A	USEPA SW846-3060A
Mercury	USEPA 200.2 Mod	APHA 3112
TPH(C6-C9)	USPEA SW846-5030A	USPEA SW 846-8260B
TPH(C10-C36), PAH	Tumbler extraction of solids	USEPA SW 846-8270B
PCB	Tumbler extraction of solids	USEPA SW 846-8270B
OC Pesticides	Tumbler extraction of solids	USEPA SW 846-8270B
BTEX	Tumbler extraction of solids	USEPA SW 846-8260B

## 3. Field quality assurance and quality control

One intra laboratory duplicate sample was collected for the investigation. The frequency was greater than the recommended frequency of 5%. Table A5.1 outlines the samples collected and differences in replicate analyses. Relative differences were deemed to pass if they were within the acceptance limits of +/- 40% for replicate analyses or less than 5 times the detection limit.

Field duplicate frequency						
Sample id.	Number of samples	Duplicate	Frequency (%)	Date collected	Substrate	Laboratory report
C1, C2, C3, C4, C5, C6, C7, C8, C9, C10	10	1	10	19/5/2020	Soil	SE2006541

Table A5.1. Relative differences for intra laboratory duplicates

C1 and DA		
	Relative difference (%)	Pass/Fail
Arsenic	0	Pass
Cadmium	NA	Pass
Chromium	7	Pass
Copper	0	Pass
Lead	0	Pass
Nickel	0	Pass
Zinc	3	Pass
Mercury	NA	-
BTEXN	NA	-
TRH	NA	-
PAH	NA	-

NA – relative difference unable to be calculated as results are less than laboratory detection limit, \*Results less than 5 times laboratory detection limits, \*Variation expected to be due to non-homogenised sample. Does not impact results

No trip blanks or spikes were submitted for analysis. This is not considered to create significant uncertainty in the analysis results because of the following rationale:

- The fieldwork was completed within a short time period and consistent methods were used for soil sampling.
- Soil samples were placed in insulated cooled containers after sampling to ensure preservation during transport and storage.
- The samples were placed in single use jars using clean sampling tools and disposable gloves from material not in contact with other samples. This reduces the likelihood of cross contamination.
- Samples in the analysis batch contain analytes below the level of detection. It is considered unlikely that contamination has occurred as a result of transport and handling.

#### 4. Laboratory quality assurance and quality control

Sample holding times are recommended in NEPC (1999). The time between collection and extraction for all samples was less than the criteria listed below:

Analyte	Maximum holding time
Metals, cyanide	6 months
OCP, TRH, PCB, BTEX, PAH	14 days

The laboratory interpretative reports are presented with individual laboratory report. Assessment is made of holding time, frequency of control samples and quality control samples. No significant outliers exist for the sampling batches. The laboratory report also contains a detailed description of preparation methods and analytical methods.

The results, quality report, interpretative report and chain of custody are presented in the attached appendices. The quality report contains the laboratory duplicates, spikes, laboratory control samples, blanks and where appropriate matrix spike recovery (surrogate).

## 5. Data quality indicators (DQI) analysis

### 5.1 Completeness

A measure of the amount of usable data for a data collection activity (total to be greater than 95%).

The data set was found to be complete based on the scope of work. No critical areas of contamination were omitted from the data set.

#### 5.1.1 Field

Consideration	Accepted	Comment
Locations to be sampled	Yes	In accordance with sampling methodology, described in the report. Sampling locations described in figures.
Depth to be sampled	Yes	In accordance with sampling methodology
SOP appropriate and compiled	Yes	In accordance with sampling methodology Sampled with stainless steel spade into lab prepared containers, decontamination between samples, latex gloves worn by sampler
Experienced sampler	Yes	Same soil sampler, environmental scientist
Documentation correct	Yes	Sampling log completed Chain of custody completed

#### 5.1.2 Laboratory

Consideration	Accepted	Comment
Samples analysed	Yes	All critical samples analysed in accordance with chain of custody and analysis plan
Analytes	Yes	All analytes in accordance with chain of custody and analysis plan
Methods	Yes	Analysed in NATA accredited laboratory with recognised methods and suitable PQL
Sample documentation	Yes	Completed including chain of custody and sample results and quality results report for each batch
Sample holding times	Yes	Metals less than 6 months. OCP, TPH, PCB, BTEX less than 14 days

### 5.2 Comparability

The confidence that data may be considered to be equivalent for each sampling and analytical event.

The data sets were found to be acceptable.

#### 5.2.1 Field

Consideration	Accepted	Comment
SOP	Yes	Same sampling procedures used and sampled on one date
Experienced sampler	Yes	Experienced scientist
Climatic conditions	Yes	Described in field sampling log
Samples collected	Yes	Suitable size, storage and transport

#### 5.2.2 Laboratory

Consideration	Accepted	Comment
Analytical methods	Yes	Same methods all samples, in accordance with NEPC (1999) or USEPA
PQL	Yes	Suitable for analytes
Same laboratory	Yes	SGS is NATA accredited for the test
Same units	Yes	-

### 5.3 Representativeness

The confidence (expressed qualitatively) that data are representative of each media present on the site.

The data sets were found to be acceptable.

#### 5.3.1 Field

Consideration	Accepted	Comment
Appropriate media sampled	Yes	Sampled according to sampling and quality plan
All media identified	Yes	Soil Sampling media identified in the sampling and quality plan

#### 5.3.2 Laboratory

Consideration	Accepted	Comment
Samples analysed	Yes	Undertaken in NATA accredited laboratory. No blanks analysed. Samples in the analysis batch contain analytes below the level of detection. It is considered unlikely that contamination has occurred as a result of transport and handling.

### 5.4 Precision

A quantitative measure of the variability (or reproduced of the data). The data sets were found to be acceptable.

#### 5.4.1 Field

Consideration	Accepted	Comment
SOP	Yes	Complied
Field duplicates	Yes	Collected

#### 5.4.2 Laboratory

Consideration	Accepted	Comment
Laboratory and inter lab duplicates	Yes	Frequency of 5%, results to be within +/-40% or discussion required
Field duplicates	Yes	Frequency of 5%, results to be within +/-40% or discussion required
Laboratory prepared volatile trip spikes	NA	Not analysed due to preliminary nature of investigation

### 5.5 Accuracy

A quantitative measure of the closeness of the reported data to the true value.

The data sets were found to be acceptable.

#### 5.5.1 Field

Consideration	Accepted	Comment
SOP	Yes	Complied
Field blanks	NA	Frequency of 5%, <5 times the PQL, PQL may be adjusted
Rinsate blanks	NA	Frequency of 5%, <5 times the PQL, PQL may be adjusted

#### 5.5.2 Laboratory

Consideration	Accepted	Comment
Method blanks	Yes	Frequency of 5%, <5 times the PQL, PQL may be adjusted
Matrix spikes	Yes	Frequency of 5%, results to be within +/-40% or discussion required.
Matrix duplicates	Yes	Frequency of 5%, results to be within +/-40% or discussion required. RPD failed acceptance criteria due to sample heterogeneity.

Surrogate spikes	Yes	Frequency of 5%, results to be within +/-40% or discussion required. At least 2 of 3 surrogates are within acceptance criteria.
Laboratory control samples	Yes	Frequency of 5%, results to be within +/-40% or discussion required
Laboratory prepared spikes	Yes	Frequency of 5%, results to be within +/-40% or discussion required

No trip blanks, field spikes or sample rinsates were submitted for analysis. This is not considered to create significant uncertainty in the analysis results because of the following rationale:

- The fieldwork methods used for soil sampling were consistent throughout the project with all in situ samples collected from material which had not been subject to exposure.
- The fieldwork was completed within a short time period and consistent methods were used for soil sampling.
- Soil samples were placed in insulated cooled containers as quickly as possible, with the containers filled to minimize headspace. The sample containers were sealed immediately after the sample was collected and chilled in an esky containing ice.
- The samples were stored in a refrigerator and transported with ice bricks to ensure preservation during transport and storage.
- The samples were placed in single use jars using clean sampling tools and disposable gloves from material not in contact with other samples. This reduces the likelihood of cross contamination.
- Samples in the analysis batches contained analytes below the level of detection. It is considered unlikely that contamination has occurred as a result of transport and handling.

## 6. Conclusion

All media appropriate to the objectives of this investigation have been adequately analysed and no area of significant uncertainty exist. It is concluded the data is usable for the purposes of the investigation.

**Appendix 2. Borelogs**

**Borelog**

Job: 11858 Client: The Planning Hub Site: Dubbo RSL Boundary Road Dubbo NSW		Borehole No: BH1	Sampling method: EVH Logged by: LN Date: 19/5/2020		
Depth (m)	Graphic Log	SOIL DESCRIPTION Soil type/rock, grain size, structure, colour, minor components	Unified symbol	Samples	COMMENTS
0.5		FILL, silty sand, dark brown with gravel FILL, silty clay, yellowish brown			No odour No odour
1.0		FILL, silty clay, dark brown			No odour
1.5		SILTY CLAY, reddish brown with gravel	Cl		
		End of hole, drill refusal due to basalt rock			
Slope/nature of surface: 2.4% SE Ground water: No free water identified in soil profile		Remarks (fill, odour, root holes): Fill to 0.9m			

**Borelog**

Job: 11858 Client: The Planning Hub Site: Dubbo RSL Boundary Road Dubbo NSW		Borehole No: BH2	Sampling method: EVH Logged by: LN Date: 19/5/2020		
Depth (m)	Graphic Log	SOIL DESCRIPTION Soil type/rock, grain size, structure, colour, minor components	Unified symbol	Samples	COMMENTS
0.5		FILL, silty sand, light brown			No odour
1.0		SANDY CLAY, dark brown grey	Cl		
1.5		End of hole, drill refusal due to basalt rock			
Slope/nature of surface: 2.4% E Ground water: No free water identified in soil profile		Remarks (fill, odour, root holes): Fill to 0.6m			

**Borelog**

Job: 11858 Client: The Planning Hub Site: Dubbo RSL Boundary Road Dubbo NSW		Borehole No: BH3	Sampling method: EVH Logged by: LN Date: 19/5/2020			
Depth (m)	Graphic Log	<b>SOIL DESCRIPTION</b> Soil type/rock, grain size, structure, colour, minor components		Unified symbol	Samples	COMMENTS
		SILTY SAND, reddish brown		SM		
0.5		End of hole, drill refusal due to basalt rock				
1.0						
1.5						
Slope/nature of surface: 2.4% E Ground water: No free water identified in soil profile		Remarks (fill, odour, root holes): Two boreholes drilled adjacent Borehole 3 with drill refusal at 0.3m.				

**Borelog**

Job: 11858 Client: The Planning Hub Site: Dubbo RSL Boundary Road Dubbo NSW		Borehole No: BH4	Sampling method: EVH Logged by: LN Date: 19/5/2020			
Depth (m)	Graphic Log	<b>SOIL DESCRIPTION</b> Soil type/rock, grain size, structure, colour, minor components		Unified symbol	Samples	COMMENTS
		SILTY SAND, reddish brown		SM		
0.5		End of hole, drill refusal due to basalt rock				
1.0						
1.5						
Slope/nature of surface: 2.4% E Ground water: No free water identified in soil profile		Remarks (fill, odour, root holes): One borehole drilled adjacent Borehole 4 with drill refusal at 0.2m.				



**Borelog**

Job: 11858 Client: The Planning Hub Site: Dubbo RSL Boundary Road Dubbo NSW		Borehole No: BH5	Sampling method: EVH Logged by: LN Date: 19/5/2020		
Depth (m)	Graphic Log	SOIL DESCRIPTION Soil type/rock, grain size, structure, colour, minor components	Unified symbol	Samples	COMMENTS
		SILTY SAND, reddish brown	SM		No odour
0.5		End of hole, drill refusal due to basalt rock			
1.0					
1.5					
Slope/nature of surface: 2.4% E Ground water: No free water identified in soil profile		Remarks (fill, odour, root holes): Nil			

**Borelog**

Job: 11858 Client: The Planning Hub Site: Dubbo RSL Boundary Road Dubbo NSW		Borehole No: BH5	Sampling method: EVH Logged by: LN Date: 19/5/2020		
Depth (m)	Graphic Log	SOIL DESCRIPTION Soil type/rock, grain size, structure, colour, minor components	Unified symbol	Samples	COMMENTS
		SILTY CLAY, reddish brown	Cl		No odour
0.5		SILTY CLAY, grey with gravel	Cl		
1.0		End of hole, drill refusal due to basalt rock			
1.5					
Slope/nature of surface: 2.4% E Ground water: No free water identified in soil profile		Remarks (fill, odour, root holes): Nil			



Appendix 4. Soil analysis results – SGS report number SE206541 and chain of custody form



ANALYTICAL REPORT



CLIENT DETAILS

Contact Luke Niven  
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Telephone 61 2 63614954  
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Project 11858  
 Order Number 11858  
 Samples 13

LABORATORY DETAILS

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SGS Reference SE206541 RD  
 Date Received 21/5/2020  
 Date Reported 28/5/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

SIGNATORIES

Dong LIANG  
 Metals/Inorganics Team Leader

Ly Kim HA  
 Organic Section Head



ANALYTICAL RESULTS

SE206541 R0

VOC's in Soil [AN433] Tested: 22/5/2020

PARAMETER	UNIT	LCR	C1	C2	C3	C4	C5
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1

PARAMETER	UNIT	LCR	C6	C7	C8	C9	C10
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1

PARAMETER	UNIT	LCR	C11
			mg/kg
Benzene	mg/kg	0.1	<0.1
Toluene	mg/kg	0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2
o-xylene	mg/kg	0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6
Naphthalene	mg/kg	0.1	<0.1



ANALYTICAL RESULTS

SE206541 R0

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 22/5/2020

PARAMETER	UNIT	CONC	C1	C2	C3	C4	C5
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UNIT	CONC	C6	C7	C8	C9	C10
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UNIT	CONC	UA
			mg/kg
TRH C6-C9	mg/kg	20	<20
Benzene (F0)	mg/kg	0.1	<0.1
TRH C6-C10	mg/kg	25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25



ANALYTICAL RESULTS

SE206541 R0

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 22/5/2020

PARAMETER	UNIT	LGA	C1	C2	C3	C4	C5
			SE206541 R0	SE206541 R0	SE206541 R0	SE206541 R0	SE206541 R0
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UNIT	LGA	C6	C7	C8	C9	C10
			SE206541 R0	SE206541 R0	SE206541 R0	SE206541 R0	SE206541 R0
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UNIT	LGA	C11
			SE206541 R0
TRH C10-C14	mg/kg	20	<20
TRH C15-C28	mg/kg	45	<45
TRH C29-C36	mg/kg	45	<45
TRH C37-C40	mg/kg	100	<100
TRH >C10-C16	mg/kg	25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120
TRH C10-C36 Total	mg/kg	110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210





ANALYTICAL RESULTS

SE206541 R0

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 22/6/2020

PARAMETER	UNIT	LQA	C1	C2	C3	C4	C5
			SE 206541 R0	SE 206541 R0	SE 206541 R0	SE 206541 R0	SE 206541 R0
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	0.1	1.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	0.3	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	0.2	0.4	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	1.0	0.5	0.2
Pyrene	mg/kg	0.1	<0.1	<0.1	1.1	0.9	0.3
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	0.4	0.6	0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	0.4	0.7	0.1
Benzo(b)fluoranthene	mg/kg	0.1	<0.1	<0.1	0.5	1.2	0.2
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	0.3	0.5	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	0.5	0.9	0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	0.4	0.6	0.1
Dibenzo(a,h)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	0.5	0.7	0.1
Carcinogenic PAHs, BaP TEQ <LOR-II	TEQ (mg/kg)	0.2	<0.2	<0.2	0.7	1.4	<0.2
Carcinogenic PAHs, BaP TEQ <LOR-LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	0.8	1.4	<0.3
Carcinogenic PAHs, BaP TEQ <LOR-LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	0.7	1.4	0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	6.9	8.2	1.4
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	6.9	8.2	1.4

PARAMETER	UNIT	LQA	C6	C7	C8	C9	C10
			SE 206541 R0	SE 206541 R0	SE 206541 R0	SE 206541 R0	SE 206541 R0
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR-II	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR-LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR-LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8



ANALYTICAL RESULTS

SE206541 R0

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 22/6/2020 (continued)

PARAMETER	LOD	LOQ	U/L
Naphthalene	mg/kg	0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1
Fluorene	mg/kg	0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1
Anthracene	mg/kg	0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1
Pyrene	mg/kg	0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1
Chrysene	mg/kg	0.1	<0.1
Benzo(b)fluoranthene	mg/kg	0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR-II	TEQ (mg/kg)	0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR-LOR	TEQ (mg/kg)	0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR-LOR/2	TEQ (mg/kg)	0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8
Total PAH (NEMMHO 16)	mg/kg	0.8	<0.8



ANALYTICAL RESULTS

SE206541 R0

Soluble Anions (1:5) In Soil by Ion Chromatography [AN245] Tested: 27/6/2020

PARAMETER	UNIT	LCR	REQUIREMENT	REQUIREMENT
Chloride	mg/kg	0.25	9.3	35
Sulfate	mg/kg	5	15	100



ANALYTICAL RESULTS

SE206541 R0

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR) [AN122] Tested: 28/8/2020

PARAMETER	UNIT	LCR	RESULT	REMARKS
Exchangeable Sodium, Na	mg/kg	2	49	900
Exchangeable Sodium, Na	meq/100g	0.01	0.21	3.9
Exchangeable Sodium Percentage*	%	0.1	0.6	8.4



ANALYTICAL RESULTS

SE206541 R0

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN020] Testref: 25/8/2020

PARAMETER	LOD	LCR	C1	C2	C3	C4	C5
			mg/kg SE-101	mg/kg SE-101	mg/kg SE-101	mg/kg SE-101	mg/kg SE-101
Arsenic, As	mg/kg	1	4	3	2	1	11
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	18	78	16	87	1200
Copper, Cu	mg/kg	0.5	11	24	16	18	17
Lead, Pb	mg/kg	1	8	8	180	8	15
Nickel, Ni	mg/kg	0.5	8.6	128	15	26	16
Zinc, Zn	mg/kg	2	37	34	77	33	150

PARAMETER	LOD	LCR	C6	C7	C8	C9	C10
			mg/kg SE-101	mg/kg SE-101	mg/kg SE-101	mg/kg SE-101	mg/kg SE-101
Arsenic, As	mg/kg	1	2	1	1	5	5
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	8.8	33	48	11	14
Copper, Cu	mg/kg	0.5	13	14	20	12	12
Lead, Pb	mg/kg	1	4	180	28	6	7
Nickel, Ni	mg/kg	0.5	23	22	34	11	11
Zinc, Zn	mg/kg	2	87	86	38	26	27

PARAMETER	LOD	LCR	C11
			mg/kg SE-101
Arsenic, As	mg/kg	1	4
Cadmium, Cd	mg/kg	0.3	<0.3
Chromium, Cr	mg/kg	0.5	14
Copper, Cu	mg/kg	0.5	11
Lead, Pb	mg/kg	1	8
Nickel, Ni	mg/kg	0.5	8.6
Zinc, Zn	mg/kg	2	38



ANALYTICAL RESULTS

SE206541 R0

Mercury In Soil [AN312] Tested: 25/5/2020

			C1	C2	C3	C4	C5
PARAMETER	UOM	LOD	SE206541 C1	SE206541 C2	SE206541 C3	SE206541 C4	SE206541 C5
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

			C6	C7	C8	C9	C10
PARAMETER	UOM	LOD	SE206541 C6	SE206541 C7	SE206541 C8	SE206541 C9	SE206541 C10
Mercury	mg/kg	0.05	<0.05	0.45	<0.05	<0.05	<0.05

			C11
PARAMETER	UOM	LOD	SE206541 C11
Mercury	mg/kg	0.05	<0.05



ANALYTICAL RESULTS

SE206541 R0

Moisture Content [AN002] Tested: 22/9/2020

PARAMETER	UDM	LOR	BT-308	BT-309	C1	C2	C3
			SSU SE206541.01	SSU SE206541.02	SSU SE206541.03	SSU SE206541.04	SSU SE206541.05
% Moisture	%w/w	1	4.9	15.8	12.6	21.6	4.8

PARAMETER	UDM	LOR	C4	C5	C6	C7	C8
			SSU SE206541.06	SSU SE206541.07	SSU SE206541.08	SSU SE206541.09	SSU SE206541.10
% Moisture	%w/w	1	6.8	12.2	18.7	2.1	9.0

PARAMETER	UDM	LOR	C9	C10	OA
			SSU SE206541.11	SSU SE206541.12	SSU SE206541.13
% Moisture	%w/w	1	24.5	21.1	13.1





METHOD SUMMARY

SE206541 R0

METHOD	METHODOLOGY SUMMARY						
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.						
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.						
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.						
AN122	Exchangeable Cations, CEC and ESP: Soil sample is extracted in 1M Ammonium Acetate at pH=7 (or 1M Ammonium Chloride at pH=7) with cations (Na, K, Ca & Mg) then determined by ICP OES/ICP MS and reported as Exchangeable Cations. For saline soils, these results can be corrected for water soluble cations and reported as Exchangeable cations in meq/100g or soil can be pre-treated (aqueous ethanol/aqueous glycerol) prior to extraction. Cation Exchange Capacity (CEC) is the sum of the exchangeable cations in meq/100g.						
AN122	The Exchangeable Sodium Percentage (ESP) is calculated as the exchangeable sodium divided by the CEC (all in meq/100g) times 100. ESP can be used to categorise the sodicity of the soil as below : <table border="0" style="margin-left: 40px;"> <tr> <td>ESP &lt; 6%</td> <td>non-sodic</td> </tr> <tr> <td>ESP 6-15%</td> <td>sodic</td> </tr> <tr> <td>ESP &gt;15%</td> <td>strongly sodic</td> </tr> </table>	ESP < 6%	non-sodic	ESP 6-15%	sodic	ESP >15%	strongly sodic
ESP < 6%	non-sodic						
ESP 6-15%	sodic						
ESP >15%	strongly sodic						
	Method is referenced to Rayment and Lyons, 2011, sections 15D3 and 15N1.-						
AN245	Anions by Ion Chromatography: A water sample is injected into an eluent stream that passes through the ion chromatographic system where the anions of interest ie Br, Cl, NO2, NO3 and SO4 are separated on their relative affinities for the active sites on the column packing material. Changes to the conductivity and the UV-visible absorbance of the eluent enable identification and quantitation of the anions based on their retention time and peak height or area. APHA 4110 B						
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid, mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500						
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.						
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents.						
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.						
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).						
AN420	Carcinogenic PAHs may be expressed as Benzo(a)pyrene equivalents by applying the BaP toxicity equivalence factor (NEPM 1999, June 2013, B7). These can be reported as the individual PAHs and as a sum of carcinogenic PAHs. The sum is reported three ways, the first assuming all <LOR results are zero, the second assuming all <LOR results are half the LOR and the third assuming all <LOR results are the LOR.						
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC's are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.						



FOOTNOTES

SE206541 R0

FOOTNOTES

<ul style="list-style-type: none"> <li>* NATA accreditation does not cover the performance of this service.</li> <li>** Indicative data, theoretical holding time exceeded.</li> </ul>	<ul style="list-style-type: none"> <li>- Not analysed.</li> <li>NVL Not validated.</li> <li>IS Insufficient sample for analysis.</li> <li>LNR Sample listed, but not received.</li> </ul>	<ul style="list-style-type: none"> <li>UOM Unit of Measure.</li> <li>LOR Limit of Reporting.</li> <li>↑↓ Raised/lowered Limit of Reporting.</li> </ul>
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Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received. Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the "Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.

Note that in terms of units of radioactivity:

- a. 1 Bq is equivalent to 27 pCi
- b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11923.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: [www.sgs.com.au/en-qb/environment-health-and-safety](http://www.sgs.com.au/en-qb/environment-health-and-safety).

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STATEMENT OF QA/QC PERFORMANCE

SE206541 R0

CLIENT DETAILS		LABORATORY DETAILS	
Contact	Luke Niven	Manager	Huong Crawford
Client	ENVIROWEST CONSULTING PTY LIMITED	Laboratory	SGS Alexandria Environmental
Address	PO BOX 8158 ORANGE NSW 2800	Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	61 2 63614954	Telephone	+61 2 8594 0400
Facsimile	(Not specified)	Facsimile	+61 2 8594 0499
Email	luke@envirowest.net.au	Email	au.environmental.sydney@sgs.com
Project	11858	SGS Reference	SE206541 R0
Order Number	11858	Date Received	21 May 2020
Samples	13	Date Reported	28 May 2020

**COMMENTS**

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.  
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.  
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Extraction Date	Soluble Anions (1-6) in Soil by Ion Chromatography	2 Items
Surrogate	VOC's in Soil	2 Items
	Volatile Petroleum Hydrocarbons in Soil	2 Items
Duplicate	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	1 Item

**SAMPLE SUMMARY**

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice Bricks
Samples received in correct containers	Yes	Sample counts by matrix	13 Soil
Date documentation received	21/5/2020	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	12.7°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

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HOLDING TIME SUMMARY

SE206541 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guidelines on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5067.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in Green when within suggested criteria or Red with an appended dagger symbol {†} when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/BAF)

Method: ME-(AU)-ENV/IN922

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysis
B1-300	SE206541.001	L8200369	19 May 2020	21 May 2020	16 Jun 2020	25 May 2020	16 Jun 2020	28 May 2020
B1-1500	SE206541.002	L8200369	19 May 2020	21 May 2020	16 Jun 2020	25 May 2020	16 Jun 2020	28 May 2020

Mercury in Soil

Method: ME-(AU)-ENV/IN442

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysis
C1	SE206541.003	L8200348	19 May 2020	21 May 2020	16 Jun 2020	25 May 2020	16 Jun 2020	28 May 2020
C2	SE206541.004	L8200348	19 May 2020	21 May 2020	16 Jun 2020	25 May 2020	16 Jun 2020	28 May 2020
C3	SE206541.005	L8200348	19 May 2020	21 May 2020	16 Jun 2020	25 May 2020	16 Jun 2020	28 May 2020
C4	SE206541.006	L8200348	19 May 2020	21 May 2020	16 Jun 2020	25 May 2020	16 Jun 2020	28 May 2020
C5	SE206541.007	L8200348	19 May 2020	21 May 2020	16 Jun 2020	25 May 2020	16 Jun 2020	28 May 2020
C6	SE206541.008	L8200348	19 May 2020	21 May 2020	16 Jun 2020	25 May 2020	16 Jun 2020	28 May 2020
C7	SE206541.009	L8200348	19 May 2020	21 May 2020	16 Jun 2020	25 May 2020	16 Jun 2020	28 May 2020
C8	SE206541.010	L8200348	19 May 2020	21 May 2020	16 Jun 2020	25 May 2020	16 Jun 2020	28 May 2020
C9	SE206541.011	L8200348	19 May 2020	21 May 2020	16 Jun 2020	25 May 2020	16 Jun 2020	28 May 2020
C10	SE206541.012	L8200348	19 May 2020	21 May 2020	16 Jun 2020	25 May 2020	16 Jun 2020	28 May 2020
DA	SE206541.013	L8200348	19 May 2020	21 May 2020	16 Jun 2020	25 May 2020	16 Jun 2020	28 May 2020

Molinate Content

Method: ME-(AU)-ENV/IN442

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysis
B1-300	SE206541.001	L8200191	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	27 May 2020	27 May 2020
B1-1500	SE206541.002	L8200191	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	27 May 2020	27 May 2020
C1	SE206541.003	L8200191	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	27 May 2020	27 May 2020
C2	SE206541.004	L8200191	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	27 May 2020	27 May 2020
C3	SE206541.005	L8200191	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	27 May 2020	27 May 2020
C4	SE206541.006	L8200191	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	27 May 2020	27 May 2020
C5	SE206541.007	L8200191	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	27 May 2020	27 May 2020
C6	SE206541.008	L8200191	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	27 May 2020	27 May 2020
C7	SE206541.009	L8200191	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	27 May 2020	27 May 2020
C8	SE206541.010	L8200191	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	27 May 2020	27 May 2020
C9	SE206541.011	L8200191	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	27 May 2020	27 May 2020
C10	SE206541.012	L8200191	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	27 May 2020	27 May 2020
DA	SE206541.013	L8200191	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	27 May 2020	27 May 2020

PAH (Polycyclic Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-ENV/IN442

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysis
C1	SE206541.003	L8200187	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	28 May 2020
C2	SE206541.004	L8200187	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	28 May 2020
C3	SE206541.005	L8200187	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	28 May 2020
C4	SE206541.006	L8200187	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	28 May 2020
C5	SE206541.007	L8200187	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	28 May 2020
C6	SE206541.008	L8200187	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	28 May 2020
C7	SE206541.009	L8200187	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	28 May 2020
C8	SE206541.010	L8200187	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	28 May 2020
C9	SE206541.011	L8200187	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	28 May 2020
C10	SE206541.012	L8200187	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	28 May 2020
DA	SE206541.013	L8200187	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	28 May 2020

Reliable Arsenic (As) in Soil by Ion Chromatography

Method: ME-(AU)-ENV/IN442

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysis
B1-300	SE206541.001	L8200487	19 May 2020	21 May 2020	26 May 2020	27 May 2020†	24 Jun 2020	28 May 2020
B1-1500	SE206541.002	L8200487	19 May 2020	21 May 2020	26 May 2020	27 May 2020†	24 Jun 2020	28 May 2020

Total Recoverable Elements in Soil/Paste Solids/Materials by ICPOES

Method: ME-(AU)-ENV/IN442

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysis
C1	SE206541.003	L8200340	19 May 2020	21 May 2020	15 Nov 2020	25 May 2020	15 Nov 2020	28 May 2020
C2	SE206541.004	L8200340	19 May 2020	21 May 2020	15 Nov 2020	25 May 2020	15 Nov 2020	28 May 2020
C3	SE206541.005	L8200340	19 May 2020	21 May 2020	15 Nov 2020	25 May 2020	15 Nov 2020	28 May 2020
C4	SE206541.006	L8200340	19 May 2020	21 May 2020	15 Nov 2020	25 May 2020	15 Nov 2020	28 May 2020
C5	SE206541.007	L8200340	19 May 2020	21 May 2020	15 Nov 2020	25 May 2020	15 Nov 2020	28 May 2020
C6	SE206541.008	L8200340	19 May 2020	21 May 2020	15 Nov 2020	25 May 2020	15 Nov 2020	28 May 2020
C7	SE206541.009	L8200340	19 May 2020	21 May 2020	15 Nov 2020	25 May 2020	15 Nov 2020	28 May 2020
C8	SE206541.010	L8200340	19 May 2020	21 May 2020	15 Nov 2020	25 May 2020	15 Nov 2020	28 May 2020



HOLDING TIME SUMMARY

SE206541 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guidelines on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5067.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in Green when within suggested criteria or Red with an appended dagger symbol {†} when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Total Recoverable Elements in Soil/Water Solids/Minerals by ICP/MS (continued)

Method: ME-(AU)-ENV/AN600000

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Received
C9	SE206541.011	L8200340	19 May 2020	21 May 2020	15 Nov 2020	25 May 2020	15 Nov 2020	28 May 2020
C10	SE206541.012	L8200340	19 May 2020	21 May 2020	15 Nov 2020	25 May 2020	15 Nov 2020	28 May 2020
DA	SE206541.013	L8200340	19 May 2020	21 May 2020	15 Nov 2020	25 May 2020	15 Nov 2020	28 May 2020

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-ENV/AN600000

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Received
C1	SE206541.003	L8200187	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
C2	SE206541.004	L8200187	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
C3	SE206541.005	L8200187	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
C4	SE206541.006	L8200187	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
C5	SE206541.007	L8200187	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
C6	SE206541.008	L8200187	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
C7	SE206541.009	L8200187	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
C8	SE206541.010	L8200187	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
C9	SE206541.011	L8200187	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
C10	SE206541.012	L8200187	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
DA	SE206541.013	L8200187	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020

VOC's in Soil

Method: ME-(AU)-ENV/AN600000

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Received
C1	SE206541.003	L8200182	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
C2	SE206541.004	L8200182	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
C3	SE206541.005	L8200182	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
C4	SE206541.006	L8200182	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
C5	SE206541.007	L8200182	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
C6	SE206541.008	L8200182	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
C7	SE206541.009	L8200182	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
C8	SE206541.010	L8200182	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
C9	SE206541.011	L8200182	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
C10	SE206541.012	L8200182	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
DA	SE206541.013	L8200182	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-ENV/AN600000

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Received
C1	SE206541.003	L8200182	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
C2	SE206541.004	L8200182	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
C3	SE206541.005	L8200182	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
C4	SE206541.006	L8200182	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
C5	SE206541.007	L8200182	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
C6	SE206541.008	L8200182	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
C7	SE206541.009	L8200182	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
C8	SE206541.010	L8200182	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
C9	SE206541.011	L8200182	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
C10	SE206541.012	L8200182	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
DA	SE206541.013	L8200182	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020





SURROGATES

SE206541 R0

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for chartered surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in Green when within suggested criteria or Red with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: MS-(AU)-ENV-022

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	C1	SE206541.003	%	70 - 130%	92
	C2	SE206541.004	%	70 - 130%	85
	C3	SE206541.005	%	70 - 130%	91
	C4	SE206541.006	%	70 - 130%	78
	C5	SE206541.007	%	70 - 130%	50
	C6	SE206541.008	%	70 - 130%	87
	C7	SE206541.009	%	70 - 130%	94
	C8	SE206541.010	%	70 - 130%	88
	C9	SE206541.011	%	70 - 130%	88
	C10	SE206541.012	%	70 - 130%	88
d14-p-terphenyl (Surrogate)	DA	SE206541.013	%	70 - 130%	89
	C1	SE206541.003	%	70 - 130%	114
	C2	SE206541.004	%	70 - 130%	122
	C3	SE206541.005	%	70 - 130%	98
	C4	SE206541.006	%	70 - 130%	98
	C5	SE206541.007	%	70 - 130%	112
	C6	SE206541.008	%	70 - 130%	115
	C7	SE206541.009	%	70 - 130%	91
	C8	SE206541.010	%	70 - 130%	110
	C9	SE206541.011	%	70 - 130%	105
d15-nitrobenzene (Surrogate)	C10	SE206541.012	%	70 - 130%	100
	DA	SE206541.013	%	70 - 130%	58
	C1	SE206541.003	%	70 - 130%	58
	C2	SE206541.004	%	70 - 130%	58
	C3	SE206541.005	%	70 - 130%	97
	C4	SE206541.006	%	70 - 130%	57
	C5	SE206541.007	%	70 - 130%	92
	C6	SE206541.008	%	70 - 130%	55
	C7	SE206541.009	%	70 - 130%	94
	C8	SE206541.010	%	70 - 130%	56
d16-toluene (Surrogate)	C9	SE206541.011	%	70 - 130%	56
	C10	SE206541.012	%	70 - 130%	58
	DA	SE206541.013	%	70 - 130%	100

VOCs in Soil

Method: MS-(AU)-ENV-022

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	C1	SE206541.003	%	60 - 130%	75
	C2	SE206541.004	%	60 - 130%	80
	C3	SE206541.005	%	60 - 130%	80
	C4	SE206541.006	%	60 - 130%	74
	C5	SE206541.007	%	60 - 130%	78
	C6	SE206541.008	%	60 - 130%	82
	C7	SE206541.009	%	60 - 130%	79
	C8	SE206541.010	%	60 - 130%	73
	C9	SE206541.011	%	60 - 130%	80
	C10	SE206541.012	%	60 - 130%	70
d4-1,2-dichloroethane (Surrogate)	DA	SE206541.013	%	60 - 130%	78
	C1	SE206541.003	%	60 - 130%	104
	C2	SE206541.004	%	60 - 130%	109
	C3	SE206541.005	%	60 - 130%	112
	C4	SE206541.006	%	60 - 130%	105
	C5	SE206541.007	%	60 - 130%	108
	C6	SE206541.008	%	60 - 130%	113
	C7	SE206541.009	%	60 - 130%	111
	C8	SE206541.010	%	60 - 130%	110
	C9	SE206541.011	%	60 - 130%	108
d18-toluene (Surrogate)	C10	SE206541.012	%	60 - 130%	102
	DA	SE206541.013	%	60 - 130%	103
	C1	SE206541.003	%	60 - 130%	117
d19-toluene (Surrogate)	C2	SE206541.004	%	60 - 130%	127
	C3	SE206541.005	%	60 - 130%	131 (G)



SURROGATES

SE206541 R0

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charred surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in Green when within suggested criteria or Red with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOCs in Soil (continued)

Method: MS-(AU)-EPA/RC403

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
oB-toluene (Surrogate)	C4	SE206541.006	%	60 - 130%	120
	C5	SE206541.007	%	60 - 130%	124
	C6	SE206541.008	%	60 - 130%	125
	C7	SE206541.009	%	60 - 130%	127
	C8	SE206541.010	%	60 - 130%	128
	C9	SE206541.011	%	60 - 130%	122 (3)
	C10	SE206541.012	%	60 - 130%	118
	DA	SE206541.013	%	60 - 130%	122

Volatile Petroleum Hydrocarbons in Soil

Method: MS-(AU)-EPA/RC403

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	C1	SE206541.003	%	60 - 130%	75
	C2	SE206541.004	%	60 - 130%	80
	C3	SE206541.005	%	60 - 130%	80
	C4	SE206541.006	%	60 - 130%	74
	C5	SE206541.007	%	60 - 130%	75
	C6	SE206541.008	%	60 - 130%	82
	C7	SE206541.009	%	60 - 130%	79
	C8	SE206541.010	%	60 - 130%	75
	C9	SE206541.011	%	60 - 130%	80
	C10	SE206541.012	%	60 - 130%	70
oB-1,2-dichloroethane (Surrogate)	DA	SE206541.013	%	60 - 130%	76
	C1	SE206541.003	%	60 - 130%	104
	C2	SE206541.004	%	60 - 130%	103
	C3	SE206541.005	%	60 - 130%	112
	C4	SE206541.006	%	60 - 130%	104
	C5	SE206541.007	%	60 - 130%	103
	C6	SE206541.008	%	60 - 130%	110
	C7	SE206541.009	%	60 - 130%	111
	C8	SE206541.010	%	60 - 130%	113
	C9	SE206541.011	%	60 - 130%	109
oB-toluene (Surrogate)	C10	SE206541.012	%	60 - 130%	102
	DA	SE206541.013	%	60 - 130%	109
	C1	SE206541.003	%	60 - 130%	117
	C2	SE206541.004	%	60 - 130%	127
	C3	SE206541.005	%	60 - 130%	131 (3)
	C4	SE206541.006	%	60 - 130%	120
	C5	SE206541.007	%	60 - 130%	124
	C6	SE206541.008	%	60 - 130%	126
	C7	SE206541.009	%	60 - 130%	127
	C8	SE206541.010	%	60 - 130%	128
C9	SE206541.011	%	60 - 130%	132 (3)	
C10	SE206541.012	%	60 - 130%	116	
DA	SE206541.013	%	60 - 130%	122	





METHOD BLANKS

SE206541 R0

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).  
 Result is shown in Green when within suggested criteria or Red with an appended dagger symbol (†) when outside suggested criteria.

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/CAF)

Method ME(AU)-EN/EN/EN/EN

Sample Number	Parameter	Units	LOR	Result
LB200365.001	Exchangeable Sodium, Na	mg/kg	2	0

Mercury in Soil

Method ME(AU)-EN/EN/EN/EN

Sample Number	Parameter	Units	LOR	Result
LB200348.001	Mercury	mg/kg	0.05	<0.05

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method ME(AU)-EN/EN/EN/EN

Sample Number	Parameter	Units	LOR	Result
LB200187.001	Naphthalene	mg/kg	0.1	<0.1
	2-methylnaphthalene	mg/kg	0.1	<0.1
	1-methylnaphthalene	mg/kg	0.1	<0.1
	Acenaphthylene	mg/kg	0.1	<0.1
	Acenaphthene	mg/kg	0.1	<0.1
	Fluorene	mg/kg	0.1	<0.1
	Phenanthrene	mg/kg	0.1	<0.1
	Anthracene	mg/kg	0.1	<0.1
	Fluoranthene	mg/kg	0.1	<0.1
	Pyrene	mg/kg	0.1	<0.1
	Benzo(a)anthracene	mg/kg	0.1	<0.1
	Chrysene	mg/kg	0.1	<0.1
	Benzo(a)pyrene	mg/kg	0.1	<0.1
	Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
	Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
	Benzo(ghi)perylene	mg/kg	0.1	<0.1
	Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates			
	d5-nitrobenzene (Surrogate)	%	-	50
	2-fluorobiphenyl (Surrogate)	%	-	51
	d14-p-terphenyl (Surrogate)	%	-	119

Soluble Anions (18) in Soil by Ion Chromatography

Method ME(AU)-EN/EN/EN/EN

Sample Number	Parameter	Units	LOR	Result
LB200467.001	Chloride	mg/kg	0.25	<0.25
	Sulfate	mg/kg	5	<5.0

Total Recoverable Elements in Soil/Waste Solids/Materials by ICP-OES

Method ME(AU)-EN/EN/EN/EN

Sample Number	Parameter	Units	LOR	Result
LB200348.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0

TRH (Total Recoverable Hydrocarbons) in Soil

Method ME(AU)-EN/EN/EN/EN

Sample Number	Parameter	Units	LOR	Result
LB200187.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110

VOCs in Soil

Method ME(AU)-EN/EN/EN/EN

Sample Number	Parameter	Units	LOR	Result	
LB200182.001	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m,p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1



METHOD BLANKS

SE206541 R0

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).  
 Result is shown in Green when within suggested criteria or Red with an appended dagger symbol (†) when outside suggested criteria.

VOCs in Soil (continued) Notes: MS(AU)-EN-14000

Sample Number	Parameter	Unit	LOR	Result
LB200182.001	Polycyclic VOCs	Naphthalene	mg/kg	<0.1
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	112
		d6-toluene (Surrogate)	%	112
		Bromofluorobenzene (Surrogate)	%	64
	Totals	Total BTEX	mg/kg	0.6

Volatile Petroleum Hydrocarbons in Soil Notes: MS(AU)-EN-14000

Sample Number	Parameter	Unit	LOR	Result
LB200182.001	TPH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	112



DUPLICATES

SE206541 R0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula:  $RPD = |OriginalResult - ReplicateResult| \times 100 / Mean$

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula:  $MAD = 100 \times SDL / Mean + LR$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in Green when within suggested criteria or Red with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Necessary In Soil

Notes: MS(AU)-EPA/NZSE

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Diff %	RPD %
SE206541.012	LB200348.014	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE206547.005	LB200348.022	Mercury	mg/kg	0.05	<0.05	<0.05	200	0

Moisture Content

Notes: MS(AU)-EPA/NZSE

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Diff %	RPD %
SE206541.009	LB200191.011	% Moisture	%w/w	1	2.1	2.2	76	2
SE206547.005	LB200191.021	% Moisture	%w/w	1	8.7	8.9	41	3

PAH (Polycyclic Aromatic Hydrocarbons) In Soil

Notes: MS(AU)-EPA/NZSE

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Diff %	RPD %
SE206541.011	LB200187.014	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
		Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
		Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(b)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Dibenz(a,h)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
		Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	<0.2	200	0
		Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	<0.3	134	0
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	<0.2	175	0		
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0		
Surrogates		d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	30	2
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	1
SE206547.005	LB200187.022	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
		Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
		Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(b)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Dibenz(a,h)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
		Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	<0.2	200	0
		Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	<0.3	134	0
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	<0.2	175	0		
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0		
Surrogates		d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	30	1
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	4



DUPLICATES

SE206541 R0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula:  $RPD = |OriginalResult - ReplicateResult| \times 100 / Mean$

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula:  $MAD = 100 \times SDL / Mean + LR$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in Green when within suggested criteria or Red with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued) Method: ME(AU)-EPA/1631/0003

Original	Duplicate	Parameter	Units	UCL	Original	Duplicate	RPD %
SE206547.005	LB200187.022	Surrogates	mg/kg	-	0.5	0.4	30
		d14-p-terphenyl (Surrogate)					27

Total Recoverable Elements in Soil/Route Solids/Substrates by ICPOES Method: ME(AU)-EPA/8210/9903

Original	Duplicate	Parameter	Units	UCL	Original	Duplicate	RPD %
SE206541.012	LB200340.014	Arsenic, As	mg/kg	1	5	5	49
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200
		Chromium, Cr	mg/kg	0.5	14	12	34
		Copper, Cu	mg/kg	0.5	12	11	34
		Nickel, Ni	mg/kg	0.5	11	11	35
		Lead, Pb	mg/kg	1	7	6	45
		Zinc, Zn	mg/kg	2	27	24	38
SE206547.005	LB200340.022	Arsenic, As	mg/kg	1	4	4	56
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200
		Chromium, Cr	mg/kg	0.5	11	11	35
		Copper, Cu	mg/kg	0.5	76	150	30
		Nickel, Ni	mg/kg	0.5	13	14	34
		Lead, Pb	mg/kg	1	19	9	41
		Zinc, Zn	mg/kg	2	44	47	34

TRH (Total Recoverable Hydrocarbons) in Soil Method: ME(AU)-EPA/8210/9903

Original	Duplicate	Parameter	Units	UCL	Original	Duplicate	RPD %
SE206541.011	LB200187.014	TRH C10-C14	mg/kg	20	<20	<20	200
		TRH C15-C28	mg/kg	45	<45	<45	200
		TRH C29-C36	mg/kg	45	<45	<45	200
		TRH C37-C40	mg/kg	100	<100	<100	200
		TRH C10-C36 Total	mg/kg	110	<110	<110	200
		TRH >C18-C40 Total (F bands)	mg/kg	210	<210	<210	200
		TRH F Bands					
		TRH >C18-C16	mg/kg	25	<25	<25	200
		TRH >C18-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200
		TRH >C18-C34 (F3)	mg/kg	90	<90	<90	200
		TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200
SE206547.005	LB200187.022	TRH C10-C14	mg/kg	20	<20	<20	200
		TRH C15-C28	mg/kg	45	<45	<45	200
		TRH C29-C36	mg/kg	45	<45	<45	200
		TRH C37-C40	mg/kg	100	<100	<100	200
		TRH C10-C36 Total	mg/kg	110	<110	<110	200
		TRH >C18-C40 Total (F bands)	mg/kg	210	<210	<210	200
		TRH F Bands					
		TRH >C18-C16	mg/kg	25	<25	<25	200
		TRH >C18-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200
		TRH >C18-C34 (F3)	mg/kg	90	<90	<90	200
		TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200

VOC's in Soil Method: ME(AU)-EPA/8210/9903

Original	Duplicate	Parameter	Units	UCL	Original	Duplicate	RPD %
SE206541.011	LB200182.014	Monoaromatic					
		Benzene	mg/kg	0.1	<0.1	<0.1	200
		Toluene	mg/kg	0.1	<0.1	<0.1	200
		Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200
		m/p-xylene	mg/kg	0.2	<0.2	<0.2	200
		o-xylene	mg/kg	0.1	<0.1	<0.1	200
		Polycyclic					
		Naphthalene	mg/kg	0.1	<0.1	<0.1	200
		Surrogates					
		d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.5	12.1	50
		d8-toluene (Surrogate)	mg/kg	-	13.2	12.1	50
		Bromofluorobenzene (Surrogate)	mg/kg	-	8.0	7.8	50
		Totals	mg/kg	0.3	<0.3	<0.3	200
		Total BTEX	mg/kg	0.6	<0.6	<0.6	200
SE206547.005	LB200182.022	Monoaromatic					
		Benzene	mg/kg	0.1	<0.1	<0.1	200
		Toluene	mg/kg	0.1	<0.1	<0.1	200
		Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200
		m/p-xylene	mg/kg	0.2	<0.2	<0.2	200
		o-xylene	mg/kg	0.1	<0.1	<0.1	200
		Polycyclic					
		Naphthalene	mg/kg	0.1	<0.1	<0.1	200
		Surrogates					
		d4-1,2-dichloroethane (Surrogate)	mg/kg	-	13.5	10.9	50



DUPLICATES

SE206541 R0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula:  $RPD = |OriginalResult - ReplicateResult| \times 100 / Mean$

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula:  $MAD = 100 \times SDL / Mean + LR$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in Green when within suggested criteria or Red with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: MS(AU)-EPA/14903

Original	Duplicate	Parameter	Units	ULH	Original	Duplicate	Colpass	RPD %
SE206547.005	LB200182.022	Surrogates						
		d8-toluene (Surrogate)	mg/kg	-	12.1	10.2	50	18
		Bromofluorobenzene (Surrogate)	mg/kg	-	8.7	7.7	50	12
		Totals						
		Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
		Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0

Volatile Petroleum Hydrocarbons in Soil

Method: MS(AU)-EPA/14903

Original	Duplicate	Parameter	Units	ULH	Original	Duplicate	Colpass	RPD %
SE206541.011	LB200182.014	TRH C6-C10	mg/kg	25	<25	<25	200	0
		TRH C6-C5	mg/kg	20	<20	<20	200	0
		Surrogates						
		d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.9	12.1	30	18
		d8-toluene (Surrogate)	mg/kg	-	13.2	12.1	30	9
		Bromofluorobenzene (Surrogate)	mg/kg	-	8.0	7.8	30	3
		VPH F Bands						
		Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
		TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE206547.005	LB200182.022	TRH C6-C10	mg/kg	25	<25	<25	200	0
		TRH C6-C5	mg/kg	20	<20	<20	200	0
		Surrogates						
		d4-1,2-dichloroethane (Surrogate)	mg/kg	-	13.5	10.9	30	21
		d8-toluene (Surrogate)	mg/kg	-	12.1	10.2	30	16
		Bromofluorobenzene (Surrogate)	mg/kg	-	8.7	7.7	30	12
		VPH F Bands						
		Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
		TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0



LABORATORY CONTROL SAMPLES

SE206541 R0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (Ref. MP-(AU)-ENV/QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in Green when within suggested criteria or Red with an appended dagger symbol (†) when outside suggested criteria.

Mercury In Soil

Method: MS(AU)-ENV/QU-022

Sample Number	Parameter	Units	LDR	Result	Expectation	Criteria %	Recovery %
LB20048.002	Mercury	mg/kg	0.05	0.21	0.2	70 - 130	105

PAH (Polycyclic Aromatic Hydrocarbons) In Soil

Method: MS(AU)-ENV/QU-022

Sample Number	Parameter	Units	LDR	Result	Expectation	Criteria %	Recovery %	
LB200187.002	Naphthalene	mg/kg	0.1	4.4	4	60 - 140	110	
	Acenaphthylene	mg/kg	0.1	4.6	4	60 - 140	116	
	Acenaphthene	mg/kg	0.1	4.3	4	60 - 140	107	
	Phenanthrene	mg/kg	0.1	3.8	4	60 - 140	95	
	Anthracene	mg/kg	0.1	4.4	4	60 - 140	109	
	Fluoranthene	mg/kg	0.1	4.0	4	60 - 140	90	
	Pyrene	mg/kg	0.1	4.5	4	60 - 140	112	
	Benzo(a)pyrene	mg/kg	0.1	4.4	4	60 - 140	109	
	Sumogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	93
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	92
	d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	85	

Soluble Anions (10) In Soil by Ion Chromatography

Method: MS(AU)-ENV/QU-022

Sample Number	Parameter	Units	LDR	Result	Expectation	Criteria %	Recovery %
LB200487.002	Chloride	mg/kg	0.25	92	100	70 - 130	92
	Sulfate	mg/kg	5	91	100	70 - 130	91

Total Recoverable Elements In Soil/Waste Solids/Materials by ICP-OES

Method: MS(AU)-ENV/QU-022

Sample Number	Parameter	Units	LDR	Result	Expectation	Criteria %	Recovery %
LB200940.002	Arsenic, As	mg/kg	1	360	318.22	80 - 120	109
	Cadmium, Cd	mg/kg	0.3	5.7	5.41	80 - 120	98
	Chromium, Cr	mg/kg	0.5	41	38.31	80 - 120	107
	Copper, Cu	mg/kg	0.5	320	290	80 - 120	109
	Nickel, Ni	mg/kg	0.5	200	187	80 - 120	107
	Lead, Pb	mg/kg	1	95	83.9	80 - 120	105
	Zinc, Zn	mg/kg	2	250	273	80 - 120	105

TRH (Total Recoverable Hydrocarbons) In Soil

Method: MS(AU)-ENV/QU-022

Sample Number	Parameter	Units	LDR	Result	Expectation	Criteria %	Recovery %	
LB200187.002	TRH C 10-C14	mg/kg	20	39	40	60 - 140	98	
	TRH C 15-C28	mg/kg	45	<45	40	60 - 140	98	
	TRH C 29-C36	mg/kg	45	<45	40	60 - 140	70	
	TRH F Bands	TRH >C 10-C 16	mg/kg	25	40	40	60 - 140	103
		TRH >C 16-C 34 (F3)	mg/kg	90	<90	40	60 - 140	85
		TRH >C 34-C 40 (F4)	mg/kg	120	<120	20	60 - 140	60

VOC's In Soil

Method: MS(AU)-ENV/QU-022

Sample Number	Parameter	Units	LDR	Result	Expectation	Criteria %	Recovery %	
LB200182.002	Monocyclic	Benzene	mg/kg	0.1	3.5	5	60 - 140	71
		Toluene	mg/kg	0.1	3.6	5	60 - 140	75
	Aromatic	Ethylbenzene	mg/kg	0.1	3.7	5	60 - 140	74
		m,p-xylene	mg/kg	0.2	7.7	10	60 - 140	77
		o-xylene	mg/kg	0.1	3.6	5	60 - 140	73
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	11.2	10	70 - 130	112
		d8-toluene (Surrogate)	mg/kg	-	10.1	10	70 - 130	101
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.3	10	70 - 130	93

Volatle Petroleum Hydrocarbons In Soil

Method: MS(AU)-ENV/QU-022

Sample Number	Parameter	Units	LDR	Result	Expectation	Criteria %	Recovery %	
LB200182.002	TRH C5-C10	TRH C5-C10	mg/kg	25	71	82.5	60 - 140	77
		TRH C6-C9	mg/kg	20	60	80	60 - 140	75
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	11.2	10	70 - 130	112
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.3	10	70 - 130	93
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	45	62.5	60 - 140	78



MATRIX SPIKES

SE206541 R0

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub-sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in Green when within suggested criteria or Red with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: MS(AU)-EPA-1631C

QC Sample	Sample Number	Parameter	Unit	LOR	Result	Original	Spikes	Recovery %
SE206541.003	LB200948.004	Mercury	mg/kg	0.05	0.20	<0.05	0.2	69

PAH (Polycyclic Aromatic Hydrocarbons) in Soil

Method: MS(AU)-EPA-8210C

QC Sample	Sample Number	Parameter	Unit	LOR	Result	Original	Spikes	Recovery %
SE206541.004	LB200187.023	Naphthalene	mg/kg	0.1	4.4	<0.1	4	108
		2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Acenaphthylene	mg/kg	0.1	4.4	<0.1	4	111
		Acenaphthene	mg/kg	0.1	4.3	<0.1	4	127
		Fluorene	mg/kg	0.1	<0.1	<0.1	-	-
		Phenanthrene	mg/kg	0.1	4.0	<0.1	4	139
		Anthracene	mg/kg	0.1	4.6	<0.1	4	114
		Fluoranthene	mg/kg	0.1	4.3	<0.1	4	103
		Pyrene	mg/kg	0.1	4.5	<0.1	4	112
		Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
		Chrysene	mg/kg	0.1	<0.1	<0.1	-	-
		Benzo(b)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
		Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
		Benzo(a)pyrene	mg/kg	0.1	4.4	<0.1	4	110
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	-	-
		Dibenz(a,h)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
		Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	-	-
		Carcinogenic PAHs, BaP TEQ <LOR-II	TEQ (mg/kg)	0.2	4.4	<0.2	-	-
		Carcinogenic PAHs, BaP TEQ <LOR-LOR	TEQ (mg/kg)	0.3	4.6	<0.3	-	-
Carcinogenic PAHs, BaP TEQ <LOR-LOR/2	TEQ (mg/kg)	0.2	4.6	<0.2	-	-		
Total PAH (18)	mg/kg	0.8	35	<0.8	-	-		
Surrogate	mS-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	-	57	
	2-Fluorophenyl (Surrogate)	mg/kg	-	0.5	0.4	-	54	
	d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.6	-	67	

Total Recoverable Elements in Soil/Paste Solids/Materials by ICP-OES

Method: MS(AU)-EPA-8210C

QC Sample	Sample Number	Parameter	Unit	LOR	Result	Original	Spikes	Recovery %
SE206541.003	LB200340.004	Arsenic, As	mg/kg	1	59	4	50	52
		Cadmium, Cd	mg/kg	0.3	43	<0.3	50	66
		Chromium, Cr	mg/kg	0.5	61	15	50	59
		Copper, Cu	mg/kg	0.5	55	11	50	59
		Nickel, Ni	mg/kg	0.5	55	8.6	50	56
		Lead, Pb	mg/kg	1	54	9	50	63
		Zinc, Zn	mg/kg	2	80	37	50	65

TRH (Total Recoverable Hydrocarbons) in Soil

Method: MS(AU)-EPA-8210C

QC Sample	Sample Number	Parameter	Unit	LOR	Result	Original	Spikes	Recovery %	
SE206541.004	LB200187.023	TRH C10-C14	mg/kg	20	42	<20	40	135	
		TRH C15-C28	mg/kg	45	<45	<45	40	59	
		TRH C29-C36	mg/kg	45	<45	<45	40	59	
		TRH C37-C40	mg/kg	100	<100	<100	-	-	
		TRH C10-C36 Total	mg/kg	110	<110	<110	-	-	
		TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	-	-	
		TRH F Bands	TRH >C10-C16	mg/kg	25	41	<25	40	132
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	41	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	50	<50	<50	40	55
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	-	-

VOC's in Soil

Method: MS(AU)-EPA-8210C

QC Sample	Sample Number	Parameter	Unit	LOR	Result	Original	Spikes	Recovery %	
SE206541.003	LB200182.024	Monocyclic Aromatic	Benzene	mg/kg	0.1	3.4	<0.1	5	67
			Toluene	mg/kg	0.1	3.8	<0.1	5	79
			Ethylbenzene	mg/kg	0.1	3.4	<0.1	5	69
			m,p-xylene	mg/kg	0.2	6.9	<0.2	10	69
			o-xylene	mg/kg	0.1	3.3	<0.1	5	65





MATRIX SPIKES

SE206541 R0

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub-sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in Green when within suggested criteria or Red with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Matrix MS (AU)-EINJ16699

QC Sample	Sample Number	Parameter	Units	LOE	Result	Original	Spk	Recovery	
SE206541.003	LB200182.024	Polycyclic							
		Naphthalene	mg/kg	0.1	<0.1	<0.1	-	-	
		Surrogate							
		m-1,2-dichloroethane (Surrogate)	mg/kg	-	10.9	10.4	10	139	
		o-1,2-dichloroethane (Surrogate)	mg/kg	-	10.4	11.7	10	134	
		Bromofluorobenzene (Surrogate)	mg/kg	-	8.4	7.6	10	84	
Totals									
Total Xylenes	mg/kg	0.3	10	<0.3	-	-			
Total BTEX	mg/kg	0.6	21	<0.6	-	-			

Volatile Petroleum Hydrocarbons in Soil

Matrix MS (AU)-EINJ16699

QC Sample	Sample Number	Parameter	Units	LOE	Result	Original	Spk	Recovery	
SE206541.003	LB200182.024	TRH C6-C10	mg/kg	25	73	<25	82.5	78	
		TRH C6-C9	mg/kg	20	65	<20	80	81	
		Surrogate							
		m-1,2-dichloroethane (Surrogate)	mg/kg	-	10.9	10.4	10	139	
		o-1,2-dichloroethane (Surrogate)	mg/kg	-	10.4	11.7	10	134	
		Bromofluorobenzene (Surrogate)	mg/kg	-	8.4	7.6	-	84	
		VPH F							
		Benzene (FD)	mg/kg	0.1	3.4	<0.1	-	-	
		Bands							
		TRH C6-C10 minus BTEX (F1)	mg/kg	25	53	<25	62.5	81	



## MATRIX SPIKE DUPLICATES

SE206541 R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula:  $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula:  $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in Green when within suggested criteria or Red with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.



## FOOTNOTES

SE206541 R0

id samples expressed on a dry weight basis.

criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: [https://www.sgs.com.au/-/media/Local/Australia/Documents/Technical/Decommission/MP-AU-ENV-QU-022\\_QA\\_QC\\_Plan.pdf](https://www.sgs.com.au/-/media/Local/Australia/Documents/Technical/Decommission/MP-AU-ENV-QU-022_QA_QC_Plan.pdf)

\* NATA accreditation does not cover the performance of this service.  
 \*\* Indicative data, theoretical holding time exceeded.  
 - Sample not analysed for this analyte.  
 IS Insufficient sample for analysis.  
 LNR Sample listed, but not received.  
 LOR Limit of reporting.  
 QFH QC result is above the upper tolerance.  
 QFL QC result is below the lower tolerance.

- ① At least 2 of 3 surrogates are within acceptance criteria.
- ② RPD failed acceptance criteria due to sample heterogeneity.
- ③ Results less than 5 times LOR preclude acceptance criteria for RPD.
- ④ Recovery failed acceptance criteria due to matrix interference.
- ⑤ Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
- ⑥ LOR was raised due to sample matrix interference.
- ⑦ LOR was raised due to dilution of significantly high concentration of analyte in sample.
- ⑧ Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
- ⑨ Recovery failed acceptance criteria due to sample heterogeneity.
- ⑩ LOR was raised due to high conductivity of the sample (required dilution).
- † Refer to relevant report comments for further information.


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Chain of Custody Form – Ref 11858

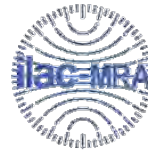
Sheet 1 of 1

Ref: 11858 Investigator: Envirowest Consulting 9 Cameron Place PO Box 8158 ORANGE NSW 2800 Telephone: (02) 6361 4954 Email: Luke@envirowest.net.au Contact Person: Luke Niven Invoice: accounts@envirowest.net.au			Sample matrix			Sample preservation			Analysis				
Laboratory: SGS SYDNEY 16/33 Maddox Street ALEXANDRIA NSW 2015 Quotation #: _____ Courier/CN: _____			Water	Soil	Sludge	Cool	HNO3/HCl	Unpreserved	SGS Method Code				
Sample ID	Container <sup>a</sup>	Sampling Date/Time							Exchangeable sodium, chloride and sulphate	CL10			
1 B1-300	A	19/05/2020		X		X		X	X				
2 B1-1500	A	19/05/2020		X		X		X	X				
3 C1	A	19/05/2020		X		X		X					
4 C2	A	19/05/2020		X		X		X					
5 C3	A	19/05/2020		X		X		X					
6 C4	A	19/05/2020		X		X		X					
7 C5	A	19/05/2020		X		X		X					
8 C6	A	19/05/2020		X		X		X					
9 C7	A	19/05/2020		X		X		X					
10 C8	A	19/05/2020		X		X		X					
11 C9	A	19/05/2020		X		X		X					
12 C10	A	19/05/2020		X		X		X					
13 DA	A	19/05/2020		X		X		X					
Investigator: I attest that the proper field sampling procedures were used during the collection of these samples.						Sampler name: Luke Niven Date: 19/05/2020 Time: 1300-1500			SGS EHS Sydney COC <b>SE206541</b> 				
Relinquished by: Luke Niven (print and signature) <i>[Signature]</i>			Date: 20/05/2020	Time: 16:00	Received by: <i>[Signature]</i> (print and signature)			Date: 21/05/2020	Time: @ 12:30				

Please return completed form to Envirowest Consulting, \*A = Solvent rinsed glass jar with Teflon lined lid and green label, B= Plastic with green label, C= Amber with green label, D= Vial with white label, E= Plastic with red label



ANALYTICAL REPORT



CLIENT DETAILS

Contact **Leah Desborough**  
 Client **ENVIROWEST CONSULTING PTY LIMITED**  
 Address **PO BOX 8158  
 ORANGE NSW 2800**

Telephone **61 2 63614954**  
 Facsimile **(Not specified)**  
 Email **leah@envirowest.net.au**

Project **11858 - Additional**  
 Order Number **11858**  
 Samples **13**

LABORATORY DETAILS

Manager **Huong Crawford**  
 Laboratory **SGS Alexandria Environmental**  
 Address **Unit 16, 33 Maddox St  
 Alexandria NSW 2015**

Telephone **+61 2 8594 0400**  
 Facsimile **+61 2 8594 0499**  
 Email **au.environmental.sydney@sgs.com**

SGS Reference **SE206541A R0**  
 Date Received **10/6/2020**  
 Date Reported **17/6/2020**

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

SIGNATORIES

**Shane MCDERMOTT**  
 Inorganic/Metals Chemist



ANALYTICAL RESULTS

SE206541A R0

Hexavalent Chromium in Soil UVVis [AN075/AN201] Tested: 16/02/2020

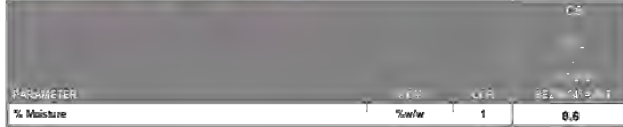
PARAMETER	UNIT	RESULT	REFERENCE
Hexavalent Chromium, Cr6+	mg/kg	0.5	1.3
Trivalent Chromium, Cr3+	mg/kg	1	1200



ANALYTICAL RESULTS

SE206541A R0

Moisture Content [AN002] Tested: 16/6/2020



PARAMETER	UNIT	UNIT	RESULT
% Moisture	%w/w	1	0.6





METHOD SUMMARY

SE206541A R0

METHOD	METHODOLOGY SUMMARY
AN082	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN075	This method uses an alkaline digestion to solubilise both water-soluble and water-insoluble forms of hexavalent chromium in solids. The solution is then pH adjusted and the hexavalent chromium concentration in solution determined colourimetrically.
AN201	Cr6+ is determined colourimetrically by reaction with diphenylcarbazide in acid solution. A red-violet colour of unknown composition is produced.

FOOTNOTES

* NATA accreditation does not cover the performance of this service.	- Not analysed.	UOM Unit of Measure.
** Indicative data, theoretical holding time exceeded.	NVL Not validated.	LOR Limit of Reporting.
	IS Insufficient sample for analysis.	↑↓ Raised/lowered Limit of Reporting.
	LNR Sample listed, but not received.	

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received. Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the "Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.

Note that in terms of units of radioactivity:

- 1 Bq is equivalent to 27 pCi
- 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: [www.sgs.com.au/en-gb/environment-health-and-safety](http://www.sgs.com.au/en-gb/environment-health-and-safety).

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STATEMENT OF QA/QC PERFORMANCE

SE206541A R0

CLIENT DETAILS		LABORATORY DETAILS	
Contact	Leah Desborough	Manager	Huong Crawford
Client	ENVIROWEST CONSULTING PTY LIMITED	Laboratory	SGS Alexandria Environmental
Address	PO BOX 8158 ORANGE NSW 2800	Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	61 2 63614954	Telephone	+61 2 8594 0400
Facsimile	(Not specified)	Facsimile	+61 2 8594 0499
Email	leah@envirowest.net.au	Email	au.environmental.sydney@sgs.com
Project	11858 - Additional	SGS Reference	SE206541A R0
Order Number	11858	Date Received	10 Jun 2020
Samples	13	Date Reported	17 Jun 2020

**COMMENTS**

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.  
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.  
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Extraction Date	Moisture Content	
		1 Recs

**SAMPLE SUMMARY**

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice Bricks
Samples received in correct containers	Yes	Sample counts by matrix	1 Soil
Date documentation received	10/6/2020@3:38pm	Type of documentation received	Email
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	12.7°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

SGS Australia Pty Ltd  
ABN 44 000 964 278

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17/6/2020

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Page 1 of 9



HOLDING TIME SUMMARY

SE206541A R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Microbial Chromium in Soil UWW

Method: MS(AU)S01/AN375/2011

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysis
CS	SE206541A.007	LB20204.1	15 May 2020	10 Jun 2020	16 Jun 2020	15 Jun 2020	23 Jun 2020	17 Jun 2020

Metaline Content

Method: MR(AU)S01/AN375/2011

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysis
CS	SE206541A.007	LB20191.2	15 May 2020	10 Jun 2020	02 Jun 2020	15 Jun 2020†	20 Jun 2020	15 Jun 2020



## SURROGATES

SE206541A R0

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QL-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charred surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in Green when within suggested criteria or Red with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No surrogates were required for this job.



METHOD BLANKS

SE206541A R0

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in Green when within suggested criteria or Red with an appended dagger symbol (†) when outside suggested criteria.

Hexavalent Chromium in Soil UV/Vis		Method MS(AV) 6301/2007040201		
Sample Number	Parameter	Units	LOR	Result
LR020641.001	Hexavalent Chromium, Cr6+	mg/kg	0.5	0



DUPLICATES

SE206541A R0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula:  $RPD = |OriginalResult - ReplicateResult| \times 100 / Mean$

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula:  $MAD = 100 \times SDL / Mean + LR$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in Green when within suggested criteria or Red with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Hexavalent Chromium In Soil U/V/s Method ME(AU)EN17627EN201

Original	Duplicate	Parameter	Unit	LCR	Original	Duplicate	Criteria	RPD
SE206541A.007	LB202041.004	Hexavalent Chromium, Cr6+	mg/kg	0.5	1.3	1.269022201	69	1

Moisture Content Method ME(AU)EN17627EN201

Original	Duplicate	Parameter	Unit	LCR	Original	Duplicate	Criteria	RPD
SE206541A.007	LB201912.016	% Moisture	%w/w	1	8.6	7.5	42	14
SE207466.001	LB201912.011	% Moisture	%w/w	1	16.73653719005	0.028861202	36	11



LABORATORY CONTROL SAMPLES

SE206541A R0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (Ref: MP-(AU)-ENV\QIU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Hexavalent Chromium In Soil U/V/As Method MS(AU)-ENVIW07000201

Sample Name	Parameter	Units	LOD	Result	Expected	Criteria	Recovery
LR202041.002	Hexavalent Chromium, Cr6+	mg/kg	0.5	NA	20	70 - 130	66





## MATRIX SPIKES

SE206541A R0

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub-sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-(ENV)011-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in Green when within suggested criteria or Red with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spikes were required for this job.



## MATRIX SPIKE DUPLICATES

SE206541A R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula:  $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula:  $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in Green when within suggested criteria or Red with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.



## FOOTNOTES

SE206541A R0

id samples expressed on a dry weight basis.

criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: [https://www.sgs.com.au/-/media/Local/Australia/Documents/Technical Documents/IMP-AU-ENV-QU-022\\_QA\\_QC\\_Plan.pdf](https://www.sgs.com.au/-/media/Local/Australia/Documents/Technical Documents/IMP-AU-ENV-QU-022_QA_QC_Plan.pdf)

- \* NATA accreditation does not cover the performance of this service.
- \*\* Indicative data, theoretical holding time exceeded.
- Sample not analysed for this analyte.
- IS Insufficient sample for analysis.
- LNR Sample listed, but not received.
- LOR Limit of reporting.
- QFH QC result is above the upper tolerance.
- QFL QC result is below the lower tolerance.

- ① At least 2 of 3 surrogates are within acceptance criteria.
- ② RPD failed acceptance criteria due to sample heterogeneity.
- ③ Results less than 5 times LOR preclude acceptance criteria for RPD.
- ④ Recovery failed acceptance criteria due to matrix interference.
- ⑤ Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
- ⑥ LOR was raised due to sample matrix interference.
- ⑦ LOR was raised due to dilution of significantly high concentration of analyte in sample.
- ⑧ Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
- ⑨ Recovery failed acceptance criteria due to sample heterogeneity.
- ⑩ LOR was raised due to high conductivity of the sample (required dilution).
- † Refer to relevant report comments for further information.

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**Yin, Emily (Sydney)**

---

**From:** AU.Environmental.Sydney (Sydney)  
**Sent:** Wednesday, 10 June 2020 3:38 PM  
**To:** Leah Desborough  
**Cc:** AU.SampleReceipt.Sydney (Sydney)  
**Subject:** RE: [EXTERNAL] SE206541

Hi Leah,

Thanks, will report this additional job on standard TAT.  
 If you could cc all your future analysis requests to [AU.SampleReceipt.Sydney@sgs.com](mailto:AU.SampleReceipt.Sydney@sgs.com) as well that would be much appreciated.

Hi Emily,

Please see below additional analysis request. Thanks.

Kind Regards,

Huong Crawford  
 Environment, Health & Safety  
 Production Manager

SGS Australia Pty Ltd  
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 Web: [www.au.sgs.com](http://www.au.sgs.com)

View Your Results Online: <https://www.sgs.com>




---

**From:** Leah Desborough <[Leah@envirowest.net.au](mailto:Leah@envirowest.net.au)>  
**Sent:** Wednesday, 10 June 2020 3:30 PM  
**To:** AU.Environmental.Sydney (Sydney) <[AU.Environmental.Sydney@sgs.com](mailto:AU.Environmental.Sydney@sgs.com)>  
**Subject:** [EXTERNAL] SE206541

\*\*\* WARNING: this message is from an EXTERNAL SENDER. Please be cautious, particularly with links and attachments.\*\*\*

---

Good afternoon:

Could I please request analysis for Chromium (VI) and (III) on sample C5 on job number SE206541. Standard turnaround time please.

Thanks

*Leah Desborough*  
 Senior Environmental Scientist

## Appendix 5. Soil sampling protocols

### 1. Sampling

The samples will be collected from the auger tip, mattock, hand auger or excavator bucket immediately on withdrawal.

The time between retrieval of the sample and sealing of the sample container will be kept to a minimum.

The material will be collected using single use disposal gloves or a stainless-steel spade which represented material which has not been exposed to the atmosphere prior to sampling.

All sampling jars will be filled as close to the top as possible to minimise the available airspace within the jar.

### 2. Handling, containment and transport

Daily sampling activities will be recorded including sampling locations, numbers, observations, measurements, sampler, date and time and weather condition.

The sampling jars will be new sterile glass jars fitted with plastic lid and airtight Teflon seals, supplied by the laboratories for the purpose of collecting soil samples for analysis. Sample containers will be marked indelibly with the sample ID code to waterproof labels affixed to the body of the container.

All samples will be removed from direct sunlight as soon as possible after sampling and placed in insulated containers. Samples will be stored in a refrigerator at 4°C prior to transportation to the laboratory in insulated containers with ice bricks in accordance with AS4482.1.

Handling and transportation to the laboratory will be accompanied with a chain of custody form to demonstrate the specimens are properly received, documents, processed and stored.

Maximum holding time for extraction (AS4482.1) are:

Analyte	Maximum holding time
Metals	6 months
Mercury	28 days
Sulfate	7 days
Organic carbon	7 days
OCP, OPP, PCB	14 days
TRH, BTEX, PAH, phenols	14 days

### 3. Decontamination of sampling equipment

Sampling tools will be decontaminated between sampling locations by

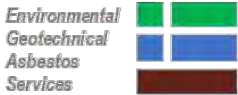
- Removing soil adhering to the sampling equipment by scraping, brushing or wiping
- Washing with a phosphate-free detergent
- Rinsing thoroughly with clean water
- Repeating if necessary
- Collect rinsate per sampling time and preserve according to AS 2031.1
- Dry equipment with disposable towels or air

**Groundwater and salinity study**

Proposed RSL Club, part Lot 502 DP1255115 Boundary Road, Dubbo NSW



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Document control			
Report number	Date	Author	Update information
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R11858s.1	3 August 2020	Leah Desborough BNatRes (Hons)	Update to reflect new concept plan

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## Executive summary

### Background

A registered club facility and associated recreational facilities are proposed for a 3.3ha parcel of land located within Lot 502 DP1255115 Boundary Road, Dubbo NSW. The development will include the club building, kids play and family area, football/cricket field and carpark. Part of the site is located in a moderately high groundwater vulnerability area. The hydrogeological landscape has moderate salinity risk. A groundwater salinity assessment is required as part of the development process.

### Objectives of the investigation

A site investigation was undertaken to assess the existing salinity conditions of the soil and groundwater and determine the impact of the development on groundwater and salinity.

### Investigation

A soil investigation was undertaken of the site. An initial investigation and desktop review was undertaken to collect existing information on groundwater on and around the site and the likelihood of salinity across the site. Boreholes were drilled and soil samples collected on 19 May 2020.

The site investigation included landscape description, soil investigation, laboratory analysis and groundwater investigation. The soil profile investigation was undertaken by constructing six boreholes up to 1.7m in depth or drill refusal. Representative soil samples were collected and analysed for pH, electrical conductivity, colour, dispersion, texture, chlorides and exchangeable sodium percentage.

The investigation results and proposed development were evaluated to identify impacts and recommend management outcomes to minimise salinity risk. Water balance was modelled to estimate changes in infiltration following development. Surface water flow containing sediment, nitrogen and phosphorus were modelled using Chafer (2003).

### Conclusions

The site had a historical pasture grazing land-use and is currently vacant with numerous stockpiles of imported soil and debris. Vegetation cover on the site was generally 100% due to recent rainfall. No bare areas resulting from sheet erosion or salinity scalding were identified. The risk of erosion is low.

Soils on the site comprised loamy sand over silty clay and light clay. Drill refusal due to basalt was encountered from depths of 0.1 to 1.7m.

The majority of the site is located in the Dubbo Basalt Hydro-geological Landscape (HGL). Lithology of the Dubbo Basalt Hydro-geological Landscape consists of Cainozoic basalt consisting of in situ Olivine rich alkali basalt with some colluvial material and quartzite derived from the underlying sandstone and siltstone. Soil salinity in the landscape is isolated at areas along drainage lines, at the intersection with the Purlawaugh formation, depressions and footslopes which were not identified on the site. Groundwater or groundwater indicators were not encountered in the soil to a depth of 1.7m. Groundwater was not saline from drillers log descriptions of bores in the landscape.

Potable and stock supply bores have been constructed in the locality. Bores in the locality generally have water bearing zones greater than 10m in gravels and sands. Groundwater recharge within the Dubbo Basalt HGL is greatest on plateau areas. Groundwater residence times are short.



No visual surface or sub-surface indicators of groundwater discharge areas were identified on the site.

The infiltration balance indicated infiltration will reduce under the post development scenario due to an increase in impermeable areas. Rainfall on impermeable areas will drain off-site in stormwater pipes. Increased infiltration may occur as a result of irrigation of the sporting field. The increase is off-set by the reduction in permeable areas

The risk of groundwater contamination from the proposed land-use is lower than the current land-use. Nutrient contributions will decrease as a result of smaller available areas for fertilisation and a decrease in animal waste. Sediment contributions will also decrease as a result of an increase in hard cover areas and no soil disturbance from farming activities. Other activities which may increase the risk of groundwater contamination including car washing and re-use of greywater will not be undertaken on the site.

No impact on groundwater including contamination and changed groundwater levels is expected from the development. The development will not impact on quantity or quality of both unconfined and confined aquifers.

#### **Recommendations**

The development water and soil design will include:

- Drainage of water from hard surfaces in stormwater pipes
- Sediment and erosion control plans during construction
- Determination of the soil electrical conductivity at the design depth in areas to be excavated
- Ensure imported material is non-saline
- Irrigation scheduling of sports field to prevent overwatering
- No unsealed stormwater detention dams to be constructed

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### 1. Introduction

A registered club facility and associated recreational facilities are proposed for a 3.3ha parcel of land located within Lot 502 DP1255115 Boundary Road, Dubbo NSW. The development will include the club building, kids play and family area, football/cricket field and carpark. Part of the site is located in a moderately high groundwater vulnerability area. The hydrogeological landscape has moderate salinity risk. A groundwater salinity assessment is required as part of the development process.

### 2. Scope of work

Envirowest Consulting Pty Ltd was commissioned by The Planning Hub to undertake a groundwater investigation and salinity study for part Lot 502 DP1255115 Boundary Road, Dubbo NSW. The objective was to assess the existing conditions and possible future impact of the proposed development on soil, groundwater and salinity.

### 3. Site identification

Address	Part Lot 502 DP1255115 Boundary Road Dubbo NSW
Client	The Planning Hub
Deposited plans	Part Lot 502 DP1255115
Universal grid reference	UTM Zone 55H, 654072mE, 6428355mN
Locality map	Figure 1
Site plan	Figure 2
Photographs	Figure 16
Area	Approximately 3.3 hectares
Dates of inspection and assessment	19 May 2020

### 4. Proposed development

The proposed development is club facility and associated recreational facility (Figure 15). The development will include the club building, kids play and family area, football/cricket field and carpark. Approximately 1.2ha of the site will be hard surface areas comprising carpark, driveway and buildings (Table 1). Surface water on the areas are expected to be managed by a stormwater system which will discharge into the reticulated stormwater system and flow off-site. The remainder of the site is expected to comprise soft landscaping which will allow infiltration of water. Irrigation is expected to occur on the sporting field, viewing banks and other landscaped areas.

Table 1. Land-use areas

Land-use	Area (ha)
Carpark and driveway	0.9
Buildings	0.25
Sports field, soft landscaping	2.15

## 5. Site condition and surrounding environment

### 5.1 Land-use

The current land-use is vacant. Material has been imported and stockpiled across the site. Historical land-use is expected to have been dominated by grazing and may have included a basalt quarry.

### 5.2 Vegetation

The investigation area was dominated by ruderal weeds including mallow, skeleton weed, hedge mustard, paddy melon and other broadleaved weeds. An eucalypt tree and several small robinias are scattered across the site.

### 5.3 Topography

The site is predominantly located on a upper slope. Aspect is predominantly east and slopes are gently inclined and generally less than 5%. Elevation ranges between 285 and 293 metres above sea level. The lowest elevation occurs on the eastern boundary. No evidence of groundwater seepage or discharge areas were observed on the site.

### 5.4 Soils and geology

The site is located within the Bunglegumbie Soil Landscape (Murphy *et al.* 1998).

Soil in the Bunglegumbie landscape consists of red brown earths, red earth, non-calcic brown soils and yellow podzolic/solodic soils. Parent material is weathered alluvium. Soil salinity problems are absent. Erosion hazard is low on slopes less than 3%.

Lithology of the southern section of the site is Napperby Formation comprising siltstone thinly interbedded with fine-medium grained lithic quartz sandstone with minor conglomerate. Lithology of the northern section is Cainozoic Basalt comprising tholeiite, alkali basalt and alkali ultramafic (Colquhoun *et al.* 1997).

Soils on the site comprised reddish brown sandy clay over yellowish brown to light brown sandy clay. Basalt rock was encountered in all boreholes at depths of between 0.1m and 1.7m. Basalt rock was deeper (1.1m and 1.7m) through the central section of the site and shallower (0.25m to 0.6m) in the western and northern sections of the site.

### 5.5 Surface water

The surface of the site is uneven as a result of numerous stockpiles on the site. Water is expected to pond between stockpiles. Surface water flows are generally east and south. Eulomogo Creek is located approximately 2.2km south of the site.

Eulomogo Creek empties into the Macquarie River approximately 3.0km south of the site.

### 5.6 Groundwater

The Australian Natural Resources Atlas identifies the site within the Upper Macquarie Alluvium Groundwater Management Unit. The management unit has an area of 414km<sup>2</sup> with approximately 17.95 GL consumed per year. Average salinity levels are greater than 1,500mg/L.

Sixteen registered water abstraction bores were identified within a 1km radius of the site on the NSW Government Water NSW website (2020). Water-bearing zones (WBZ's) and standing water levels were recorded for nine bores. The Water NSW website shows that SWL's and WBZ's in bores (for which data was recorded) were at depths greater than 5m. The water bearing zones are located in unconfined sand, gravel and clay and confined sandstone.

Five bores form part of the Dubbo Regional Council salinity network and as such have been constructed to intersect shallow unconfined groundwater. The remainder of the bores are licenced for domestic, stock, and public.

## **6. Groundwater and soil salinity investigation**

The soil salinity investigation comprised a desktop study, field assessment and soil analysis. The desktop study included a review of soil landscape maps, hydro-geological landscapes and groundwater databases. Infiltration modelling was also undertaken.

The field assessment included an initial site investigation and detailed profile descriptions and soil analysis. The soil and landscape information collected provided an adequate description of the physical processes on the site to enable salinity issues to be identified and managed. The frequency of tests undertaken was in accordance to the frequency in Table 1 of Lillicrap and McGhie (2002) for moderately intensive construction.

### **6.1 Soil landscapes**

Soil landscape data was reviewed for information regarding soil types in the locality, occurrence of salinity, erosion and sodic soils.

### **6.2 Hydro-geological landscapes**

Hydro-geological landscape (HGL) data for the locality was reviewed for information regarding the groundwater aquifer including lithology, aquifer type, recharge and discharge characteristics (Figure 3).

### **6.3 Groundwater**

An investigation of registered bores in the area was undertaken to determine the depth and salinity of the groundwater. Groundwater information was found from a review of the NSW Government Water NSW database and Dubbo Regional Council Salinity Network.

The groundwater was divided into deep and shallow groundwater. Deep groundwater is located in river gravels, sands and sandstone at depths greater than 15 metres. The shallow groundwater is expected to generally be unconfined in a local aquifer controlled by drainage lines and/or lithological contrasts within the site.

Water criteria for salinity are presented in Tables 2 to 4. The conversion from EC (dS/m) to total dissolved solids or TDS (mg/L) is undertaken by applying the conversion factor of 640 for an average concentration of salts present (Lillicrap and McGhie 2002).

**Table 2. Drinking water criteria for salinity (NHMRC, NRMCC 2011)**

Palatability	EC (dS/m)	Total dissolved solids -Salinity (mg/L)
Good	0.94	600
Fair	0.94-1.41	600-900
Poor	1.41-1.88	900-1,200
Unacceptable	>1.88	>1,200

**Table 3. Total dissolved solids of water for agricultural use (Reid 1990)**

Class	Description	Total dissolved solids -Salinity (mg/L)
1	Low salinity	0-175
2	Medium salinity	175-500
3	High salinity	500-1500
4	Very high salinity	1500-3500
5	Extremely high salinity	>3500

**Table 4. Guidelines on salinity class determination (Dubbo City Council Urban Salinity Plan)**

Electrical conductivity (dS/m)	Salinity class
0-2	Low
2-6	Moderate
6-15	High
>15	Extreme

#### 6.4 DLWC groundwater vulnerability mapping

The NSW Department of Land and Water Conservation have undertaken groundwater vulnerability mapping of the Dubbo locality (Piscope and Dwyer 2001). The vulnerability mapping utilises the DRASTIC technique which is a composite description of all the major geologic and hydro-geologic factors that affect and control groundwater movement into, through and out of an area. It involves the overlaying of various hydro-geological settings via a Geographical Information System (GIS). Each hydro-geological setting describes topography, soil type, bedrock type, estimate of rainfall and net recharge depth to watertable (DTWT), aquifer yield, relative conductivity and any particular features associated with the setting that are available. Groundwater vulnerability is classified into high, moderately high, moderate, low moderate and low (Figure 4).

#### 6.5 Dubbo LEP (2011) groundwater vulnerability map

The Dubbo LEP (2011) Natural Resource – Groundwater vulnerability map describes the areas within the Dubbo Regional Council area where groundwater is considered vulnerable to depletion and contamination as a result of development (Figure 5).

#### 6.6 Infiltration model

A simulation model was developed to predict changes in infiltration pre and post development. The area for each land-use pre and post development was estimated from site walkover, topographical map, development concept plans and aerial photograph. The site was classified into the different land-use areas pre and post development (Table 5).

Groundwater recharge in agricultural pasture areas in the Wagga Wagga area was estimated to be 15mm/year (Cook *et al.* 2001). Wagga Wagga has a similar climate to Dubbo and the groundwater recharge data is considered representative of the investigation area.

It is expected overwatering will contribute to recharge however studies have demonstrated the recharge in agricultural grazing land-use of 15mm/year is similar to diffuse urban land-use of 14mm/year (Cook *et al.* 2001).

Infiltration on hard surfaces will be zero with surface water collected and piped off-site.

Table 5. Land-use areas pre and post development

Land-use	Pre development (ha)	%	Post development (ha)	%	Comments
Pasture	3.3	100	0	0	Not irrigated, few trees, water expected to pool in low areas between stockpiles
Urban	0	0	2.15	65	Sports field and surrounds
Hard surfaces (buildings, carpark, driveway)	0	0	1.15	35	Surface water expected to be piped off-site
Total	3.3	100	3.3	100	

### 6.7 Nutrient model

A simulation model was developed to predict surface runoff, sediment loss, nitrogen and phosphorus export, pre and post development. The area for each land-use pre and post development was estimated from site walkover, topographical map, subdivision plans and an aerial photograph. The site was classified into the different land-use areas pre and post development (Table 6).

Table 6. Land use areas for nutrient model

Land-use areas	Pre-development (ha)	Post development (ha)
Improved pasture	3.3	0
Urban (open space)	0	2.15
Roads (sealed)	0	0.9
Urban	0	0.25
Total	3.3	3.3

Land-use on-site are as follows;

- *Improved pasture* is the pre-development land-use.
- *Urban (open space)* refers to the irrigated sporting field and surrounds.
- *Roads (sealed)* refers to the carpark and driveway
- *Urban* refers to the developed areas on the site including building and terraced seating

Sediment, nitrogen and phosphorus export was estimated for low, median and high scenarios for each land-use class as detailed in Appendix 1 (Chafer 2003).

### 6.8 Initial site investigation

An initial site investigation was conducted by collecting information on vegetation, slope, bare areas and other indicators of salinity at 12 locations across the site (Figure 6). This density is in accordance with the recommendations by Lillicrap and McGhie (2002).

### 6.9 Detailed profile descriptions and laboratory analysis

Six boreholes were constructed with an EVH truck mounted hydraulic drilling rig with solid auger on 18 May 2020 to provide information on the soil profiles and enable sampling. The boreholes were constructed at various local elevations on the site (Figure 7). Depth of boreholes were to refusal on basalt rock. One borehole was drilled to 1.7m, one borehole to 1.1m and four boreholes to less than 1m.

The soil profile was described for colour, texture and moisture. Soil samples were collected from one borehole at 100mm, 200mm, 300mm, 500mm, and 500mm intervals to the depth of the borehole. The sampling is expected to provide an adequate description of subsoil salinity conditions. Soil samples were analysed for pH, electrical conductivity and dispersion.

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 (Charman and Murphy, 1991), which is dependent on the soil texture (Table 7). 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 8.

**Table 7. 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 8. 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 were analysed for dispersion using the Emerson aggregate test. Table 9 details the eight dispersion classes.

**Table 9. 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

Representative soil samples were collected from the topsoil and subsoil and analysed for chloride and sodicity. Chloride criteria for corrosiveness to building material are presented in Table 10 and are an extract from AS2159-1995 Piling – design and installation.

Aggressive soils criteria for salinity and sulfate impacts on building structures are presented in Australia Standard AS2870-2011 (Appendix 2). The AS2870 standard also describes requirements to mitigate salinity and sulphate on footings.



**Table 10. Chloride corrosiveness to building materials (AS2159-1995 Piling – design and installation)**

Concrete piles		Steel piles	
Chlorides in water (mg/kg)	Soil conditions for low permeability soils or all soils above groundwater	Chlorides in water (mg/kg)	Soil conditions for low permeability soils or all soils above groundwater
<2,000	Non-aggressive	<1,000	Non-aggressive
2,000-6,000	Non-aggressive	1,000-10,000	Non-aggressive
6,000-12,000	Mild	10,000-20,000	Mild
12,000-30,000	Moderate	>20,000	Moderate
>30,000	Severe		

Sodicity is expressed as a percentage of the cation exchange capacity or exchangeable sodium percentage (ESP). Ranking of sodicity is presented in Table 11 (Lillicrap and McGhie 2002). An ESP of less than 5% indicates a non-sodic soil, ESP of between 5 and 15% indicates a sodic soil and an ESP of greater than 15% indicates a highly sodic soil.

**Table 11. Ranking of exchangeable sodium percentage**

Exchangeable sodium percentage	Ranking
<5%	Non-sodic
5-15%	Sodic
>15%	Highly sodic

## 7. Results and discussion

### 7.1 Soil landscape maps

The site is located within the Bunglegumbie Soil Landscape (Murphy *et al.* 1998). Soil in the Bunglegumbie landscape consists of red brown earths, red earth, non-calcic brown soils and yellow podzolic/solodic soils. Parent material is relatively old and weathered alluvium. Soil salinity problems are absent. Erosion hazard is low on slopes less than 3%.

Lithology of the site is Cainozoic Basalt comprising tholeiite, alkali basalt and alkali ultramafic (Colquhoun *et al.* 1997).

### 7.2 Hydro-geological landscapes

The majority of the site is located in the Dubbo Basalt HGL. The south western section is in the Purlawaugh/Napperby HGL (eSpade 2020). The site and associated hydro-geological landscapes are depicted in Figure 3.

Lithology of the Dubbo Basalt HGL consists of Cainozoic basalt consisting of in-situ Olivine rich alkali basalt with some colluvial material and quartzite derived from the underlying sandstone and siltstone. Soil salinity is isolated at areas along drainage lines, at the intersection with the Purlawaugh formation, depressions and footslopes. Saline soils also occur due to local perching of the water table. Groundwater recharge is greatest on plateau areas. Groundwater flow is unconfined to semi-confined in consolidated fractured rock. Groundwater salinity is good. Salt sites occur at the contact of the basalt cap with the underlying geology.

The Purlawaugh/Napperby HGL landscape is characterised by low flat hills and rises with a stepped geomorphology. Lithology of the Purlawaugh/Napperby HGL consists of Purlawaugh Formation, Napperby Formation and Boulderwood Formation comprising mainly ferruginous red siltstone, carbonaceous mudstone, fine to medium grained lithic sandstone, ironstone, minor coal and minor conglomerate. Large areas of salinity occur along contours and are repeated at different topographic levels. Severe salt sites occur in the lower landscape. Salt load is very high to extreme due to water

readily mobilising salts stored within the sedimentary pile. Groundwater flow is unconfined to semi-confined flows through fractures in sandstone and sedimentary bedrock, permeable soils and saprolite. Lateral flow occurs through colluvial sediments on lower slopes. High recharge rates occur across the landscape particularly in areas where cropping is practised. Water electrical conductivity is moderate to high.

Shallow basalt was encountered in the boreholes across the site including in boreholes constructed in the south western section (BH3 and BH4) where basalt was encountered at 0.25m and 0.3m. The presence of basalt indicates that the Purlewaugh/Napperby HGL was not encountered to the drilling depth. Dubbo Basalt underlies the investigation area. The contact of the basalt cap with the underlying geology is expected to occur further downslope. Salt sites are not expected to occur on the site.

Topographical features including drainage lines, depressions and footslopes and geological features including geological contact where soil sites can develop in the Dubbo Basalt HGL were not identified on the site.

### **7.3 Groundwater**

#### **7.3.1 OEH registered bores**

Sixteen registered water abstraction bores were identified within a 1km radius of the site on the NSW Government Water NSW database (2020) (Figure 8). Data known about each bore within 1km of the site from the Department of Primary Industries website is summarised in Appendix 3.

Five bores form part of the Dubbo Regional Council salinity network and as such have been constructed to intersect shallow unconfined groundwater. The characteristics of these bores are discussed in Section 7.3.2. The remainder of the bores are licenced for domestic, stock, public and monitoring.

Water-bearing zones (WBZ's) and standing water levels were recorded for twenty bores. The Water NSW database shows that SWL's and WBZ's in bores (for which data was recorded) were at depths greater than 5m (Figure 8 and Appendix 3). The water bearing zones are located in unconfined sand, gravel and clay and confined sandstone.

#### **7.3.2 Dubbo Regional Council salinity network**

Five Dubbo Regional Council (DRC) monitoring bores are located at less than 1km from the site (Figure 9 and Appendix 4). The bores are identified as DCC19, DCC44, DCC45, DCC115 and DCC116 (Figure 10).

Bore depths ranged from 3m to 9m with water bearing zones located in unconfined regolith comprising clay. Bores DCC19 and DCC44 have been dry since monitoring begun in March 2005 and one of the bores (DCC115) has not been monitored since February 2012. DCC45 usually contains water at the time of monitoring at depths greater than 6.5m. Salinity rating of the water is low. Water within DCC116 was variable until January 2016 and has generally contained water since this time at depths greater than 2m. Salinity rating of the water is low.

Standing water levels in Dubbo Regional Council (DRC) monitoring bores within 1km of the site in November 2018 to March 2019 were generally dry ranged between 0.30m to 8.76m and dry at times (Table 12 and Figure 9). Electrical conductivity of these bores was classed as low to moderate salinity (Appendix 4).

Table 12. Dubbo Regional Council salinity network

Sampling location (see Figure 10)	Depth (m)	Date sampled	Standing water level (m)	EC (dS/m)	Total dissolved solids (EC x 640) (mg/L)
DCC19	3	Nov-18	Dry	-	-
		Jan-19	Dry	-	-
		Mar-19	Dry	-	-
DCC44	6	Nov-18	Dry	-	-
		Jan-19	Dry	-	-
		Mar-19	Dry	-	-
DCC45	9	Nov-18	7.43	1.35	864
		Jan-19	Dry	-	-
		Mar-19	Dry	-	-
DCC115	9	Nov-18	Missing	-	-
		Jan-19	Missing	-	-
		Mar-19	Missing	-	-
DCC116	3.5	Nov-18	Missing	-	-
		Jan-19	Missing	-	-
		Mar-19	Missing	-	-

TSTB- too shallow to bail

### 7.3.3 On-site groundwater

No groundwater was identified on site when constructing boreholes. No indicators of seasonal groundwater was identified in the boreholes.

### 7.4 Groundwater vulnerability

The Department of Land and Water Conservation (Piscope and Dwyer 2001) identifies the majority of the site as having a moderate groundwater vulnerability rating (Figure 4).

Land to the south west had a moderately high groundwater vulnerability rating and to the east and north east a low groundwater vulnerability rating.

### 7.5 Dubbo LEP (2011) groundwater vulnerability map

The Dubbo LEP (2011) identifies the south western section of the site in a moderately high groundwater vulnerability area (Figure 5). No groundwater vulnerability rating applies to remainder of the site.

The moderately high groundwater vulnerability area is associated with the mapped Purlewaugh/Napperby HGL and the non-mapped area is associated with the Dubbo Basalt HGL. The Purlewaugh/Napperby HGL was not encountered on the site (Section 7.2) and the entire site is expected to not have a groundwater vulnerability rating.

### 7.6 Initial site investigation

The initial site investigation was conducted on a 50m x 50m grid across the site (Figure 6 and Appendix 5).

The site has a historical land-use of grazing with stockpiles and debris placed on the site between 1980 and 1991 and potentially more added after this time.

Several trees were located on the site. The tree species was generally non-native robinias which are garden escapees. One eucalypt tree occurs on the site.

Groundcover species were dominated by ruderal weeds including mallow and hedge mustard. Recent rain has resulted in lush vegetation on the site. Some bare areas were identified as a result of gravel.

The majority of the site was very gently inclined with slopes less than 5%.

Basalt cobbles were identified on the surface in the western section of the site.

No bare areas and indicators of salinity were observed in the assessment.

#### 7.7 Soil characteristics

Boreholes were constructed up to depths of 1.7m and generally to depths of less than 1m due to the presence of basalt rock. Borelogs are presented in Appendix 6.

##### 7.7.1 Texture and colour

Soils on the site comprised topsoil of dark brown loamy sand with gravel (Table 13). Subsoils were yellowish brown silty clay with gravel over reddish brown light clay with gravel. Basalt rock resulting in drill refusal was encountered from depths of 0.1m and up to depths of 1.7m.

##### 7.7.2 Salinity (electrical conductivity)

All samples to 1.5m were determined to be non-saline with electrical conductivity of less than 2dS/m (Figure 10).

The sample collected from the base (1.7m) of Borehole 1 was slightly saline (Table 13).

##### 7.7.3 pH

The topsoil was slightly acidic (Table 12). Subsoil was generally slightly to strongly alkaline.

##### 7.7.4 Emerson aggregate test

Topsoil on site was non-dispersive with slightly dispersive soils identified from 0.5m (Table 13).

**Table 13.** Soil colour, texture, pH, EC and ECe (detailed profile descriptions)

Borehole No -depth (mm)	Soil colour	Soil texture	pH	EC1:5	ECe (dS/m)	Emerson aggregate test
1-100	Dark brown	Loamy sand with gravel	8.9	0.05	1.15	5
1-200	Yellowish brown	Silty clay with gravel	8.7	0.17	1.28	5
1-300	Yellowish brown	Silty clay with gravel	9.0	0.09	0.68	5
1-500	Dark brown	Light clay	8.9	0.16	1.20	3
1-1000	Reddish brown	Light clay	8.8	0.17	1.28	3
1-1500	Reddish brown	Light clay with gravel	8.9	0.23	1.73	3
1-1700	Reddish brown	Light clay with gravel	9.0	0.31	2.33	3

##### 7.7.5 Chlorides

Levels of chlorides in the samples analysed were less than 2,000mg/kg and considered non-aggressive soils for concrete and steel piles (Table 14).

##### 7.7.6 Exchangeable sodium percentage

Exchangeable sodium percentage for the topsoil sample collected from Borehole 1 was non-sodic (Table 14). The subsoil sample collected at 1.5m from Borehole 1 was sodic.

**Table 14. Soil results for chlorides and exchangeable sodium percentage (ESP) (Appendix 7)**

Sample ID	Borehole and depth (mm) (Figure 5)	Chlorides (mg/kg)	ESP (%)
B1-300	1-300	9.3	0.6
B1-1500	1-1500	35	8.4

ND – Not detected at the laboratory limits

## 7.8 Indicators of salinity

### 7.8.1 Bare soil

No bare soil resulting from sheet erosion or salinity were present on site.

### 7.8.2 Salt crystals

No salt crystals present on site.

### 7.8.3 Vegetation indicators

No highly salt tolerant plant species are present on site.

### 7.8.4 Die back

No vegetation or tree die back was observed on or surrounding the site.

### 7.8.5 Effects on buildings

No buildings are located on site.

### 7.8.6 Conditions of roads

No evidence of surface undulations or break-up of bitumen on the roads surrounding the site.

## 7.9 Infiltration balance

Infiltration occurs for all permeable areas. Infiltration under a pasture land-use (15mm/year) has been determined to be similar as under an irrigated lawn land-use (14mm/year). Soil moisture resulting from infiltration not used by vegetation represents potential recharge. Pre-development infiltration will occur across the whole site under the pasture land-use. Post development infiltration will occur on a portion of the site with no infiltration occurring on hard surfaces.

The infiltration balance indicates the development will reduce infiltration (Table 15).

**Table 15. Infiltration from each land-use, pre and post development**

Land-use areas	Infiltration (mm/year)	Area pre-development (ha)	Infiltration pre-development (mm/year)	Area post development (ha)	Infiltration post development (mm/year)	Impact
Pasture	15	3.3	49.5	0	0.00	49.5
Urban	14	0	0.00	2.15	30.1	-30.1
Hard surfaces	0	0	0.00	1.15	0	0.0
<b>TOTAL</b>			<b>49.5</b>		<b>30.1</b>	<b>19.4</b>

## 7.10 Nitrogen

Nitrogen soil levels in the grazing system are typically low with concentrated areas around animal wastes. Nitrogen fertilisers are also used in cropping operations and biological synthesis occurs in legumes. Off-site movement occurs from sediment loss. Water soluble nitrogen has potential to leach into the groundwater.

Post development sources of nitrogen are from fertilisers applied to lawns. Post development fertilisation is only expected to occur on the sporting field with minor fertiliser of garden areas. The

impact from lawn fertilisers will be less than the impact of animal wastes. The impact of nitrogen fertiliser post development will be reduced.

The nutrient balance indicates the development will reduce nitrogen export by 16 kg/year under the median scenarios (Table 16). Reduced pasture area and a greater area of hard surfaces has resulted in a decrease in nitrogen loss.

**Table 16. Land-use nitrogen export pre and post development (kg/year)**

Land-use areas	Pre-development	Post development	Impact
Improved pasture	29.37	0.00	29.37
Urban (open space)	0.00	6.88	-6.88
Roads (sealed)	0.00	5.40	-5.40
Urban	0.00	1.53	-1.53
<b>TOTAL</b>	<b>29.37</b>	<b>13.81</b>	<b>15.57</b>

### 7.11 Phosphorus

The main phosphorus sources pre-development are from animal waste and fertilisers. Stock are expected to have been regularly grazed on the site prior to development works around the site resulting in removal of fences. Off-site movement of phosphorus will occur in sediments and susceptible times are when vegetation cover is low.

Stock numbers will be zero in the post development land-use resulting in a decrease contribution of phosphorus on the site.

Phosphorus binds to soil and the primary method of movement is in sediments. Vegetation cover is expected to be higher post development resulting in filtering of runoff, reduced sediment loads exported and consequently lower phosphorus export.

The nutrient balance indicates the development will decrease phosphorus export by 2 kg/year under the median scenarios (Table 17). Reduced pasture area and a greater area of sealed surfaces have resulted in a decrease in the phosphorus loss.

**Table 17. Land-use phosphorus exports pre and post development (kg/year)**

Land-use areas	Pre-development	Post development	Impact
Improved pasture	4.46	0.00	4.46
Urban (open space)	0.00	0.37	-0.37
Roads (sealed)	0.00	1.62	-1.62
Urban	0.00	0.46	-0.46
<b>TOTAL</b>	<b>4.46</b>	<b>2.44</b>	<b>2.01</b>

### 7.12 Sediment

The nutrient balance indicates the development will reduce sediment by 696 kg/year under the median scenario (Table 18). Sediments are reduced due to the decrease in contribution from the pasture area.

**Table 18. Land-use sediment export pre and post development (kg/year)**

Land-use areas	Pre-development	Post development	Impact
Improved pasture	1,716.00	0.00	1,716.00
Urban (open space)	0.00	774.00	-774.00
Roads (sealed)	0.00	171.00	-171.00
Urban	0.00	75.00	-75.00
<b>TOTAL</b>	<b>1,716.00</b>	<b>1,020.00</b>	<b>696.00</b>

### 7.13 Garden fertilisers and chemicals

Minor usage of herbicides may occur post development on irrigated areas, in a controlled manner to manage weeds within the sporting field. All fertilisers and agricultural chemicals will be utilised by the vegetation or degrade rapidly in the environment. No impact on surface water or groundwater will occur.

No industrial activities including bulk storage or use of chemicals will occur in the development.

## 8. Soil and water impact assessment

### 8.1 Soil

Soil across the site was shallow ranging in depth from 0.1m to 1.7m. The soils were identified to be non-saline to 1.5m with slightly saline subsoil identified at 1.7m. Sodic subsoils were identified in the sample collected from 1.5m. Excavation works for the development are expected to be minimal due to the presence of shallow basalt bedrock and will include levelling of the central and eastern sections of the site to create a level playing field. Excavation works for the development are not expected to intercept the slightly saline and sodic subsoil. Management will be required to ensure sodic subsoil exposure is minimised.

### 8.2 Water

#### 8.2.1 Surface water

Stormwater on the site will be managed by the reticulated stormwater system to be connected to the site. Majority of rainfall will be piped off-site.

#### 8.2.2 Groundwater

##### 8.2.2.1 Recharge

No recharge areas were identified on the site. Recharge within the Dubbo Basalt HGL is greatest on plateau areas.

The decrease in permeable areas following development of the site will result in a reduction in the amount of infiltration and therefore the potential in recharge.

Regular monitoring has been undertaken by the NSW Office of Water of the Dubbo town water supply extraction area located south west of the site. These bores have shown a long term declining trend with falls of up to 18m (Smithson 2010).

##### 8.2.2.2 Discharge

Discharge areas were not identified on the site from surface and subsurface observations such as ponding water, water tolerant vegetation and wet soils.

##### 8.2.2.3 Clause 7.5 of the Dubbo LEP 2011

*(1) The objective of this clause is to maintain the hydrological functions of key groundwater systems and to protect vulnerable groundwater resources from depletion and contamination as a result of inappropriate development.*

**Response:** The development and groundwater at the site is described in the Groundwater and Salinity report prepared by Envirowest Consulting Pty Ltd (Report number R11858s).

*(2) This clause applies to the land identified as "Groundwater vulnerability" on the Natural Resources – Groundwater Vulnerability Map.*

**Response:** The majority of the site is not mapped on the groundwater vulnerability map. The south western section of the site is in a moderately high groundwater vulnerability area.

*(3) Before determining a development application for development on land to which this clause applies, the consent authority must consider:*

- (a) whether the development (including any on-site storage or disposal of solid or liquid waste chemicals) will cause any groundwater contamination or any adverse effect on groundwater dependent ecosystems.*

**Response:**

The development has a low potential to adversely affect groundwater and groundwater dependent ecosystems. Approximately half of the site will be covered with hard surfaces which will result in a reduction in water infiltration. Irrigation of the football field and small landscaped areas is expected to occur.

Nitrogen fertiliser will not be required on the majority of the site and application rates are expected to be sufficient to provide nutrients to plants and not result in off-site movement. The impact of nitrogen inputs post development will be reduced.

The post development scenario is expected to result in a decrease in contribution of phosphorus, nitrogen and suspended sediments. Fertilizer use will be less than the agricultural land-use. Stock will not be grazed on the site in the post development land-use.

Minor usage of herbicides may occur post development to control weeds. All fertilisers and agricultural chemicals are not residual and will be utilised by the vegetation or degrade rapidly in the environment. No impact on surface water or groundwater will occur.

No industrial activities including bulk storage or use of chemicals will occur in the development.

- (b) The cumulative impact (including the impact on nearby groundwater extraction for potable water supply or stock water supply) of the development and any other existing development on groundwater.*

**Response:**

Impact on groundwater from nitrogen and phosphorus contamination is expected to be less post development compared to pre-development due to lower contributions from animals and fertilisers. The cumulative impact of the development on groundwater quality is expected to be negligible.

*(4) Development consent must not be granted to development on land to which this clause applies unless the consent authority is satisfied that:*

- (a) The development is designed, sited and will be managed to avoid any significant adverse environmental impact, or*  
*(b) If that impact cannot be avoided by adopting feasible alternatives – the development is designed, sited and will be managed to minimise that impact, or*  
*(c) If that impact cannot be minimised – the development will be managed to mitigate that impact.*

No impacts from the development are expected under the expected development works and the proposed land-use scenario.



### 8.3 Vegetation

The site contains annual species which are shallow rooted. No impact from saline soils and groundwater on the vegetation was observed.

Vegetation will be replaced with introduced grasses, ornamental species including native species and hard surfaces.

### 8.4 Infrastructure

The engineering design for the site has not been finalised. The presence of basalt rock from depths of 0.1m is expected to prevent extensive excavation works being undertaken on the site with some cutting and filling works expected to create a level site. Imported fill should be non-saline. Impact on infrastructure from saline soils are not expected as infrastructure will be within non-saline imported material, non-saline to slightly saline natural soils or basalt rock.

### 8.5 Pollution risk control

Occasional fertilizer and chemical use is expected from the proposed land-use. Fertilisers will be utilised by plants. All agricultural chemicals degrade rapidly in the environment. No impact on surface water or groundwater will occur.

The site has historically been used for grazing. Waste from the animals contains significant nutrients and pathogens which has potential to move in surface water flows.

Stock will be excluded in the post development land-use decreasing contribution by animals to nutrients on the site.

The site contains numerous stockpiles of soil and other waste materials of unknown origin. If any contamination is associated with the imported material, remediation works will be undertaken to make the site suitable for the proposed land-use. The remediation works will ensure contaminants which may be currently contributing to pollution are managed.

Hard surfaces across the site will reduce sediment loads exported. Nutrient impact on surface water will be reduced post development.

The site area is considered important as it forms part of the Macquarie River catchment. ANZECC (2000) has determined water quality indicators for river systems in regard to various environmental values (Table 19). The environmental values relate to the protection of:

- aquatic ecosystems
- aquatic foods
- primary contact recreation
- secondary contact recreation
- drinking water
- visual amenity
- irrigation water supplies
- homestead water supplies
- livestock water supplies
- human consumption of fish

The irrigation water quality indicators are considered appropriate for the catchment. The potential impact of the development on each water quality indicator has been assessed (Table 19). Potential issues relate to current and future land-use and management of the site.

**Table 19. Impacts of development on water quality (Environmental objectives)**

Indicator	Objective	Impact of development
Nitrogen	5 mg/L	<p>Nitrogen may be applied to areas of the site as fertilisers. Nitrogen will be used by plants, digested by microbes or volatilised into the atmosphere. Infiltration for nitrogen into the subsoil and impact on groundwater systems will not occur.</p> <p>Maintenance of groundcover by minimal cultivation and no grazing are important factors in reducing nitrogen export.</p> <p>Nutrient modelling indicates nitrogen will decrease on site.</p>
Faecal coliform	<10 cfu/100mL to 10,000cfu/100mL	No effluent applied to the site. No impact.
Aluminium	5 mg/L	No impact.
Iron	0.2 mg/L	No impact.
Manganese	0.2 mg/L	No impact.
Dissolved oxygen	>6.5 mg/L	No effluent applied to the site. Vegetated areas are expected to be managed. No impact.
Phosphorus	0.05mg/L	<p>Phosphorus may be applied to small areas of the site as fertilisers. Phosphorus will be used by plants and absorbed in the soil.</p> <p>Groundcover will be enhanced in the development resulting in reduced sediment and phosphorus export. Post development fertiliser application rates will be reduced and the effect on phosphorus less.</p> <p>Nutrient modelling indicates phosphorous will decrease on site post development.</p>
pH	between 6.0 and 8.5	Fertilisers have a declining influence on pH and effects off-site will be negligible.
Cyanobacteria	-	<p>Cyanobacteria are dependent on the levels of nitrogen, phosphorus and water temperature. The development will not increase nitrogen and phosphorus therefore will have negligible impact.</p> <p>No cyanobacteria are present in fertilisers.</p>
Conductivity	-	Exposure of saline soils and off-site movement will be minimised by adoption of recommendations including minimising depth of cut and implementation of erosion and sediment control plans. No impact expected.
Turbidity	-	Negligible impact due to small size of the development and the absence of any disturbed areas on site.

The impact of the development on each water quality indicators will be negligible.

### 8.6 Earthworks

The engineering design for the site has not been finalised. The presence of basalt rock from depths of 0.1m is expected to prevent extensive excavation works being undertaken on the site with some cutting and filling works expected to create a level site. Imported fill should be non-saline.

### 8.7 Other impacts of the development

Nil

## 9. Management recommendation

### 9.1 Design

The development water and soil design will include:

- Drainage of water from hard surfaces in stormwater pipes
- Sediment and erosion control plans during construction
- Determination of the soil electrical conductivity at the design depth in areas to be excavated
- Ensure imported material is non-saline
- Irrigation scheduling of sports field to prevent overwatering
- No unsealed stormwater detention dams to be constructed

### 9.2 Exposure classification for concrete

Soil saturated extract electrical conductivity ( $EC_e$ ) was determined to be  $<4dS/m$  in the natural soil samples tested (Table 14). The soil pH was greater than 8. Exposure classification for concrete is A1. Minimum design characteristic strength for concrete is 20MPa and minimum curing requirement is continuous curing for at least 3 days (Appendix 2). Minimum reinforcement cover for concrete in soils is 40mm (Appendix 2). Exposure classification for concrete will require determination for imported fill material.

## 10. Conclusions

The site had a historical pasture grazing land-use and is currently vacant with numerous stockpiles of imported soil and debris. Vegetation cover on the site was generally 100% due to recent rainfall. No bare areas resulting from sheet erosion or salinity scalding were identified. The risk of erosion is low.

Soils on the site comprised loamy sand over silty clay and light clay. Drill refusal due to basalt was encountered from depths of 0.1 to 1.7m.

The majority of the site is located in the Dubbo Basalt Hydro-geological Landscape (HGL). Lithology of the Dubbo Basalt Hydro-geological Landscape consists of Cainozoic basalt consisting of in situ Olivine rich alkali basalt with some colluvial material and quartzite derived from the underlying sandstone and siltstone. Soil salinity in the landscape is isolated at areas along drainage lines, at the intersection with the Purlewaugh formation, depressions and footslopes which were not identified on the site. Groundwater or groundwater indicators were not encountered in the soil to a depth of 1.7m. Groundwater was not saline from drillers log descriptions of bores in the landscape.

Potable and stock supply bores have been constructed in the locality. Bores in the locality generally have water bearing zones greater than 10m in gravels and sands. Groundwater recharge within the Dubbo Basalt HGL is greatest on plateau areas. Groundwater residence times are short.

No visual surface or sub-surface indicators of groundwater discharge areas were identified on the site.

The infiltration balance indicated infiltration will reduce under the post development scenario due to an increase in impermeable areas. Rainfall on impermeable areas will drain off-site in stormwater pipes. Increased infiltration may occur as a result of irrigation of the sporting field. The increase is off-set by the reduction in permeable areas

The risk of groundwater contamination from the proposed land-use is lower than the current land-use. Nutrient contributions will decrease as a result of smaller available areas for fertilisation and a decrease in animal waste. Sediment contributions will also decrease as a result of an increase in hard cover areas and no soil disturbance from farming activities. Other activities which may increase the risk of groundwater contamination including car washing and re-use of greywater will not be undertaken on the site.

No impact on groundwater including contamination and changed groundwater levels is expected from the development. The development will not impact on quantity or quality of both unconfined and confined aquifers.

#### **11. Recommendations**

The development water and soil design will include:

- Drainage of water from hard surfaces in stormwater pipes
- Sediment and erosion control plans during construction
- Determination of the soil electrical conductivity at the design depth in areas to be excavated
- Ensure imported material is non-saline
- Irrigation scheduling of sports field to prevent overwatering
- No unsealed stormwater detention dams to be constructed

## 12. 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 level of confidence of the conclusion reached is governed by the scope of the investigation and the availability and quality of existing data. Where 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.

The investigation identifies the actual subsurface conditions only at those points where samples are taken, when they are taken. Data derived through sampling and subsequent laboratory testing is interpreted by geologists, engineers or scientists who then render an opinion about overall conditions, the nature and extent of likely impacts of the proposed development, and appropriate remediation measures. Actual conditions may differ from those inferred to exist, because no professional, no matter how well qualified, and no sub surface exploration program, no matter how comprehensive, can reveal what is hidden by earth, rock or time. The actual interface between materials may be far more gradual or abrupt than a report indicates. Actual conditions in areas not sampled may differ from predictions. It is thus import to understand the limitations of the investigation and recognise that we are not responsible for these limitations.

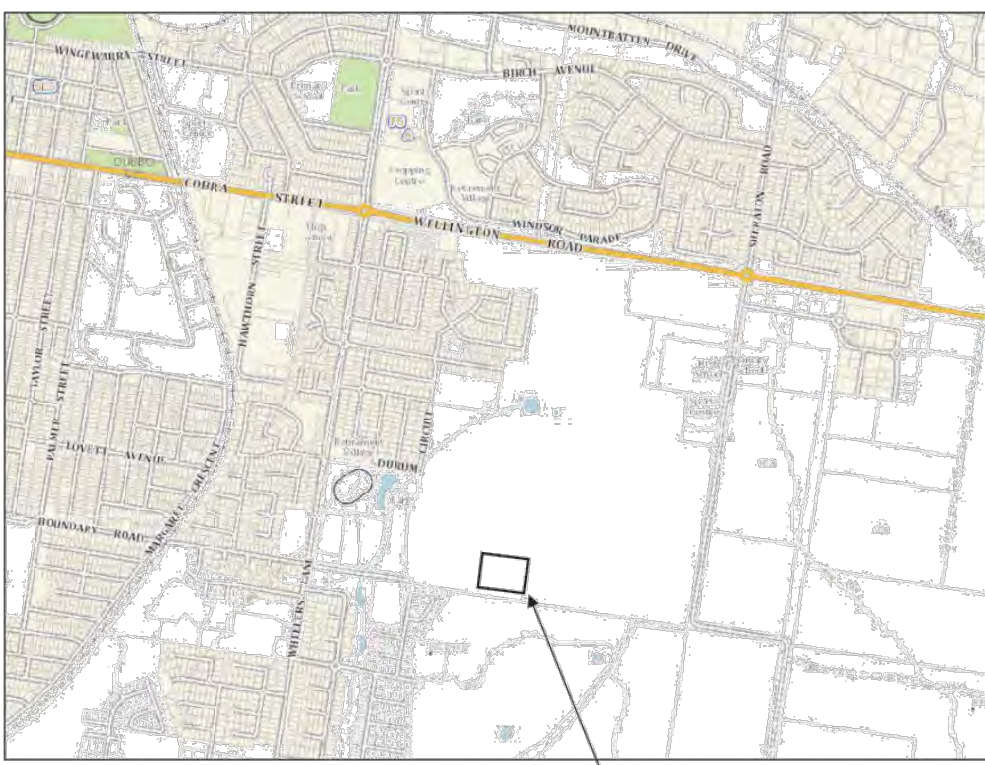
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### 13. References

- Bureau of Meteorology (1975) *Climatic Averages New South Wales, Dubbo*
- Chafer CJ (2003) *Modelling Diffuse Source Pollutants in the Sydney Catchment Authorities Catchments Final Draft (SCA)*
- Charman PE and Murphy BW (2001) *Soils: Their Properties and Management* (Oxford University Press, South Melbourne)
- Colquhoun GP, Meakin NS, Morgan EJ, Raymond OL, Scott MM, Watkins JJ *et al.* (1997) *Dubbo 1:250,000 Geological Sheet SI/55-04, 2<sup>nd</sup> Edition* (Geological Survey of New South Wales Sydney NSW)
- Cook PG, Stauffacher M, Therrien R, Halihan T, Richardson P, Williams RM, Bradford A (2001) *Groundwater Recharge and discharge in a saline, urban catchment (CSIRO 2001)*
- DCC (2013) *Dubbo City Urban Salinity Management Strategy* (Dubbo City Council)
- eSpade (2020) available at <http://www.environment.nsw.gov.au/eSpade2WebApp>
- Humphries E (2000) *Salinity Risk Assessment for the Central West Catchment (Macquarie, Castlereagh and Bogan Rivers)* (A joint initiative of the Central West Catchment Committee and the Department of Land and Water Conservation, Wellington NSW)
- Lillicrap A and McGhie S (2002) *Site Investigation for Urban Salinity* (Department of Land and Water Conservation, Sydney)
- McGhie S (2003) *Building in a Saline Environment* (Department of Infrastructure, Planning and Natural Resources, Sydney)
- Murphy BW and Lawrie JW (1998) *Soil Landscapes of the Dubbo 1:250 000 Sheet Report*, Department of Land and Water Conservation of NSW, Sydney
- NHMRC, NRMCC (2011) *Australian Drinking Water Guidelines Paper 6 National Water Quality Management Strategy* (National Health and Medical Research Council, national Resource Management Ministerial Council, Commonwealth of Australia, Canberra)
- NSW Government Water NSW (2020) *All Groundwater Map* <http://www.allwaterdata.water.nsw.gov.au/water>
- Piscope G and Dwyer J (2001) *Groundwater Vulnerability Map Series Macquarie Catchment* (Department of Land and Water Conservation)
- Reid RL (1990) *The Manual of Australian Agriculture* (Butterworths, Sydney)
- Smithson A (2010) *Upper Macquarie Alluvium- Groundwater Management Area 009; Groundwater Status Report- 2010* (NSW Office of Water, Sydney)

**Figures**

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- Figure 3. Hydro-geological Landscape plan
- Figure 4. Groundwater vulnerability map – DECCW
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Investigation area

<b>Figure 1. Locality plan</b>		
RSL Club, Part Lot 502 DP1255115, Boundary Road, Dubbo NSW		
	Envirowest Consulting Pty Ltd	
Job: R11858s.1	Drawn by: LD	Date: 9/6/2020





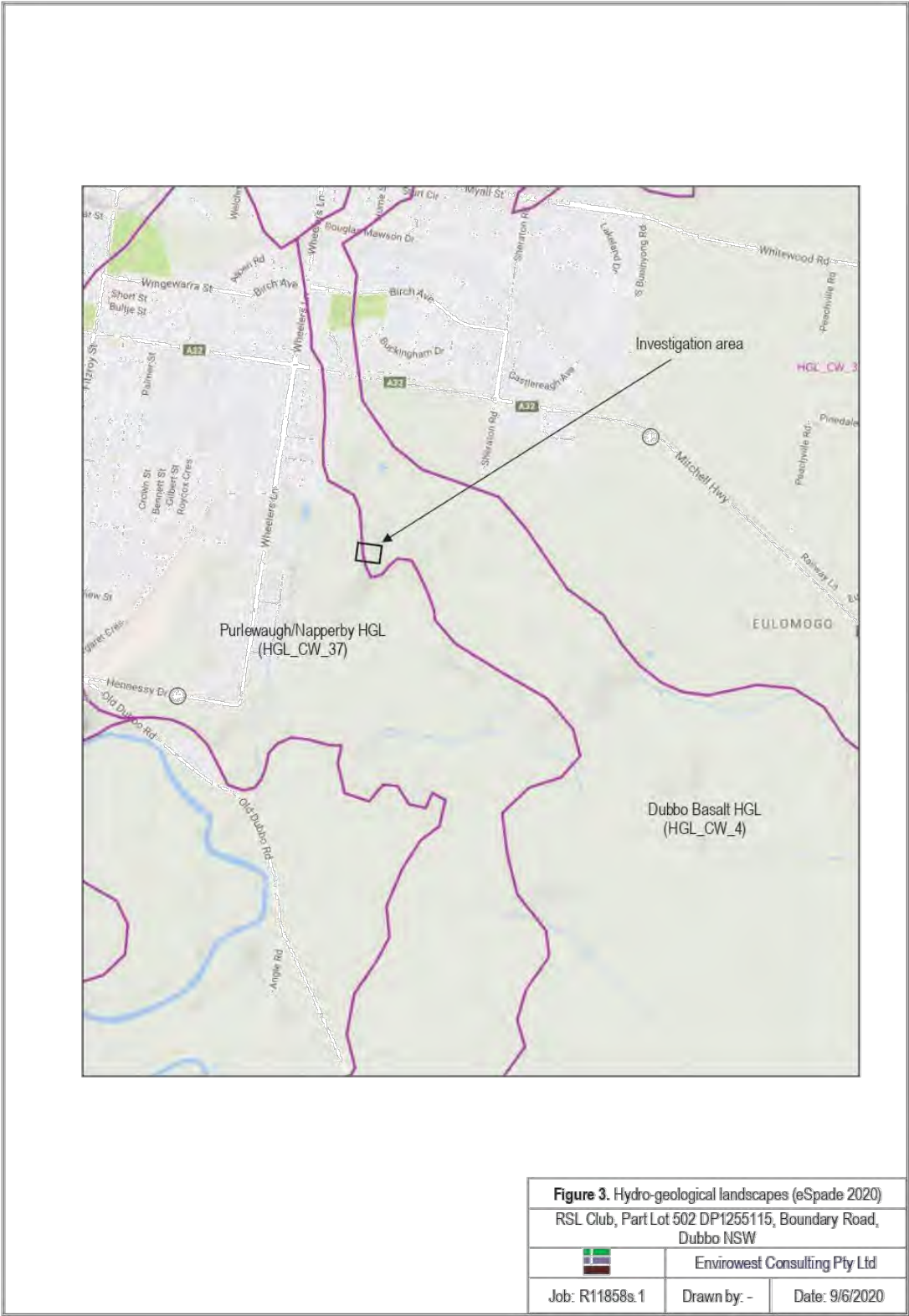
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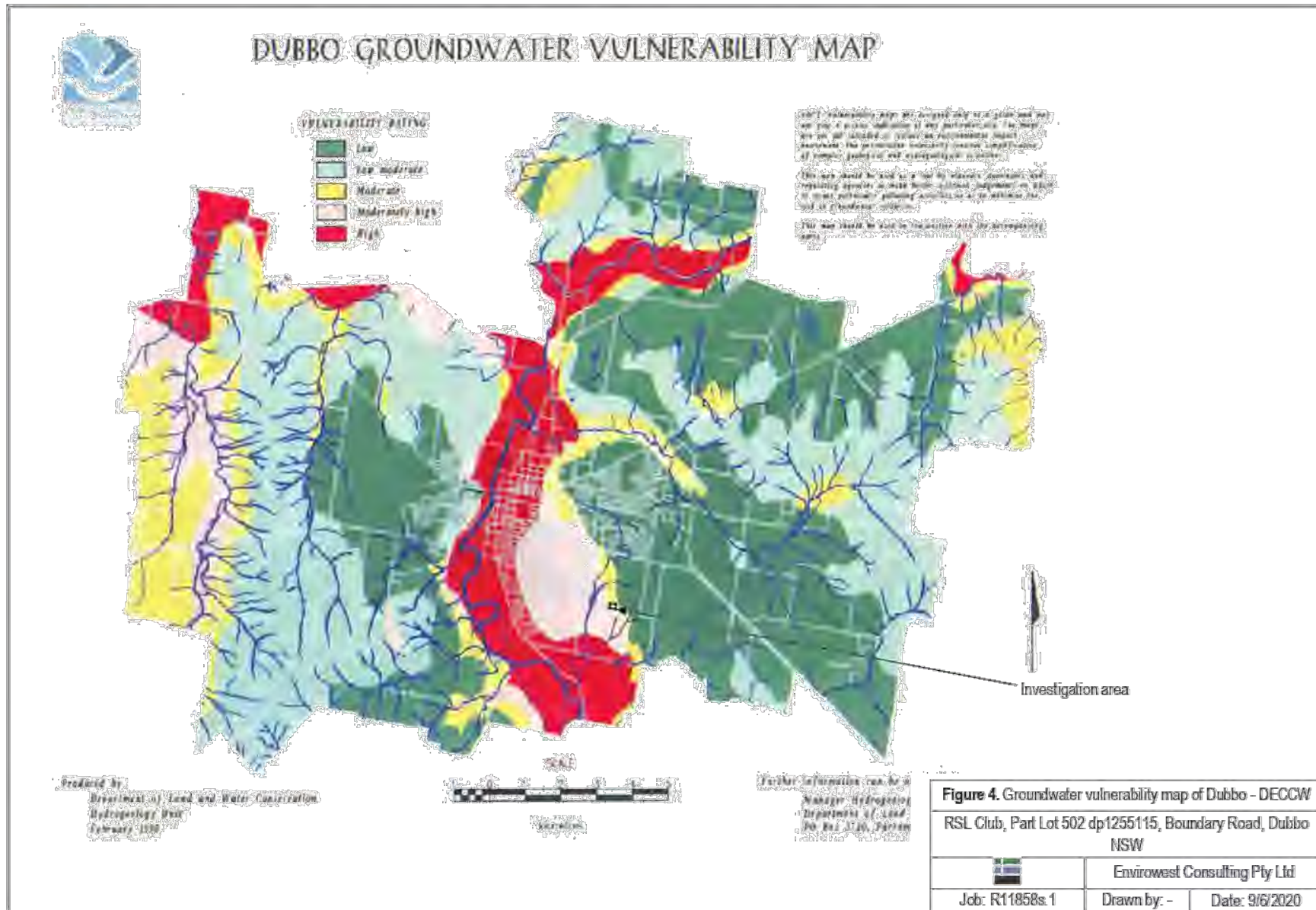


**Legend**

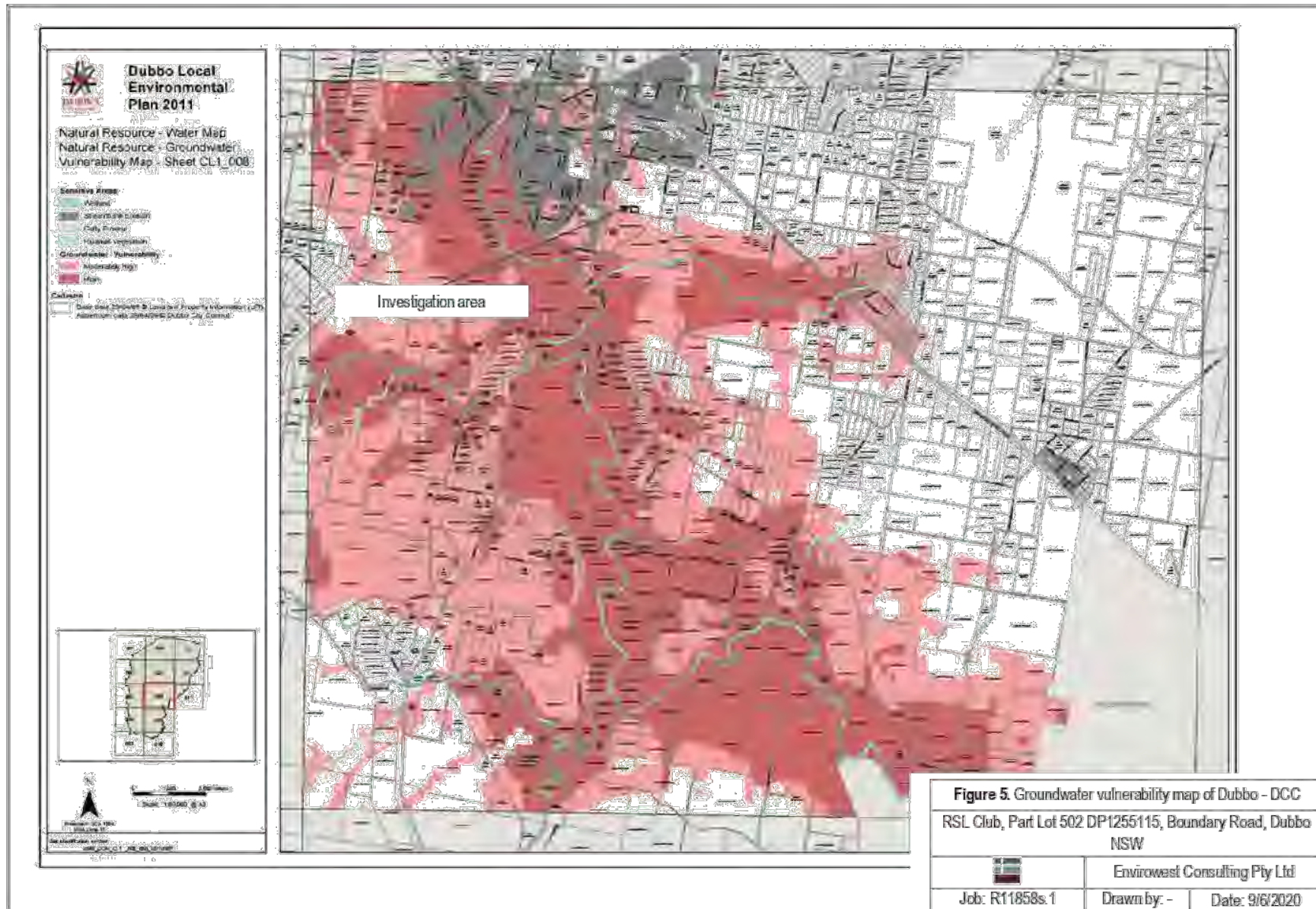
— Investigation area

<b>Figure 2. Aerial photograph</b>		
RSL Club, Part Lot 502 DP1255115, Boundary Road, Dubbo NSW		
	Envirowest Consulting Pty Ltd	
Job: R11858s.1	Drawn by: LD	Date: 10/6/2020







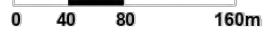




**Legend**

- Investigation area
- ⊗ Sampling location

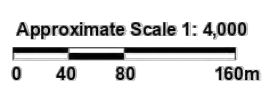
Approximate Scale 1: 4,000



<b>Figure 6.</b> Initial investigation locations		
RSL Club, Part Lot 502 DP1255115, Boundary Road, Dubbo NSW		
	Envirowest Consulting Pty Ltd	
Job: R11858s.1	Drawn by: LD	Date: 10/6/2020

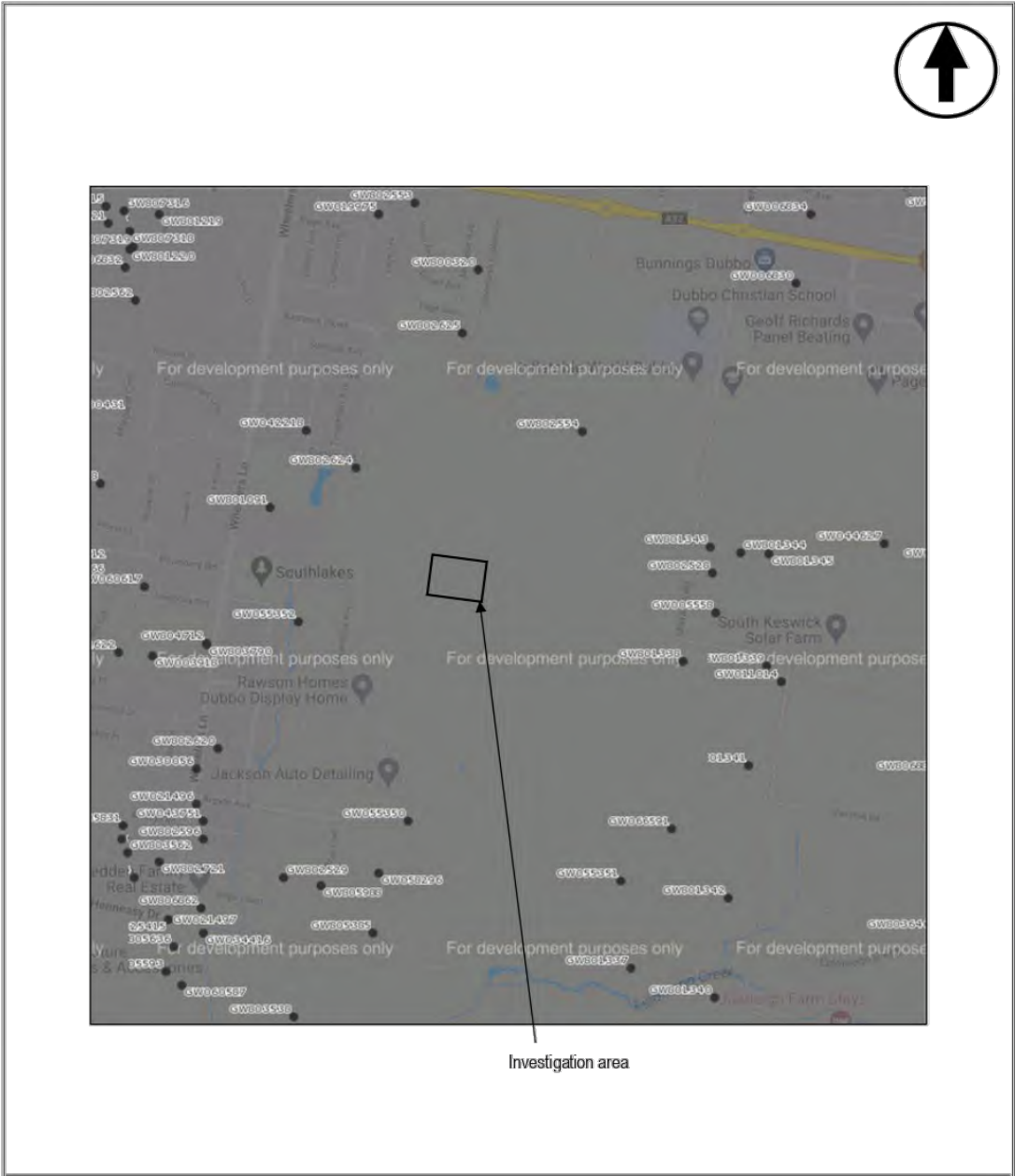


- Legend**
- Investigation area
  - ⊗ Sampling location




<b>Figure 7. Detailed investigation locations</b>		
RSL Club, Part Lot 502 DP1255115, Boundary Road, Dubbo NSW		
	Envirowest Consulting Pty Ltd	
Job: R11858s.1	Drawn by: LD	Date: 10/6/2020

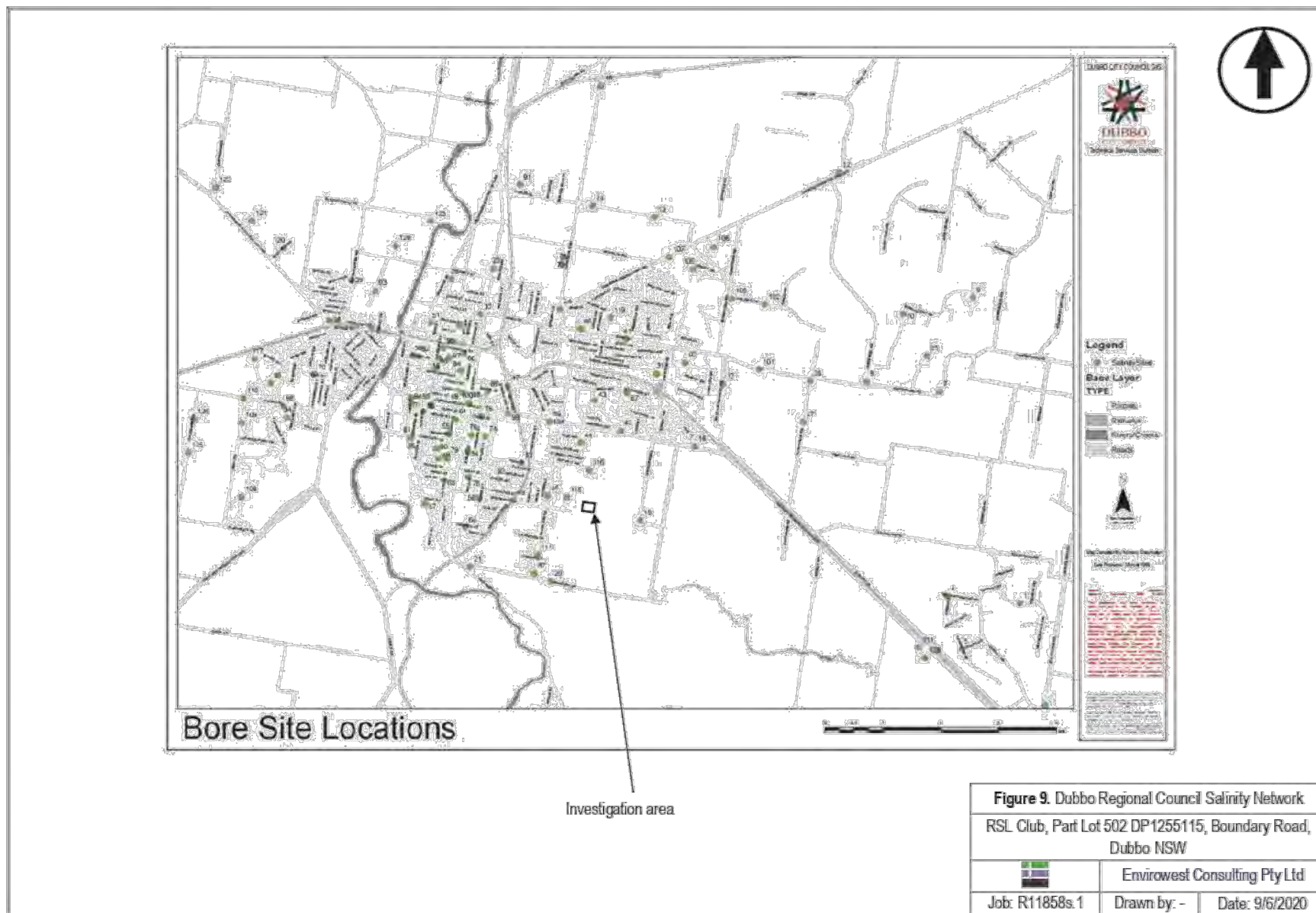




Approximate Scale 1: 19,000  
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**Figure 8.** Location of groundwater bores within 1km of the site  
 RSL Club, Part Lot 502 DP1255115, Boundary Road, Dubbo  
 NSW

	Enviwest Consulting Pty Ltd	
Job: R11858s.1	Drawn by: -	Date: 11/6/2020





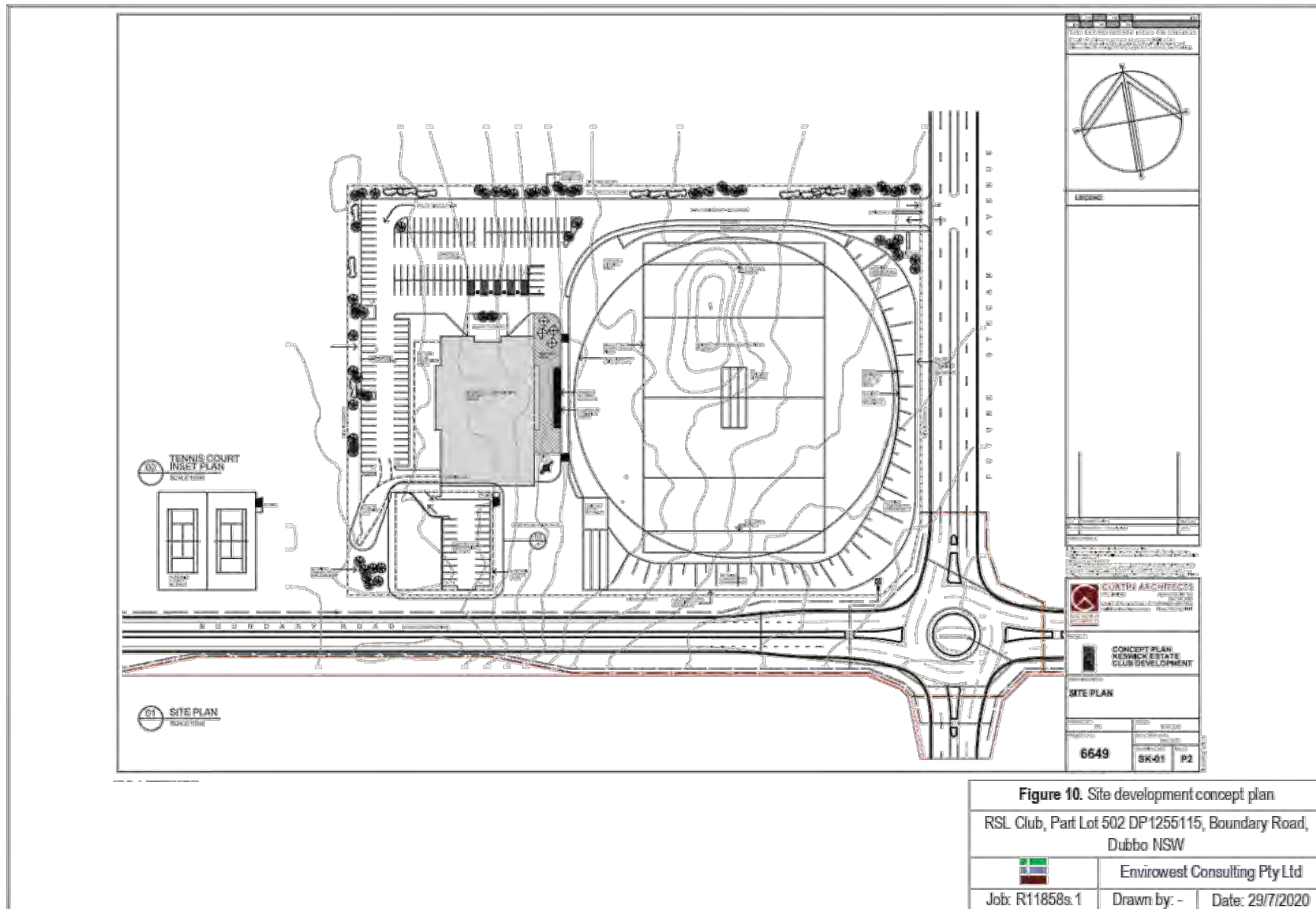


Figure 11. Photographs of the site



**Appendices**

- Appendix 1.** Nutrient and sediment modelling
- Appendix 2.** Aggressive soils, extract from Australia Standards, AS 2870-2011, 2011
- Appendix 3.** Details of registered bores within 1km of the site – Water NSW
- Appendix 4.** Salinity results from the Dubbo Regional Council Salinity Network
- Appendix 5.** Initial site investigation characteristics
- Appendix 6.** Field and laboratory sheets
- Appendix 7.** Reference methods for soil testing
- Appendix 8.** SGS laboratory report and chain of custody form

**Appendix 1. Nutrient and sediment modelling**

Land-use export rates for sediments, nitrogen and phosphorus mg/kg/year (Chafer 2003)

Land use class	Suspended sediment (kg/ha/yr)		
	Low	Median	High
Native bushland	20	40	60
Disturbed landscapes	330	870	2290
Remediated gullies	165	435	1145
Cropped	420	570	720
Pine plantations	65	380	680
Improved pasture	140	520	870
Unimproved pasture	140	190	230
Roads (sealed)	140	190	230
Roads (earth)	25	140	500
Urban	30	300	1200
Urban (open space)	160	360	1000
Rural residential	140	190	230
Industrial	180	200	4800
Commercial	180	200	4800
Golf course	0	10	20
Orchard	490	680	870

Land use class	Total Nitrogen (kg/ha/yr)		
	Low	Median	High
Native bushland	0.9	2.4	4
Disturbed landscapes	4.2	12	20
Remediated gullies	2.1	6	10
Cropped	4.2	8.9	13.5
Pine plantations	0.8	2.9	8.3
Improved pasture	4.2	8.9	13.5
Unimproved pasture	1.3	3.2	5.1
Roads (sealed)	2	6	10
Roads (earth)	1.3	2.2	3.1
Urban	2.2	6.1	10
Urban (open space)	1.3	3.2	5.1
Rural residential	2.2	6.1	10
Industrial	4	7.4	10
Commercial	4	7.4	10
Golf course	0	3.2	5
Orchard	1.7	8.9	5

Land use class	Total Phosphorus		
	Low	Median	High
Native bushland	0.01	0.13	0.25
Disturbed landscapes	0.3	1.24	2.2
Remediated gullies	0.15	0.62	1.1
Cropped	0.5	1.35	2.2
Pine plantations	0.1	1.16	2.5
Improved pasture	0.5	1.35	2.2
Unimproved pasture	0.1	0.17	0.25
Roads (sealed)	0.3	1.8	3.4
Roads (earth)	0.3	1.72	3.2
Urban	0.2	1.82	3.6
Urban (open space)	0.1	0.17	0.25
Rural residential	0.2	1.72	3.6
Industrial	1.4	1.82	2.2
Commercial	1.4	1.8	2.2
Golf course	0	0.3	3.6
Orchard	0.1	0.3	0.5

<b>Sediment export kg/yr</b>				
<b>LOW</b>	<b>PRE</b>	<b>POST</b>	<b>IMPACT</b>	
Native bushland	0.00	0.00	0.00	
Disturbed landscapes	0.00	0.00	0.00	
Remediated gullies	0.00	0.00	0.00	
Cropped	0.00	0.00	0.00	
Pine plantations	0.00	0.00	0.00	
Improved pasture	462.00	0.00	462.00	
Unimproved pasture	0.00	0.00	0.00	
Roads (sealed)	0.00	126.00	-126.00	
Roads (earth)	0.00	0.00	0.00	
Urban	0.00	7.50	-7.50	
Urban (open space)	0.00	344.00	-344.00	
Rural residential	0.00	0.00	0.00	
Industrial	0.00	0.00	0.00	
Commercial	0.00	0.00	0.00	
Golf course	0.00	0.00	0.00	
Orchard	0.00	0.00	0.00	
<b>TOTAL</b>	<b>462.00</b>	<b>477.50</b>	<b>-15.50</b>	
<b>MEDIAN</b>	<b>PRE</b>	<b>POST</b>	<b>IMPACT</b>	
Native bushland	0.00	0.00	0.00	
Disturbed landscapes	0.00	0.00	0.00	
Remediated gullies	0.00	0.00	0.00	
Cropped	0.00	0.00	0.00	
Pine plantations	0.00	0.00	0.00	
Improved pasture	1716.00	0.00	1716.00	
Unimproved pasture	0.00	0.00	0.00	
Roads (sealed)	0.00	171.00	-171.00	
Roads (earth)	0.00	0.00	0.00	
Urban	0.00	75.00	-75.00	
Urban (open space)	0.00	774.00	-774.00	
Rural residential	0.00	0.00	0.00	
Industrial	0.00	0.00	0.00	
Commercial	0.00	0.00	0.00	
Golf course	0.00	0.00	0.00	
Orchard	0.00	0.00	0.00	
<b>TOTAL</b>	<b>1716.00</b>	<b>1020.00</b>	<b>696.00</b>	
<b>HIGH</b>	<b>PRE</b>	<b>POST</b>	<b>IMPACT</b>	
Native bushland	0.00	0.00	0.00	
Disturbed landscapes	0.00	0.00	0.00	
Remediated gullies	0.00	0.00	0.00	
Cropped	0.00	0.00	0.00	
Pine plantations	0.00	0.00	0.00	
Improved pasture	2871.00	0.00	2871.00	
Unimproved pasture	0.00	0.00	0.00	
Roads (sealed)	0.00	207.00	-207.00	
Roads (earth)	0.00	0.00	0.00	
Urban	0.00	300.00	-300.00	
Urban (open space)	0.00	2150.00	-2150.00	
Rural residential	0.00	0.00	0.00	
Industrial	0.00	0.00	0.00	
Commercial	0.00	0.00	0.00	
Golf course	0.00	0.00	0.00	
Orchard	0.00	0.00	0.00	
<b>TOTAL</b>	<b>2871.00</b>	<b>2657.00</b>	<b>214.00</b>	

<b>Total Nitrogen kg/yr LOW</b>	<b>PRE</b>	<b>POST</b>	<b>IMPACT</b>
Native bushland	0.00	0.00	0.00
Disturbed landscapes	0.00	0.00	0.00
Remediated gullies	0.00	0.00	0.00
Cropped	0.00	0.00	0.00
Pine plantations	0.00	0.00	0.00
Improved pasture	13.86	0.00	13.86
Unimproved pasture	0.00	0.00	0.00
Roads (sealed)	0.00	1.80	-1.80
Roads (earth)	0.00	0.00	0.00
Urban	0.00	0.55	-0.55
Urban (open space)	0.00	2.80	-2.80
Rural residential	0.00	0.00	0.00
Industrial	0.00	0.00	0.00
Commercial	0.00	0.00	0.00
Golf course	0.00	0.00	0.00
Orchard	0.00	0.00	0.00
<b>TOTAL</b>	<b>13.86</b>	<b>5.15</b>	<b>8.72</b>

<b>MEDIAN</b>	<b>PRE</b>	<b>POST</b>	<b>IMPACT</b>
Native bushland	0.00	0.00	0.00
Disturbed landscapes	0.00	0.00	0.00
Remediated gullies	0.00	0.00	0.00
Cropped	0.00	0.00	0.00
Pine plantations	0.00	0.00	0.00
Improved pasture	29.37	0.00	29.37
Unimproved pasture	0.00	0.00	0.00
Roads (sealed)	0.00	5.40	-5.40
Roads (earth)	0.00	0.00	0.00
Urban	0.00	1.53	-1.53
Urban (open space)	0.00	6.88	-6.88
Rural residential	0.00	0.00	0.00
Industrial	0.00	0.00	0.00
Commercial	0.00	0.00	0.00
Golf course	0.00	0.00	0.00
Orchard	0.00	0.00	0.00
<b>TOTAL</b>	<b>29.37</b>	<b>13.81</b>	<b>15.57</b>

<b>HIGH</b>	<b>PRE</b>	<b>POST</b>	<b>IMPACT</b>
Native bushland	0.00	0.00	0.00
Disturbed landscapes	0.00	0.00	0.00
Remediated gullies	0.00	0.00	0.00
Cropped	0.00	0.00	0.00
Pine plantations	0.00	0.00	0.00
Improved pasture	44.55	0.00	44.55
Unimproved pasture	0.00	0.00	0.00
Roads (sealed)	0.00	9.00	-9.00
Roads (earth)	0.00	0.00	0.00
Urban	0.00	2.50	-2.50
Urban (open space)	0.00	10.97	-10.97
Rural residential	0.00	0.00	0.00
Industrial	0.00	0.00	0.00
Commercial	0.00	0.00	0.00
Golf course	0.00	0.00	0.00
Orchard	0.00	0.00	0.00
<b>TOTAL</b>	<b>44.55</b>	<b>22.47</b>	<b>22.09</b>

<b>Total Phosphorus kg/yr</b>			
<b>LOW</b>	<b>PRE</b>	<b>POST</b>	<b>IMPACT</b>
Native bushland	0.00	0.00	0.00
Disturbed landscapes	0.00	0.00	0.00
Remediated gullies	0.00	0.00	0.00
Cropped	0.00	0.00	0.00
Pine plantations	0.00	0.00	0.00
Improved pasture	1.65	0.00	1.65
Unimproved pasture	0.00	0.00	0.00
Roads (sealed)	0.00	0.27	-0.27
Roads (earth)	0.00	0.00	0.00
Urban	0.00	0.05	-0.05
Urban (open space)	0.00	0.22	-0.22
Rural residential	0.00	0.00	0.00
Industrial	0.00	0.00	0.00
Commercial	0.00	0.00	0.00
Golf course	0.00	0.00	0.00
Orchard	0.00	0.00	0.00
<b>TOTAL</b>	<b>1.65</b>	<b>0.54</b>	<b>1.12</b>
<b>MEDIAN</b>	<b>PRE</b>	<b>POST</b>	<b>IMPACT</b>
Native bushland	0.00	0.00	0.00
Disturbed landscapes	0.00	0.00	0.00
Remediated gullies	0.00	0.00	0.00
Cropped	0.00	0.00	0.00
Pine plantations	0.00	0.00	0.00
Improved pasture	4.46	0.00	4.46
Unimproved pasture	0.00	0.00	0.00
Roads (sealed)	0.00	1.62	-1.62
Roads (earth)	0.00	0.00	0.00
Urban	0.00	0.46	-0.46
Urban (open space)	0.00	0.37	-0.37
Rural residential	0.00	0.00	0.00
Industrial	0.00	0.00	0.00
Commercial	0.00	0.00	0.00
Golf course	0.00	0.00	0.00
Orchard	0.00	0.00	0.00
<b>TOTAL</b>	<b>4.46</b>	<b>2.44</b>	<b>2.01</b>
<b>HIGH</b>	<b>PRE</b>	<b>POST</b>	<b>IMPACT</b>
Native bushland	0.00	0.00	0.00
Disturbed landscapes	0.00	0.00	0.00
Remediated gullies	0.00	0.00	0.00
Cropped	0.00	0.00	0.00
Pine plantations	0.00	0.00	0.00
Improved pasture	7.26	0.00	7.26
Unimproved pasture	0.00	0.00	0.00
Roads (sealed)	0.00	3.06	-3.06
Roads (earth)	0.00	0.00	0.00
Urban	0.00	0.90	-0.90
Urban (open space)	0.00	0.54	-0.54
Rural residential	0.00	0.00	0.00
Industrial	0.00	0.00	0.00
Commercial	0.00	0.00	0.00
Golf course	0.00	0.00	0.00
Orchard	0.00	0.00	0.00
<b>TOTAL</b>	<b>7.26</b>	<b>4.50</b>	<b>2.76</b>

**Appendix 2. Aggressive soils, extract from Australian Standards, AS 2870-2011, 2011****Exposure classification for concrete in saline soils**

Saturated extract electrical conductivity ( $EC_e$ ), dS/m	Exposure classification
<4	A1
4-8	A2
8-16	B1
>16	B2

**Notes:**

- Guidance on concrete in saline soils can be found in CCAA T56
- Exposure classifications are from AS 3600
- The currently accepted method of determining the salinity level of the soil is by measuring the extract electrical conductivity (EC) of a soil and water mixture in deciSiemens per metre (dS/m) and using conversion factors that allow for the soil texture, to determine the saturated extract electrical conductivity ( $EC_e$ )
- The division between a non-saline and saline soil is generally regarded as an  $EC_e$  value of 4dS/m, therefore no increase in the minimum concrete strength is required below this value

**Exposure classification for concrete in sulfate soils**

Exposure conditions			Exposure classification	
Sulfates (expressed as $SO_4$ ) <sup>*</sup>		pH	Soil conditions	Soil conditions
In soil (ppm)	In groundwater (ppm)		A <sup>**</sup>	B <sup>†</sup>
<5,000	<1,000	>5.5	A2	A1
5,000-10,000	1,000-3,000	4.5-5.5	B1	A2
10,000-20,000	3,000-10,000	4-4.5	B2	B1
>20,000	>10,000	<4	C2	B2

\* Approximately 100ppm  $SO_4$  = 80ppm  $SO_3$

\*\* Soil conditions A – high permeability soils (e.g. sands and gravels) that are in groundwater

† Soil conditions B – low permeability soils (e.g. silts and clays) or all soils above groundwater

**Minimum design characteristic strength ( $f_c$ ) and curing requirements for concrete**

Exposure classification	Minimum $f_c$ MPa	Minimum initial curing requirement
A1	20	Cure continuously for at least 3 days
A2	25	
B1	32	Cure continuously for at least 7 days
B2	40	
C1	≥50	
C2	≥50	

**Minimum reinforcement cover for concrete**

Exposure classification	Minimum cover in saline soils * mm	Minimum cover in sulfate soils ** (mm)
A1	See Clause 5.3.2	40
A2	45	50
B1	50	60
B2	55	65
C1	†	70
C2	†	85

\* Where a damp-proofing membrane is installed, the minimum reinforcement cover in saline soils may be reduced to 30mm.

\*\* Where a damp-proofing membrane is installed, the minimum reinforcement cover in sulfate soils may be reduced by 10mm.

† Saline soils have a maximum exposure classification of B2.



## Appendix 3. Details of registered bores within 1km of the site – Water NSW

Bore record No. (Figure 8)	Eastings	Northings	Drilled / Completed depth (m)	Salinity description	Water bearing zones (m)	Standing water level (m)	Date drilled and or tested	Purpose
GW801091	653375	6428652	36	-	-	-	-	Industrial/ Irrigation
GW802624	653684	6428788	9	-	7-9	-	2005	Monitoring
GW042218	653505	6428921	18.3	-	-	18.4	1953	Stock, domestic (abandoned)
GW802625	654071	6429259	3.5	-	2.5-3.5	-	2006	Monitoring
GW802554	654491	6428905	9	-	6.5-7.5	-	2004	Monitoring
GW801343	654944	6428486	59	-	-	-	1992	Unknown (backfilled)
GW801344	655053	6428466	32	-	-	-	1992	Unknown (backfilled)
GW801345	655153	6428459	34	-	-	-	1992	Unknown (backfilled)
GW802528	654952	6428393	3	-	2-3	2.9	2004	Monitoring
GW005558	654961	6428252	57.9	-	26.2-33.8	18.3	1959	Stock
GW801338	654839	6428083	149	-	-	-	1992	Unknown (backfilled)
GW055350	653851	6427529	21.6	-	-	-	-	Stock/ Domestic
GW802620	653174	6427798	6	-	5-6	5.47	2005	Monitoring
GW803790	653138	6428168	43.9	Good	0-39.3	30	1988	Stock, domestic: (Abandoned)
GW804712	653140	6428170	52	Good	42-49	32.8	2011	Domestic
GW055352	652647	6428616	99.7	Good	30.4-31.3	32.9	1973	Public

**Appendix 4. Salinity and Standing Water Level (SWL) data from Dubbo Regional Council Salinity Network**

Dubbo Regional Council Salinity Network site number (Figure 9)		DCC19	DCC44	DCC45	DCC115	DCC116
Sampling date	Drilled depth (m)	3	6	9	9	3.5
Mar-05	EC(dS/m)	TSTB	-	-	-	-
	SWL (m)	2.90	DRY	DRY	DRY	DRY
Apr-05	EC(dS/m)	TSTB	TSTB	0.30	-	-
	SWL (m)	2.83	6	6.80	DRY	DRY
May-05	EC(dS/m)	-	-	0.30	-	-
	SWL (m)	-	DRY	5.87	DRY	DRY
Jun-05	EC(dS/m)	-	-	1.40	-	-
	SWL (m)	-	DRY	5.95	DRY	DRY
Jul-05	EC(dS/m)	-	-	1.30	0.3	-
	SWL (m)	-	DRY	6.90	7.01	DRY
Aug-05	EC(dS/m)	-	-	1.30	0.4	-
	SWL (m)	-	DRY	7.40	8.0	DRY
Sep-05	EC(dS/m)	-	-	-	0.1	-
	SWL (m)	-	DRY	8.76	5.87	DRY
Oct-05	EC(dS/m)	TSTB	-	0.90	0.2	0.7
	SWL (m)	2.75	DRY	7.45	6.37	2.3
Nov-05	EC(dS/m)	-	-	-	0.2	-
	SWL (m)	-	DRY	7.40	6.4	DRY
Dec-05	EC(dS/m)	-	-	DRY	-	-
	SWL (m)	DRY	DRY	DRY	DRY	DRY
Jan-06	EC(dS/m)	-	-	DRY	0.3	-
	SWL (m)	DRY	DRY	DRY	8.0	DRY
Feb-06	EC(dS/m)	-	-	TSTB	TSTB	TSTB
	SWL (m)	DRY	DRY	8.75	8.5	3.26
Mar-06	EC(dS/m)	-	-	DRY	-	-
	SWL (m)	DRY	DRY	DRY	DRY	DRY
Apr-06	EC(dS/m)	-	-	0.90	-	-
	SWL (m)	DRY	DRY	4.60	DRY	DRY
May-06	EC(dS/m)	-	-	0.70	-	TSTB
	SWL (m)	DRY	DRY	3.29	DRY	3.26
Jun-06	EC(dS/m)	-	-	1.00	-	TSTB
	SWL (m)	DRY	DRY	4.25	DRY	3.3
Jul-06	EC(dS/m)	-	-	0.90	0.1	-
	SWL (m)	DRY	DRY	2.87	5.75	DRY
Aug-06	EC(dS/m)	-	-	0.80	0.3	-
	SWL (m)	DRY	DRY	7.42	7.59	DRY
Sep-06	EC(dS/m)	-	-	0.90	-	-
	SWL (m)	DRY	DRY	8.45	DRY	DRY
Oct-06	EC(dS/m)	-	-	-	-	-
	SWL (m)	DRY	DRY	DRY	DRY	DRY
Nov-06	EC(dS/m)	-	-	-	-	-
	SWL (m)	DRY	DRY	DRY	DRY	DRY
Dec-06	EC(dS/m)	-	-	-	-	-
	SWL (m)	DRY	DRY	DRY	DRY	DRY
Jan-07	EC(dS/m)	-	-	0.80	-	TSTB
	SWL (m)	DRY	DRY	7.5	DRY	3.29
Feb-07	EC(dS/m)	-	-	0.90	-	TSTB
	SWL (m)	DRY	DRY	4.96	DRY	3.3
Mar-07	EC(dS/m)	-	-	0.80	-	-
	SWL (m)	DRY	DRY	7.43	DRY	DRY
Apr-07	EC(dS/m)	-	-	1.80	-	TSTB
	SWL (m)	DRY	DRY	7.46	DRY	3.3

TSTB – Too shallow to bail

Dubbo Regional Council Salinity Network site number (Figure 9)		DCC19	DCC44	DCC45	DCC115	DCC116
Sampling date	Drilled depth (m)	3	6	9	9	3.5
May-07	EC(dS/m)	-	-	0.80	TSTB	TSTB
	SWL (m)	DRY	DRY	7.09	6.33	3.3
Jun-07	EC(dS/m)	TSTB	-	0.70	-	TSTB
	SWL (m)	2.79	DRY	7.47	5.47	3.32
Jul-07	EC(dS/m)	-	-	0.90	-	TSTB
	SWL (m)	DRY	DRY	7.62	DRY	3.25
Aug-07	EC(dS/m)	TSTB	-	0.90	-	-
	SWL (m)	2.69	DRY	7.31	DRY	DRY
Sep-07	EC(dS/m)	TSTB	-	0.90	-	-
	SWL (m)	2.75	DRY	7.33	DRY	DRY
Oct-07	EC(dS/m)	-	-	TSTB	-	-
	SWL (m)	DRY	DRY	8.69	DRY	DRY
Nov-07	EC(dS/m)	-	-	TSTB	-	-
	SWL (m)	DRY	DRY	8.74	DRY	DRY
Dec-07	EC(dS/m)	-	-	TSTB	-	-
	SWL (m)	DRY	DRY	8.28	DRY	DRY
Jan-08	EC(dS/m)	-	-	TSTB	-	TSTB
	SWL (m)	DRY	DRY	7.79	DRY	3.29
Feb-08	EC(dS/m)	-	-	DRY	-	-
	SWL (m)	DRY	DRY	DRY	DRY	DRY
Mar-08	EC(dS/m)	-	-	0.50	-	-
	SWL (m)	-	DRY	7.30	DRY	DRY
Apr-08	EC(dS/m)	-	-	DRY	-	-
	SWL (m)	-	DRY	DRY	DRY	DRY
May-08	EC(dS/m)	-	-	DRY	-	-
	SWL (m)	-	DRY	DRY	DRY	DRY
Jun-08	EC(dS/m)	-	-	DRY	-	-
	SWL (m)	-	DRY	DRY	DRY	DRY
Jul-08	EC(dS/m)	-	-	-	-	-
	SWL (m)	-	DRY	DRY	DRY	DRY
Aug-08	EC(dS/m)	-	-	7.90	-	-
	SWL (m)	-	DRY	6.25	DRY	DRY
Sep-08	EC(dS/m)	-	-	0.90	0.2	-
	SWL (m)	-	DRY	6.56	6.2	DRY
Oct-08	EC(dS/m)	-	-	-	-	-
	SWL (m)	-	DRY	DRY	DRY	DRY
Nov-08	EC(dS/m)	-	-	0.7	0.2	-
	SWL (m)	-	DRY	7.4	6.08	DRY
Dec-08	EC(dS/m)	-	-	1.00	0.5	-
	SWL (m)	-	DRY	8.47	7.32	DRY
Jan-09	EC(dS/m)	-	-	-	-	-
	SWL (m)	-	DRY	DRY	DRY	DRY
Feb-09	EC(dS/m)	-	-	-	-	-
	SWL (m)	-	DRY	DRY	DRY	DRY
Mar-09	EC(dS/m)	-	-	1.01	-	-
	SWL (m)	-	DRY	6.6	DRY	DRY
Apr-09	EC(dS/m)	-	-	1.14	-	-
	SWL (m)	-	DRY	7.41	DRY	DRY
May-09	EC(dS/m)	-	-	-	-	-
	SWL (m)	-	DRY	DRY	DRY	DRY
Jun-09	EC(dS/m)	-	-	-	-	-
	SWL (m)	-	DRY	DRY	DRY	DRY
Jul-09	EC(dS/m)	-	-	0.96	-	-
	SWL (m)	-	DRY	7.35	DRY	DRY

TSTB – Too shallow to bail

Dubbo Regional Council Salinity Network site number (Figure 9)		DCC19	DCC44	DCC45	DCC115	DCC116
Sampling date	Drilled depth (m)	3	6	9	9	3.5
Aug-09	EC(dS/m)	-	-	1.08	-	-
	SWL (m)	DRY	DRY	7.96	DRY	DRY
Sep-09	EC(dS/m)	-	-	1.23	-	-
	SWL (m)	DRY	DRY	8.15	DRY	DRY
Oct-09	EC(dS/m)	-	-	TSTB	0.52	-
	SWL (m)	DRY	DRY	8.79	7.38	DRY
Nov-09	EC(dS/m)	-	-	1.50	-	-
	SWL (m)	DRY	DRY	8.52	DRY	DRY
Dec-09	EC(dS/m)	-	-	1.33	-	-
	SWL (m)	DRY	DRY	7.83	DRY	DRY
Jan-10	EC(dS/m)	-	-	-	-	TSTB
	SWL (m)	DRY	DRY	DRY	DRY	3.41
Feb-10	EC(dS/m)	-	-	TSTB	-	0.4
	SWL (m)	DRY	DRY	8.74	-	2.33
Mar-10	EC(dS/m)	-	-	-	0.4	-
	SWL (m)	DRY	DRY	DRY	7.47	DRY
Apr-10	EC(dS/m)	TSTB	-	TSTB	-	0.31
	SWL (m)	2.87	DRY	8.95	-	1.43
May-10	EC(dS/m)	-	-	-	DRY	0.51
	SWL (m)	DRY	DRY	DRY	DRY	1.57
Jun-10	EC(dS/m)	-	-	-	-	0.47
	SWL (m)	DRY	DRY	DRY	-	0.3
Jul-10	EC(dS/m)	-	-	-	-	0.62
	SWL (m)	DRY	DRY	DRY	-	0.59
Aug-10	EC(dS/m)	-	-	0.87	-	0.78
	SWL (m)	DRY	DRY	7.55	-	0.74
Sep-10	EC(dS/m)	-	-	0.75	-	0.67
	SWL (m)	DRY	DRY	7.36	-	1.03
Oct-10	EC(dS/m)	-	-	-	-	0.32
	SWL (m)	DRY	DRY	DRY	-	2.45
Nov-10	EC(dS/m)	-	-	0.38	-	-
	SWL (m)	DRY	DRY	3.68	-	-
Dec-10	EC(dS/m)	-	-	0.56	-	0.74
	SWL (m)	DRY	DRY	5.09	-	1.84
Jan-11	EC(dS/m)	-	-	0.75	-	-
	SWL (m)	DRY	DRY	6.50	-	DRY
Feb-11	EC(dS/m)	-	-	1.06	-	-
	SWL (m)	DRY	DRY	8.21	DRY	DRY
Mar-11	EC(dS/m)	-	-	-	-	-
	SWL (m)	DRY	DRY	DRY	DRY	DRY
Apr-11	EC(dS/m)	-	-	-	-	-
	SWL (m)	DRY	DRY	DRY	DRY	DRY
May-11	EC(dS/m)	-	-	-	-	-
	SWL (m)	DRY	DRY	DRY	DRY	DRY
Jun-11	EC(dS/m)	-	-	-	-	-
	SWL (m)	DRY	DRY	DRY	DRY	DRY
Jul-11	EC(dS/m)	-	-	-	-	-
	SWL (m)	DRY	DRY	DRY	DRY	DRY
Aug-11	EC(dS/m)	-	-	-	-	-
	SWL (m)	DRY	DRY	DRY	DRY	DRY
Sep-11	EC(dS/m)	-	-	-	-	-
	SWL (m)	DRY	DRY	DRY	DRY	DRY
Oct-11	EC(dS/m)	-	-	-	-	-
	SWL (m)	DRY	DRY	DRY	DRY	DRY

TSTB – Too shallow to bail

Dubbo Regional Council Salinity Network site number (Figure 9)		DCC19	DCC44	DCC45	DCC115	DCC116
Sampling date	Drilled depth (m)	3	6	9	9	3.5
Nov-11	EC(dS/m)	TSTB	-	-	-	2.47
	SWL (m)	2.93	DRY	DRY	DRY	1.23
Dec-11	EC(dS/m)	-	-	1.14	-	1.56
	SWL (m)	DRY	DRY	7.3	DRY	0.95
Jan-12	EC(dS/m)	-	-	1.22	-	-
	SWL (m)	DRY	DRY	7.48	DRY	DRY
Feb-12	EC(dS/m)	-	-	1.31	-	-
	SWL (m)	DRY	DRY	7.4	-	-
Mar-12	EC(dS/m)	TSTB	-	1.88	-	-
	SWL (m)	2.82	DRY	8.03	-	-
Apr-12	EC(dS/m)	-	-	2.14	-	-
	SWL (m)	DRY	DRY	8.62	-	-
May-12	EC(dS/m)	-	-	-	-	-
	SWL (m)	DRY	DRY	DRY	-	-
Jun-12	EC(dS/m)	-	-	-	-	-
	SWL (m)	DRY	DRY	DRY	-	-
Jul-12	EC(dS/m)	-	-	-	-	-
	SWL (m)	DRY	DRY	DRY	-	-
Aug-12	EC(dS/m)	-	-	-	-	-
	SWL (m)	DRY	DRY	DRY	-	-
Sep-12	EC(dS/m)	-	-	1.04	-	-
	SWL (m)	DRY	DRY	7.5	-	-
Oct-12	EC(dS/m)	-	-	-	-	-
	SWL (m)	DRY	DRY	DRY	-	-
Nov-12	EC(dS/m)	-	-	-	-	-
	SWL (m)	DRY	DRY	DRY	-	-
Dec-12	EC(dS/m)	-	-	-	-	-
	SWL (m)	DRY	DRY	DRY	-	-
Jan-13	EC(dS/m)	-	-	1.31	-	-
	SWL (m)	DRY	DRY	7.53	-	-
Feb-13	EC(dS/m)	-	-	-	-	-
	SWL (m)	DRY	DRY	DRY	-	DRY
Mar-13	EC(dS/m)	-	-	-	-	0.54
	SWL (m)	DRY	DRY	DRY	-	1.58
Apr-13	EC(dS/m)	-	-	-	-	0.3
	SWL (m)	DRY	DRY	DRY	-	1.63
May-13	EC(dS/m)	-	-	-	-	-
	SWL (m)	DRY	DRY	DRY	-	DRY
Jun-13	EC(dS/m)	-	-	-	-	-
	SWL (m)	DRY	DRY	DRY	-	DRY
Jul-13	EC(dS/m)	-	-	-	-	-
	SWL (m)	DRY	DRY	DRY	-	DRY
Aug-13	EC(dS/m)	-	-	-	-	-
	SWL (m)	DRY	DRY	DRY	-	-
Sep-13	EC(dS/m)	-	-	TSTB	-	-
	SWL (m)	DRY	DRY	8.68	-	-
Oct-13	EC(dS/m)	-	-	TSTB	-	-
	SWL (m)	DRY	DRY	8.68	-	-
Nov-13	EC(dS/m)	-	-	-	-	-
	SWL (m)	DRY	DRY	DRY	-	-
Dec-13	EC(dS/m)	-	-	1.05	-	-
	SWL (m)	DRY	DRY	7.98	-	-
Jan-14	EC(dS/m)	-	-	1.24	-	-
	SWL (m)	DRY	DRY	5.60	-	-

TSTB – Too shallow to bail

Dubbo Regional Council Salinity Network site number (Figure 9)		DCC19	DCC44	DCC45	DCC115	DCC116
Sampling date	Drilled depth (m)	3	6	9	9	3.5
Feb-14	EC(dS/m)	-	-	1.09	-	-
	SWL (m)	DRY	DRY	5.42	-	-
Mar-14	EC(dS/m)	-	-	1.25	-	-
	SWL (m)	DRY	DRY	6.08	-	-
Apr-14	EC(dS/m)	-	-	1.11	-	-
	SWL (m)	DRY	DRY	6.24	-	-
May-14	EC(dS/m)	-	-	0.94	-	-
	SWL (m)	DRY	DRY	5.98	-	-
Jun-14	EC(dS/m)	-	-	0.99	-	-
	SWL (m)	DRY	DRY	6.03	-	-
Jul-14	EC(dS/m)	-	-	1.03	-	-
	SWL (m)	DRY	DRY	6.20	-	-
Aug-14	EC(dS/m)	-	-	1.19	-	-
	SWL (m)	DRY	DRY	6.89	-	-
Sep-14	EC(dS/m)	-	-	-	-	-
	SWL (m)	-	-	-	-	-
Oct-14	EC(dS/m)	-	-	-	-	-
	SWL (m)	DRY	DRY	DRY	-	-
Nov-14	EC(dS/m)	TSTB	-	1.35	-	-
	SWL (m)	2.85	DRY	7.95	-	-
Dec-14	EC(dS/m)	TSTB	-	1.34	-	-
	SWL (m)	2.80	DRY	7.90	-	-
Jan-15	EC(dS/m)	0.87	-	1.25	-	-
	SWL (m)	2.51	DRY	6.61	-	-
Mar-15	EC(dS/m)	-	-	1.15	-	-
	SWL (m)	DRY	DRY	5.91	-	-
May-15	EC(dS/m)	-	-	1.19	-	-
	SWL (m)	DRY	DRY	7.02	-	-
Jul-15	EC(dS/m)	-	-	1.03	-	-
	SWL (m)	DRY	DRY	6.41	-	-
Sep-15	EC(dS/m)	-	-	1.09	-	-
	SWL (m)	DRY	DRY	7.85	-	-
Nov-15	EC(dS/m)	-	-	1.35	-	-
	SWL (m)	DRY	DRY	7.90	-	-
Jan-16	EC(dS/m)	-	0.65	2.13	-	0.15
	SWL (m)	DRY	1.29	7.50	-	2.14
Mar-16	EC(dS/m)	-	0.92	2.42	-	0.84
	SWL (m)	DRY	1.87	7.71	-	2.28
May-16	EC(dS/m)	-	1.69	1.69	-	0.94
	SWL (m)	DRY	7.31	7.31	-	2.49
Jul-16	EC(dS/m)	-	0.79	1.25	-	0.99
	SWL (m)	DRY	2.41	6.60	-	2.88
Sep-16	EC(dS/m)	-	0.58	1.17	-	0.84
	SWL (m)	DRY	2.15	6.31	-	2.69
Nov-16	EC(dS/m)	-	0.87	1.17	-	0.96
	SWL (m)	DRY	2.66	7.04	-	2.02
Jan-17	EC(dS/m)	0.81	0.76	1.51	-	0.96
	SWL (m)	2.89	1.99	7.21	-	2.02
Mar-17	EC(dS/m)	0.97	0.88	1.50	-	0.84
	SWL (m)	2.54	1.81	7.01	-	2.09
May-17	EC(dS/m)	1.03	0.85	1.84	-	0.89
	SWL (m)	2.79	2.00	7.19	-	2.24
Jul-17	EC(dS/m)	-	0.70	1.39	-	0.99
	SWL (m)	DRY	2.17	6.50	-	2.77

TSTB – Too shallow to bail

Dubbo Regional Council Salinity Network site number (Figure 9)		DCC19	DCC44	DCC45	DCC115	DCC116
Sampling date	Drilled depth (m)	3	6	9	9	3.5
Sep-17	EC(dS/m)	-	-	-	-	1.04
	SWL (m)	DRY	DRY	DRY	-	2.94
Nov-17	EC(dS/m)	-	-	-	-	-
	SWL (m)	DRY	DRY	DRY	-	-
Jan-18	EC(dS/m)	-	-	-	-	-
	SWL (m)	DRY	DRY	DRY	-	-
Mar-18	EC(dS/m)	-	-	-	-	-
	SWL (m)	DRY	DRY	DRY	-	DRY
May-18	EC(dS/m)	-	-	-	-	-
	SWL (m)	DRY	DRY	DRY	-	DRY
Jul-18	EC(dS/m)	-	-	-	-	-
	SWL (m)	DRY	DRY	DRY	-	-
Sep-18	EC(dS/m)	-	-	-	-	-
	SWL (m)	DRY	DRY	DRY	-	-
Nov-18	EC(dS/m)	-	-	1.35	-	-
	SWL (m)	DRY	DRY	7.43	-	-
Jan-19	EC(dS/m)	-	-	-	-	-
	SWL (m)	DRY	DRY	DRY	-	-
Mar-19	EC(dS/m)	-	-	-	-	-
	SWL (m)	DRY	DRY	DRY	-	-

TSTB – Too shallow to bail

**Appendix 5. Initial site investigation characteristics**

Location (Figure 6)	Vegetation	Slope (%)	Bare areas	Indicators of salinity	Surface rocks	Trees (within 50m)
A1	Pasture grasses, mallow, variegated thistle, broad leaved weeds	2-4% E	Nil	Nil	Nil	Nil
A2	Hedge mustard, mallow	2-4% E	Nil	Nil	Nil	Yes, eucalypt
A3	Hedge mustard, mallow	2-4% E	Bare area from track	Nil	Nil	Nil
A4	Paddy melon, variegated thistle, broad leaved weeds	2-4% E	Nil	Nil	Nil	Nil
B1	Pasture grasses, mallow, variegated thistle, broad leaved weeds	2-4% E	Nil	Nil	Nil	Nil
B2	Hedge mustard, mallow	2-4% E	Nil	Nil	Nil	Yes, robinia
B3	Hedge mustard, mallow	2-4% E	Nil	Nil	Nil	Yes, robinia
B4	Paddy melon, variegated thistle, broad leaved weeds	2-4% E	Bare area from track	Nil	Nil	Nil
C1	Pasture grasses, mallow, variegated thistle, broad leaved weeds	2-4% E	Nil	Nil	Surface rocks	Yes, robinia
C2	Hedge mustard, mallow	2-4% E	Nil	Nil	Surface rocks	Yes, robinia
C3	Hedge mustard, mallow	2% E	Nil	Nil	Nil	Yes, robinia
C4	Paddy melon, variegated thistle, broad leaved weeds	2% E	Bare area from track	Nil	Nil	Nil



## Appendix 5. Field and laboratory sheets

## Salinity assessment

Client: The Planning Hub	Job no: 11858	Date: 18/5/2020
Address: Part Lot 502 DP1255115 Boundary Road, Dubbo		
Borehole: 1	GPS: 55H 654074mE 6428365mN	

## Surface description

Slope:	2-4%	Aspect:	South east
Morphological type:	Mid-slope		
Land-use:	Grazing/vacant/stockpiles		
Disturbance:	High		
Erosion:	Nil		
Coarse fragments:	Nil on surface		
Surface cover:	Hedge mustard, mallow, grasses		
% surface cover	98%		
Salinity:	Nil		

## Sub-surface description

Sample method: EVH		Logged by: LN					
Depth (mm)	Soil description (texture, colour, coarse fragments, mottles, roots, structure)	Sample	M/D	pH (1:5 water)	EC (dS/m)	ECe	Emerson aggregate test
0 to 100	Dark brown loamy sand with gravel	X	M	8.9	0.05	1.15	5
100 to 400	Yellowish brown silty clay with gravel	X	M	8.7	0.17	1.28	5
		X		9.0	0.09	0.68	5
400 to 900	Dark brown silty clay	X		8.9	0.16	1.20	3
900 to 1700	Reddish brown light clay with gravel	X	M	8.8	0.17	1.28	3
		X		8.9	0.23	1.73	3
		X		9.0	0.31	2.33	3
1700	End of hole, refusal on basalt						
Notes: Nil							

**Salinity assessment**

<b>Client:</b> The Planning Hub	<b>Job no:</b> 11858	<b>Date:</b> 18/5/2020
<b>Address:</b> Part Lot 502 DP1255115 Boundary Road, Dubbo		
<b>Borehole:</b> 2	<b>GPS:</b> 55H 654032mE 6428396mN	

**Surface description**

<b>Slope:</b>	2-4%	<b>Aspect:</b>	East
<b>Morphological type:</b>	Mid-slope		
<b>Land-use:</b>	Grazing/vacant/stockpiles		
<b>Disturbance:</b>	High		
<b>Erosion:</b>	Nil		
<b>Coarse fragments:</b>	Nil on surface		
<b>Surface cover:</b>	Hedge mustard, mallow, grasses		
<b>% surface cover</b>	100%		
<b>Salinity:</b>	Nil		

**Sub-surface description**

<b>Sample method:</b> EVH		<b>Logged by:</b> LN					
Depth (mm)	Soil description (texture, colour, coarse fragments, mottles, roots, structure)	Sample	M/D	pH (1:5 water)	EC (dS/m)	ECe	Emerson aggregate test
0 to 600	Light brown silty sand		M				
600 to 1100	Dark brown grey sandy clay		M				
1100	End of hole on basalt						
<b>Notes:</b> Nil							

**Salinity assessment**

<b>Client:</b> The Planning Hub	<b>Job no:</b> 11858	<b>Date:</b> 18/5/2020
<b>Address:</b> Part Lot 502 DP1255115 Boundary Road, Dubbo		
<b>Borehole:</b> 3	<b>GPS:</b> 55H 653976mE 6428368mN	

**Surface description**

<b>Slope:</b>	2-4%	<b>Aspect:</b>	East
<b>Morphological type:</b>	Mid-slope		
<b>Land-use:</b>	Grazing/vacant/stockpiles		
<b>Disturbance:</b>	High		
<b>Erosion:</b>	Nil		
<b>Coarse fragments:</b>	Basalt cobbles on surface		
<b>Surface cover:</b>	Hedge mustard, mallow, grasses		
<b>% surface cover</b>	100%		
<b>Salinity:</b>	Nil		

**Sub-surface description**

<b>Sample method:</b> EVH		<b>Logged by:</b> LN					
Depth (mm)	Soil description (texture, colour, coarse fragments, mottles, roots, structure)	Sample	M/D	pH (1:5 water)	EC (dS/m)	ECe	Emerson aggregate test
0 to 250	Reddish brown silty sand		M				
250	End of hole, refusal on basalt						
Notes: Two boreholes drilled adjacent Borehole 3 with drill refusal at 0.3m.							

**Salinity assessment**

<b>Client:</b> The Planning Hub	<b>Job no:</b> 11858	<b>Date:</b> 18/5/2020
<b>Address:</b> Part Lot 502 DP1255115 Boundary Road, Dubbo		
<b>Borehole:</b> 4	<b>GPS:</b> 55H 653995mE 6428343mN	

**Surface description**

<b>Slope:</b>	2-4%	<b>Aspect:</b>	East
<b>Morphological type:</b>	Mid-slope		
<b>Land-use:</b>	Grazing/vacant/stockpiles		
<b>Disturbance:</b>	High		
<b>Erosion:</b>	Nil		
<b>Coarse fragments:</b>	Basalt cobbles on surface		
<b>Surface cover:</b>	Hedge mustard, mallow, grasses		
<b>% surface cover</b>	100%		
<b>Salinity:</b>	Nil		

**Sub-surface description**

<b>Sample method:</b> EVH		<b>Logged by:</b> LN					
Depth (mm)	Soil description (texture, colour, coarse fragments, mottles, roots, structure)	Sample	M/D	pH (1:5 water)	EC (dS/m)	ECe	Emerson aggregate test
0 to 200	Reddish brown silty clay		M				
200	End of hole on basalt						
Notes: One borehole drilled adjacent Borehole 4 with drill refusal at 0.2m.							

**Salinity assessment**

<b>Client:</b> The Planning Hub	<b>Job no:</b> 11858	<b>Date:</b> 18/5/2020
<b>Address:</b> Part Lot 502 DP1255115 Boundary Road, Dubbo		
<b>Borehole:</b> 5	<b>GPS:</b> 55H 654008mE 6428438mN	

**Surface description**

<b>Slope:</b>	2-4%	<b>Aspect:</b>	East
<b>Morphological type:</b>	Mid-slope		
<b>Land-use:</b>	Grazing/vacant/stockpiles		
<b>Disturbance:</b>	High		
<b>Erosion:</b>	Nil		
<b>Coarse fragments:</b>	Nil on surface		
<b>Surface cover:</b>	Hedge mustard, mallow, grasses		
<b>% surface cover</b>	100%		
<b>Salinity:</b>	Nil		

**Sub-surface description**

<b>Sample method:</b> EVH		<b>Logged by:</b> LN					
Depth (mm)	Soil description (texture, colour, coarse fragments, mottles, roots, structure)	Sample	M/D	pH (1:5 water)	EC (dS/m)	ECe	Emerson aggregate test
0 to 100	Reddish brown silty clay		M				
100	End of hole on basalt						
<b>Notes:</b> Nil							

**Salinity assessment**

<b>Client:</b> The Planning Hub	<b>Job no:</b> 11858	<b>Date:</b> 18/5/2020
<b>Address:</b> Part Lot 502 DP1255115 Boundary Road, Dubbo		
<b>Borehole:</b> 6	<b>GPS:</b> 55H 654036mE 6428428mN	

**Surface description**

<b>Slope:</b>	2-4%	<b>Aspect:</b>	East
<b>Morphological type:</b>	Mid-slope		
<b>Land-use:</b>	Grazing/vacant/stockpiles		
<b>Disturbance:</b>	High		
<b>Erosion:</b>	Nil		
<b>Coarse fragments:</b>	Nil on surface		
<b>Surface cover:</b>	Hedge mustard, mallow, grasses		
<b>% surface cover</b>	100%		
<b>Salinity:</b>	Nil		

**Sub-surface description**

<b>Sample method:</b> EVH		<b>Logged by:</b> LN					
Depth (mm)	Soil description (texture, colour, coarse fragments, mottles, roots, structure)	Sample	M/D	pH (1:5 water)	EC (dS/m)	ECe	Emerson aggregate test
0 to 400	Reddish brown silty clay		M				
400 to 600	Grey silty clay with gravel		M				
600	End of hole						
<b>Notes:</b>							

**Appendix 7. Reference methods for soil testing****Reference Methods:**

Colour: Munsell (2000) In 'Munsell Soil Colour Charts' (Gretag Macbeth: NY)

Field texture: McDonald RC, Isbell RF, Speight JG, Walker, Hopkins MS (1990) Australian Soil and Land Survey Field Handbook pp.115-124 (Inkata Press: Melbourne)

PH: AS1289.4.3.1-1997 Method of testing soil for engineering purposes – Soil Chemical Tests- Determination of the pH value of a soil – Electrometric method

Salinity: Rayment GE and Higginson FR (1992) Australian Laboratory Handbook of Soil and Water Chemical Methods (Method 3A1, pp.15-16) (Inkata Press Melbourne) Electrical conductivity of saturated extract is based on conversions of EC (1:5) and soil texture class, to give a more accurate assessment of soil salinity hazard (Salavich PG and Peterson GH (1993) Estimating the electrical conductivity of soil paste extracts from 1:5 soil water suspensions and texture. Australian Journal of Soil Research 31, 3-81)

**Appendix 8. SGS laboratory report and chain of custody form**





ANALYTICAL REPORT



CLIENT DETAILS

Contact Luke Niven  
 Client ENVIROWEST CONSULTING PTY LIMITED  
 Address PO BOX 8158  
 ORANGE NSW 2800

Telephone 61 2 63614954  
 Facsimile (Not specified)  
 Email luke@envirowest.net.au

Project 11858  
 Order Number 11858  
 Samples 13

LABORATORY DETAILS

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 Laboratory SGS Alexandria Environmental  
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SGS Reference SE206541 RD  
 Date Received 21/5/2020  
 Date Reported 28/5/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

SIGNATORIES

Dong LIANG  
 Metals/Inorganics Team Leader

Ly Kim HA  
 Organic Section Head



ANALYTICAL RESULTS

SE206541 R0

VOC's in Soil [AN433] Tested: 22/5/2020

PARAMETER	UNIT	LCR	C1	C2	C3	C4	C5
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m,p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1

PARAMETER	UNIT	LCR	C6	C7	C8	C9	C10
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m,p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1

PARAMETER	UNIT	LCR	C11
			mg/kg
Benzene	mg/kg	0.1	<0.1
Toluene	mg/kg	0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1
m,p-xylene	mg/kg	0.2	<0.2
o-xylene	mg/kg	0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6
Naphthalene	mg/kg	0.1	<0.1



ANALYTICAL RESULTS

SE206541 R0

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 22/5/2020

PARAMETER	UNIT	LCR	C1	C2	C3	C4	C5
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UNIT	LCR	C6	C7	C8	C9	C10
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UNIT	LCR	UA
			mg/kg
TRH C6-C9	mg/kg	20	<20
Benzene (F0)	mg/kg	0.1	<0.1
TRH C6-C10	mg/kg	25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25



ANALYTICAL RESULTS

SE206541 R0

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 22/5/2020

PARAMETER	UNIT	LGA	C1	C2	C3	C4	C5
			SE206541 R0	SE206541 R0	SE206541 R0	SE206541 R0	SE206541 R0
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UNIT	LGA	C6	C7	C8	C9	C10
			SE206541 R0	SE206541 R0	SE206541 R0	SE206541 R0	SE206541 R0
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UNIT	LGA	C11
			SE206541 R0
TRH C10-C14	mg/kg	20	<20
TRH C15-C28	mg/kg	45	<45
TRH C29-C36	mg/kg	45	<45
TRH C37-C40	mg/kg	100	<100
TRH >C10-C16	mg/kg	25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120
TRH C10-C36 Total	mg/kg	110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210



ANALYTICAL RESULTS

SE206541 R0

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 22/6/2020

PARAMETER	UNIT	LQA	C1	C2	C3	C4	C5
			SE 206541 R0	SE 206541 R0	SE 206541 R0	SE 206541 R0	SE 206541 R0
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	0.1	1.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	0.3	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	0.2	0.4	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	1.0	0.5	0.2
Pyrene	mg/kg	0.1	<0.1	<0.1	1.1	0.9	0.3
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	0.4	0.6	0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	0.4	0.7	0.1
Benzo(b)fluoranthene	mg/kg	0.1	<0.1	<0.1	0.5	1.2	0.2
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	0.3	0.5	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	0.5	0.9	0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	0.4	0.6	0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	0.5	0.7	0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	0.7	1.4	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	0.8	1.4	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	0.7	1.4	0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	6.9	8.2	1.4
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	6.9	8.2	1.4

PARAMETER	UNIT	LQA	C6	C7	C8	C9	C10
			SE 206541 R0	SE 206541 R0	SE 206541 R0	SE 206541 R0	SE 206541 R0
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8



ANALYTICAL RESULTS

SE206541 R0

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 22/6/2020 (continued)

PARAMETER	LOD	LOQ	U/L
Naphthalene	mg/kg	0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1
Fluorene	mg/kg	0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1
Anthracene	mg/kg	0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1
Pyrene	mg/kg	0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1
Chrysene	mg/kg	0.1	<0.1
Benzo(b)fluoranthene	mg/kg	0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR-II	TEQ (mg/kg)	0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR-LOR	TEQ (mg/kg)	0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR-LOR/2	TEQ (mg/kg)	0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8
Total PAH (NEMMHO 16)	mg/kg	0.8	<0.8



ANALYTICAL RESULTS

SE206541 R0

Soluble Anions (1:5) In Soil by Ion Chromatography [AN245] Tested: 27/6/2020

PARAMETER	UNIT	LCR	RESULT	REMARKS
Chloride	mg/kg	0.25	9.3	
Sulfate	mg/kg	5	16	



ANALYTICAL RESULTS

SE206541 R0

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR) [AN122] Tested: 28/6/2020

PARAMETER	UNIT	LCR	RESULT	REMARKS
Exchangeable Sodium, Na	mg/kg	2	49	900
Exchangeable Sodium, Na	meq/100g	0.01	0.21	3.9
Exchangeable Sodium Percentage*	%	0.1	0.6	8.4





ANALYTICAL RESULTS

SE206541 R0

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN020] Testref: 25/8/2020

PARAMETER	UNIT	LCR	01	02	03	04	05
			RECOVERABLE	RECOVERABLE	RECOVERABLE	RECOVERABLE	RECOVERABLE
Arsenic, As	mg/kg	1	4	3	2	1	11
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	18	78	16	87	1200
Copper, Cu	mg/kg	0.5	11	24	16	18	17
Lead, Pb	mg/kg	1	8	8	180	8	15
Nickel, Ni	mg/kg	0.5	8.6	128	15	26	16
Zinc, Zn	mg/kg	2	37	34	77	33	150

PARAMETER	UNIT	LCR	06	07	08	09	10
			RECOVERABLE	RECOVERABLE	RECOVERABLE	RECOVERABLE	RECOVERABLE
Arsenic, As	mg/kg	1	2	1	1	5	5
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	8.8	33	48	11	14
Copper, Cu	mg/kg	0.5	13	14	20	12	12
Lead, Pb	mg/kg	1	4	180	28	6	7
Nickel, Ni	mg/kg	0.5	23	22	34	11	11
Zinc, Zn	mg/kg	2	87	86	38	26	27

PARAMETER	UNIT	LCR	11
			RECOVERABLE
Arsenic, As	mg/kg	1	4
Cadmium, Cd	mg/kg	0.3	<0.3
Chromium, Cr	mg/kg	0.5	14
Copper, Cu	mg/kg	0.5	11
Lead, Pb	mg/kg	1	8
Nickel, Ni	mg/kg	0.5	8.6
Zinc, Zn	mg/kg	2	38



ANALYTICAL RESULTS

SE206541 R0

Mercury In Soil [AN312] Tested: 25/5/2020

			C1	C2	C3	C4	C5
PARAMETER	UOM	LOD	SE206541 C1	SE206541 C2	SE206541 C3	SE206541 C4	SE206541 C5
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

			C6	C7	C8	C9	C10
PARAMETER	UOM	LOD	SE206541 C6	SE206541 C7	SE206541 C8	SE206541 C9	SE206541 C10
Mercury	mg/kg	0.05	<0.05	0.45	<0.05	<0.05	<0.05

			C11
PARAMETER	UOM	LOD	SE206541 C11
Mercury	mg/kg	0.05	<0.05



ANALYTICAL RESULTS

SE206541 R0

Moisture Content [AN002] Tested: 22/8/2020

PARAMETER	UDM	LCR	B1-308	B1-309	C1	C2	C3
			SSU SE206541.01	SSU SE206541.02	SSU SE206541.03	SSU SE206541.04	SSU SE206541.05
% Moisture	%w/w	1	4.9	15.8	12.6	21.6	4.8

PARAMETER	UDM	LCR	C4	C5	C6	C7	C8
			SSU SE206541.06	SSU SE206541.07	SSU SE206541.08	SSU SE206541.09	SSU SE206541.10
% Moisture	%w/w	1	6.8	12.2	18.7	2.1	9.0

PARAMETER	UDM	LCR	C9	C10	OA
			SSU SE206541.11	SSU SE206541.12	SSU SE206541.13
% Moisture	%w/w	1	24.5	21.1	13.1



## METHOD SUMMARY

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METHOD	METHODOLOGY SUMMARY						
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.						
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.						
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.						
AN122	Exchangeable Cations, CEC and ESP: Soil sample is extracted in 1M Ammonium Acetate at pH=7 (or 1M Ammonium Chloride at pH=7) with cations (Na, K, Ca & Mg) then determined by ICP OES/ICP MS and reported as Exchangeable Cations. For saline soils, these results can be corrected for water soluble cations and reported as Exchangeable cations in meq/100g or soil can be pre-treated (aqueous ethanol/aqueous glycerol) prior to extraction. Cation Exchange Capacity (CEC) is the sum of the exchangeable cations in meq/100g.						
AN122	The Exchangeable Sodium Percentage (ESP) is calculated as the exchangeable sodium divided by the CEC (all in meq/100g) times 100. ESP can be used to categorise the sodicity of the soil as below : <table border="0" style="margin-left: 40px;"> <tr> <td>ESP &lt; 6%</td> <td>non-sodic</td> </tr> <tr> <td>ESP 6-15%</td> <td>sodic</td> </tr> <tr> <td>ESP &gt;15%</td> <td>strongly sodic</td> </tr> </table>	ESP < 6%	non-sodic	ESP 6-15%	sodic	ESP >15%	strongly sodic
ESP < 6%	non-sodic						
ESP 6-15%	sodic						
ESP >15%	strongly sodic						
	Method is referenced to Rayment and Lyons, 2011, sections 15D3 and 15N1.-						
AN245	Anions by Ion Chromatography: A water sample is injected into an eluent stream that passes through the ion chromatographic system where the anions of interest ie Br, Cl, NO <sub>2</sub> , NO <sub>3</sub> and SO <sub>4</sub> are separated on their relative affinities for the active sites on the column packing material. Changes to the conductivity and the UV-visible absorbance of the eluent enable identification and quantitation of the anions based on their retention time and peak height or area. APHA 4110 B						
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid, mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500						
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.						
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents.						
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.						
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).						
AN420	Carcinogenic PAHs may be expressed as Benzo(a)pyrene equivalents by applying the BaP toxicity equivalence factor (NEPM 1999, June 2013, B7). These can be reported as the individual PAHs and as a sum of carcinogenic PAHs. The sum is reported three ways, the first assuming all <LOR results are zero, the second assuming all <LOR results are half the LOR and the third assuming all <LOR results are the LOR.						
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC's are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.						



FOOTNOTES

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FOOTNOTES

<ul style="list-style-type: none"> <li>* NATA accreditation does not cover the performance of this service.</li> <li>** Indicative data, theoretical holding time exceeded.</li> </ul>	<ul style="list-style-type: none"> <li>- Not analysed.</li> <li>NVL Not validated.</li> <li>IS Insufficient sample for analysis.</li> <li>LNR Sample listed, but not received.</li> </ul>	<ul style="list-style-type: none"> <li>UOM Unit of Measure.</li> <li>LOR Limit of Reporting.</li> <li>↑↓ Raised/lowered Limit of Reporting.</li> </ul>
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Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received. Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the "Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.

Note that in terms of units of radioactivity:

- a. 1 Bq is equivalent to 27 pCi
- b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11923.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: [www.sgs.com.au/en-qb/environment-health-and-safety](http://www.sgs.com.au/en-qb/environment-health-and-safety).

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STATEMENT OF QA/QC PERFORMANCE

SE206541 R0

CLIENT DETAILS		LABORATORY DETAILS	
Contact	Luke Niven	Manager	Huong Crawford
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Email	luke@envirowest.net.au	Email	au.environmental.sydney@sgs.com
Project	11858	SGS Reference	SE206541 R0
Order Number	11858	Date Received	21 May 2020
Samples	13	Date Reported	28 May 2020

**COMMENTS**

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.  
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.  
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Extraction Date	Soluble Anions (1-6) in Soil by Ion Chromatography	2 Items
Surrogate	VOC's in Soil	2 Items
	Volatile Petroleum Hydrocarbons in Soil	2 Items
Duplicate	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	1 Item

**SAMPLE SUMMARY**

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice Bricks
Samples received in correct containers	Yes	Sample counts by matrix	13 Soil
Date documentation received	21/5/2020	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	12.7°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

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HOLDING TIME SUMMARY

SE206541 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guidelines on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5067.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in Green when within suggested criteria or Red with an appended dagger symbol {†} when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/BAF)

Method: ME-(AU)-ENV/IN922

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysis
B1-300	SE206541.001	L8200369	19 May 2020	21 May 2020	16 Jun 2020	25 May 2020	16 Jun 2020	28 May 2020
B1-1500	SE206541.002	L8200369	19 May 2020	21 May 2020	16 Jun 2020	25 May 2020	16 Jun 2020	28 May 2020

Mercury in Soil

Method: ME-(AU)-ENV/IN442

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysis
C1	SE206541.003	L8200348	19 May 2020	21 May 2020	16 Jun 2020	25 May 2020	16 Jun 2020	28 May 2020
C2	SE206541.004	L8200348	19 May 2020	21 May 2020	16 Jun 2020	25 May 2020	16 Jun 2020	28 May 2020
C3	SE206541.005	L8200348	19 May 2020	21 May 2020	16 Jun 2020	25 May 2020	16 Jun 2020	28 May 2020
C4	SE206541.006	L8200348	19 May 2020	21 May 2020	16 Jun 2020	25 May 2020	16 Jun 2020	28 May 2020
C5	SE206541.007	L8200348	19 May 2020	21 May 2020	16 Jun 2020	25 May 2020	16 Jun 2020	28 May 2020
C6	SE206541.008	L8200348	19 May 2020	21 May 2020	16 Jun 2020	25 May 2020	16 Jun 2020	28 May 2020
C7	SE206541.009	L8200348	19 May 2020	21 May 2020	16 Jun 2020	25 May 2020	16 Jun 2020	28 May 2020
C8	SE206541.010	L8200348	19 May 2020	21 May 2020	16 Jun 2020	25 May 2020	16 Jun 2020	28 May 2020
C9	SE206541.011	L8200348	19 May 2020	21 May 2020	16 Jun 2020	25 May 2020	16 Jun 2020	28 May 2020
C10	SE206541.012	L8200348	19 May 2020	21 May 2020	16 Jun 2020	25 May 2020	16 Jun 2020	28 May 2020
DA	SE206541.013	L8200348	19 May 2020	21 May 2020	16 Jun 2020	25 May 2020	16 Jun 2020	28 May 2020

Molinate Content

Method: ME-(AU)-ENV/IN442

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysis
B1-300	SE206541.001	L8200191	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	27 May 2020	27 May 2020
B1-1500	SE206541.002	L8200191	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	27 May 2020	27 May 2020
C1	SE206541.003	L8200191	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	27 May 2020	27 May 2020
C2	SE206541.004	L8200191	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	27 May 2020	27 May 2020
C3	SE206541.005	L8200191	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	27 May 2020	27 May 2020
C4	SE206541.006	L8200191	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	27 May 2020	27 May 2020
C5	SE206541.007	L8200191	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	27 May 2020	27 May 2020
C6	SE206541.008	L8200191	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	27 May 2020	27 May 2020
C7	SE206541.009	L8200191	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	27 May 2020	27 May 2020
C8	SE206541.010	L8200191	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	27 May 2020	27 May 2020
C9	SE206541.011	L8200191	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	27 May 2020	27 May 2020
C10	SE206541.012	L8200191	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	27 May 2020	27 May 2020
DA	SE206541.013	L8200191	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	27 May 2020	27 May 2020

PAH (Polycyclic Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-ENV/IN442

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysis
C1	SE206541.003	L8200187	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	28 May 2020
C2	SE206541.004	L8200187	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	28 May 2020
C3	SE206541.005	L8200187	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	28 May 2020
C4	SE206541.006	L8200187	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	28 May 2020
C5	SE206541.007	L8200187	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	28 May 2020
C6	SE206541.008	L8200187	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	28 May 2020
C7	SE206541.009	L8200187	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	28 May 2020
C8	SE206541.010	L8200187	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	28 May 2020
C9	SE206541.011	L8200187	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	28 May 2020
C10	SE206541.012	L8200187	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	28 May 2020
DA	SE206541.013	L8200187	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	28 May 2020

Reliable Arsenic (As) in Soil by Ion Chromatography

Method: ME-(AU)-ENV/IN442

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysis
B1-300	SE206541.001	L8200487	19 May 2020	21 May 2020	26 May 2020	27 May 2020†	24 Jun 2020	28 May 2020
B1-1500	SE206541.002	L8200487	19 May 2020	21 May 2020	26 May 2020	27 May 2020†	24 Jun 2020	28 May 2020

Total Recoverable Elements in Soil/Paste Solids/Materials by ICPOES

Method: ME-(AU)-ENV/IN442

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysis
C1	SE206541.003	L8200340	19 May 2020	21 May 2020	15 Nov 2020	25 May 2020	15 Nov 2020	28 May 2020
C2	SE206541.004	L8200340	19 May 2020	21 May 2020	15 Nov 2020	25 May 2020	15 Nov 2020	28 May 2020
C3	SE206541.005	L8200340	19 May 2020	21 May 2020	15 Nov 2020	25 May 2020	15 Nov 2020	28 May 2020
C4	SE206541.006	L8200340	19 May 2020	21 May 2020	15 Nov 2020	25 May 2020	15 Nov 2020	28 May 2020
C5	SE206541.007	L8200340	19 May 2020	21 May 2020	15 Nov 2020	25 May 2020	15 Nov 2020	28 May 2020
C6	SE206541.008	L8200340	19 May 2020	21 May 2020	15 Nov 2020	25 May 2020	15 Nov 2020	28 May 2020
C7	SE206541.009	L8200340	19 May 2020	21 May 2020	15 Nov 2020	25 May 2020	15 Nov 2020	28 May 2020
C8	SE206541.010	L8200340	19 May 2020	21 May 2020	15 Nov 2020	25 May 2020	15 Nov 2020	28 May 2020





HOLDING TIME SUMMARY

SE206541 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guidelines on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5067.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in Green when within suggested criteria or Red with an appended dagger symbol {†} when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Total Recoverable Elements in Soil/Water Solids/Minerals by ICP-MS (continued)

Method: ME-(AU)-ENV/AN600000

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Received
C9	SE206541.011	L8200340	19 May 2020	21 May 2020	15 Nov 2020	25 May 2020	15 Nov 2020	28 May 2020
C10	SE206541.012	L8200340	19 May 2020	21 May 2020	15 Nov 2020	25 May 2020	15 Nov 2020	28 May 2020
DA	SE206541.013	L8200340	19 May 2020	21 May 2020	15 Nov 2020	25 May 2020	15 Nov 2020	28 May 2020

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-ENV/AN600000

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Received
C1	SE206541.003	L8200187	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
C2	SE206541.004	L8200187	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
C3	SE206541.005	L8200187	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
C4	SE206541.006	L8200187	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
C5	SE206541.007	L8200187	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
C6	SE206541.008	L8200187	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
C7	SE206541.009	L8200187	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
C8	SE206541.010	L8200187	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
C9	SE206541.011	L8200187	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
C10	SE206541.012	L8200187	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
DA	SE206541.013	L8200187	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020

VOC's in Soil

Method: ME-(AU)-ENV/AN600000

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Received
C1	SE206541.003	L8200182	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
C2	SE206541.004	L8200182	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
C3	SE206541.005	L8200182	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
C4	SE206541.006	L8200182	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
C5	SE206541.007	L8200182	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
C6	SE206541.008	L8200182	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
C7	SE206541.009	L8200182	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
C8	SE206541.010	L8200182	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
C9	SE206541.011	L8200182	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
C10	SE206541.012	L8200182	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
DA	SE206541.013	L8200182	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-ENV/AN600000

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Received
C1	SE206541.003	L8200182	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
C2	SE206541.004	L8200182	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
C3	SE206541.005	L8200182	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
C4	SE206541.006	L8200182	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
C5	SE206541.007	L8200182	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
C6	SE206541.008	L8200182	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
C7	SE206541.009	L8200182	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
C8	SE206541.010	L8200182	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
C9	SE206541.011	L8200182	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
C10	SE206541.012	L8200182	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020
DA	SE206541.013	L8200182	19 May 2020	21 May 2020	02 Jun 2020	22 May 2020	01 Jul 2020	27 May 2020





SURROGATES

SE206541 R0

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for chartered surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in Green when within suggested criteria or Red with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: MS-(AU)-ENV-022

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	C1	SE206541.003	%	70 - 130%	92
	C2	SE206541.004	%	70 - 130%	85
	C3	SE206541.005	%	70 - 130%	91
	C4	SE206541.006	%	70 - 130%	78
	C5	SE206541.007	%	70 - 130%	50
	C6	SE206541.008	%	70 - 130%	87
	C7	SE206541.009	%	70 - 130%	94
	C8	SE206541.010	%	70 - 130%	88
	C9	SE206541.011	%	70 - 130%	88
	C10	SE206541.012	%	70 - 130%	88
d14-p-terphenyl (Surrogate)	DA	SE206541.013	%	70 - 130%	89
	C1	SE206541.003	%	70 - 130%	114
	C2	SE206541.004	%	70 - 130%	122
	C3	SE206541.005	%	70 - 130%	98
	C4	SE206541.006	%	70 - 130%	98
	C5	SE206541.007	%	70 - 130%	112
	C6	SE206541.008	%	70 - 130%	115
	C7	SE206541.009	%	70 - 130%	91
	C8	SE206541.010	%	70 - 130%	110
	C9	SE206541.011	%	70 - 130%	105
d15-nitrobenzene (Surrogate)	C10	SE206541.012	%	70 - 130%	100
	DA	SE206541.013	%	70 - 130%	58
	C1	SE206541.003	%	70 - 130%	58
	C2	SE206541.004	%	70 - 130%	58
	C3	SE206541.005	%	70 - 130%	97
	C4	SE206541.006	%	70 - 130%	57
	C5	SE206541.007	%	70 - 130%	92
	C6	SE206541.008	%	70 - 130%	55
	C7	SE206541.009	%	70 - 130%	94
	C8	SE206541.010	%	70 - 130%	56

VOCs in Soil

Method: MS-(AU)-ENV-022

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	C1	SE206541.003	%	60 - 130%	75
	C2	SE206541.004	%	60 - 130%	80
	C3	SE206541.005	%	60 - 130%	80
	C4	SE206541.006	%	60 - 130%	74
	C5	SE206541.007	%	60 - 130%	75
	C6	SE206541.008	%	60 - 130%	82
	C7	SE206541.009	%	60 - 130%	75
	C8	SE206541.010	%	60 - 130%	73
	C9	SE206541.011	%	60 - 130%	80
	C10	SE206541.012	%	60 - 130%	70
d4-1,2-dichloroethane (Surrogate)	DA	SE206541.013	%	60 - 130%	78
	C1	SE206541.003	%	60 - 130%	104
	C2	SE206541.004	%	60 - 130%	109
	C3	SE206541.005	%	60 - 130%	112
	C4	SE206541.006	%	60 - 130%	105
	C5	SE206541.007	%	60 - 130%	108
	C6	SE206541.008	%	60 - 130%	113
	C7	SE206541.009	%	60 - 130%	111
	C8	SE206541.010	%	60 - 130%	110
	C9	SE206541.011	%	60 - 130%	108
d11-toluene (Surrogate)	C10	SE206541.012	%	60 - 130%	102
	DA	SE206541.013	%	60 - 130%	103
	C1	SE206541.003	%	60 - 130%	117
C2	SE206541.004	%	60 - 130%	127	
C3	SE206541.005	%	60 - 130%	131 (G)	



SURROGATES

SE206541 R0

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charred surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in Green when within suggested criteria or Red with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOCs in Soil (continued)

Method: MS-(AU)-EPA/RC403

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
oB-toluene (Surrogate)	C4	SE206541.006	%	60 - 130%	120
	C5	SE206541.007	%	60 - 130%	124
	C6	SE206541.008	%	60 - 130%	125
	C7	SE206541.009	%	60 - 130%	127
	C8	SE206541.010	%	60 - 130%	128
	C9	SE206541.011	%	60 - 130%	122 (3)
	C10	SE206541.012	%	60 - 130%	118
	DA	SE206541.013	%	60 - 130%	122

Volatile Petroleum Hydrocarbons in Soil

Method: MS-(AU)-EPA/RC403

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	C1	SE206541.003	%	60 - 130%	75
	C2	SE206541.004	%	60 - 130%	80
	C3	SE206541.005	%	60 - 130%	80
	C4	SE206541.006	%	60 - 130%	74
	C5	SE206541.007	%	60 - 130%	75
	C6	SE206541.008	%	60 - 130%	82
	C7	SE206541.009	%	60 - 130%	79
	C8	SE206541.010	%	60 - 130%	75
	C9	SE206541.011	%	60 - 130%	80
	C10	SE206541.012	%	60 - 130%	70
oB-1,2-dichloroethane (Surrogate)	C1	SE206541.003	%	60 - 130%	104
	C2	SE206541.004	%	60 - 130%	103
	C3	SE206541.005	%	60 - 130%	112
	C4	SE206541.006	%	60 - 130%	104
	C5	SE206541.007	%	60 - 130%	103
	C6	SE206541.008	%	60 - 130%	110
	C7	SE206541.009	%	60 - 130%	111
	C8	SE206541.010	%	60 - 130%	113
	C9	SE206541.011	%	60 - 130%	109
	C10	SE206541.012	%	60 - 130%	102
oB-toluene (Surrogate)	C1	SE206541.003	%	60 - 130%	117
	C2	SE206541.004	%	60 - 130%	127
	C3	SE206541.005	%	60 - 130%	131 (3)
	C4	SE206541.006	%	60 - 130%	120
	C5	SE206541.007	%	60 - 130%	124
	C6	SE206541.008	%	60 - 130%	126
	C7	SE206541.009	%	60 - 130%	127
	C8	SE206541.010	%	60 - 130%	128
	C9	SE206541.011	%	60 - 130%	132 (3)
	C10	SE206541.012	%	60 - 130%	116
DA	SE206541.013	%	60 - 130%	122	



METHOD BLANKS

SE206541 R0

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).  
 Result is shown in Green when within suggested criteria or Red with an appended dagger symbol (†) when outside suggested criteria.

**Exchangeable Cations and Cation Exchange Capacity (CEC) (EPA/823/P-97-001)** Method: ME(AU)-EPA/823/P-97-001

Sample Number	Parameter	Units	LOR	Result
LB200365.001	Exchangeable Sodium, Na	mg/kg	2	0

**Mercury in Soil** Method: ME(AU)-EPA/823/P-97-001

Sample Number	Parameter	Units	LOR	Result
LB200348.001	Mercury	mg/kg	0.05	<0.05

**PAH (Polynuclear Aromatic Hydrocarbons) in Soil** Method: ME(AU)-EPA/823/P-97-001

Sample Number	Parameter	Units	LOR	Result
LB200187.001	Naphthalene	mg/kg	0.1	<0.1
	2-methylnaphthalene	mg/kg	0.1	<0.1
	1-methylnaphthalene	mg/kg	0.1	<0.1
	Acenaphthylene	mg/kg	0.1	<0.1
	Acenaphthene	mg/kg	0.1	<0.1
	Fluorene	mg/kg	0.1	<0.1
	Phenanthrene	mg/kg	0.1	<0.1
	Anthracene	mg/kg	0.1	<0.1
	Fluoranthene	mg/kg	0.1	<0.1
	Pyrene	mg/kg	0.1	<0.1
	Benzo(a)anthracene	mg/kg	0.1	<0.1
	Chrysene	mg/kg	0.1	<0.1
	Benzo(a)pyrene	mg/kg	0.1	<0.1
	Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
	Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
	Benzo(ghi)perylene	mg/kg	0.1	<0.1
	Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates			
	d5-nitrobenzene (Surrogate)	%	-	50
	2-fluorobiphenyl (Surrogate)	%	-	51
	d14-p-terphenyl (Surrogate)	%	-	119

**Soluble Anions (18) in Soil by Ion Chromatography** Method: ME(AU)-EPA/823/P-97-001

Sample Number	Parameter	Units	LOR	Result
LB200467.001	Chloride	mg/kg	0.25	<0.25
	Sulfate	mg/kg	5	<5.0

**Total Recoverable Elements in Soil/Waste Solids/Materials by ICP-OES** Method: ME(AU)-EPA/823/P-97-001

Sample Number	Parameter	Units	LOR	Result
LB200345.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0

**TRH (Total Recoverable Hydrocarbons) in Soil** Method: ME(AU)-EPA/823/P-97-001

Sample Number	Parameter	Units	LOR	Result
LB200187.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110

**VOCs in Soil** Method: ME(AU)-EPA/823/P-97-001

Sample Number	Parameter	Units	LOR	Result	
LB200182.001	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m,p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1



METHOD BLANKS

SE206541 R0

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).  
 Result is shown in Green when within suggested criteria or Red with an appended dagger symbol (†) when outside suggested criteria.

VOCs in Soil (continued) Notes: MS(AU)-EN14000

Sample Number	Parameter	Unit	LOR	Result
LB200182.001	Polycyclic VOCs	Naphthalene	mg/kg	<0.1
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	112
		d6-toluene (Surrogate)	%	112
		Bromofluorobenzene (Surrogate)	%	64
	Totals	Total BTEX	mg/kg	0.6

Volatile Petroleum Hydrocarbons in Soil Notes: MS(AU)-EN14000

Sample Number	Parameter	Unit	LOR	Result
LB200182.001	TPH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	112



DUPLICATES

SE206541 R0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula:  $RPD = |OriginalResult - ReplicateResult| \times 100 / Mean$

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula:  $MAD = 100 \times SDL / Mean + LR$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in Green when within suggested criteria or Red with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Necessary In Soil

Notes: MS(AU)-EPA/NZSE

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Difference	RPD %
SE206541.012	LB200348.014	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE206547.005	LB200348.022	Mercury	mg/kg	0.05	<0.05	<0.05	200	0

Moisture Content

Notes: MS(AU)-EPA/NZSE

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Difference	RPD %
SE206541.009	LB200191.011	% Moisture	%w/w	1	2.1	2.2	76	2
SE206547.005	LB200191.021	% Moisture	%w/w	1	8.7	8.9	41	3

PAH (Polycyclic Aromatic Hydrocarbons) In Soil

Notes: MS(AU)-EPA/NZSE

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Difference	RPD %
SE206541.011	LB200187.014	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
		Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
		Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(b)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Dibenz(a,h)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
		Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	<0.2	200	0
		Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	<0.3	134	0
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	<0.2	175	0		
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0		
Surrogates		d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	30	2
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	1
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	7
SE206547.005	LB200187.022	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
		Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
		Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(b)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Dibenz(a,h)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
		Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	<0.2	200	0
		Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	<0.3	134	0
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	<0.2	175	0		
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0		
Surrogates		d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	30	1
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	4



DUPLICATES

SE206541 R0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula:  $RPD = |OriginalResult - ReplicateResult| \times 100 / Mean$

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula:  $MAD = 100 \times SDL / Mean + LR$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in Green when within suggested criteria or Red with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued) Method: ME(AU)-EPA/1631/0003

Original	Duplicate	Parameter	Units	UCL	Original	Duplicate	RPD %
SE206547.005	LB200187.022	Surrogates	mg/kg	-	0.5	0.4	30
		d14-p-terphenyl (Surrogate)					27

Total Recoverable Elements in Soil/Roads Solids/Substrates by ICPOES Method: ME(AU)-EPA/8210/9-0003

Original	Duplicate	Parameter	Units	UCL	Original	Duplicate	RPD %
SE206541.012	LB200340.014	Arsenic, As	mg/kg	1	5	5	49
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200
		Chromium, Cr	mg/kg	0.5	14	12	34
		Copper, Cu	mg/kg	0.5	12	11	34
		Nickel, Ni	mg/kg	0.5	11	11	35
		Lead, Pb	mg/kg	1	7	6	45
		Zinc, Zn	mg/kg	2	27	24	38
SE206547.005	LB200340.022	Arsenic, As	mg/kg	1	4	4	56
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200
		Chromium, Cr	mg/kg	0.5	11	11	35
		Copper, Cu	mg/kg	0.5	76	150	30
		Nickel, Ni	mg/kg	0.5	13	14	34
		Lead, Pb	mg/kg	1	19	9	41
		Zinc, Zn	mg/kg	2	44	47	34

TRH (Total Recoverable Hydrocarbons) in Soil Method: ME(AU)-EPA/1631/0003

Original	Duplicate	Parameter	Units	UCL	Original	Duplicate	RPD %
SE206541.011	LB200187.014	TRH C10-C14	mg/kg	20	<20	<20	200
		TRH C15-C28	mg/kg	45	<45	<45	200
		TRH C29-C36	mg/kg	45	<45	<45	200
		TRH C37-C40	mg/kg	100	<100	<100	200
		TRH C10-C36 Total	mg/kg	110	<110	<110	200
		TRH >C18-C40 Total (F bands)	mg/kg	210	<210	<210	200
		TRH F Bands					
		TRH >C18-C16	mg/kg	25	<25	<25	200
		TRH >C18-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200
		TRH >C18-C34 (F3)	mg/kg	90	<90	<90	200
		TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200
SE206547.005	LB200187.022	TRH C10-C14	mg/kg	20	<20	<20	200
		TRH C15-C28	mg/kg	45	<45	<45	200
		TRH C29-C36	mg/kg	45	<45	<45	200
		TRH C37-C40	mg/kg	100	<100	<100	200
		TRH C10-C36 Total	mg/kg	110	<110	<110	200
		TRH >C18-C40 Total (F bands)	mg/kg	210	<210	<210	200
		TRH F Bands					
		TRH >C18-C16	mg/kg	25	<25	<25	200
		TRH >C18-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200
		TRH >C18-C34 (F3)	mg/kg	90	<90	<90	200
		TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200

VOC's in Soil Method: ME(AU)-EPA/1631/0003

Original	Duplicate	Parameter	Units	UCL	Original	Duplicate	RPD %
SE206541.011	LB200182.014	Monocyclic					
		Benzene	mg/kg	0.1	<0.1	<0.1	200
		Aromatic					
		Toluene	mg/kg	0.1	<0.1	<0.1	200
		Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200
		m/p-xylene	mg/kg	0.2	<0.2	<0.2	200
		o-xylene	mg/kg	0.1	<0.1	<0.1	200
		Polycyclic					
		Naphthalene	mg/kg	0.1	<0.1	<0.1	200
		Surrogates					
		d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.5	12.1	50
		d8-toluene (Surrogate)	mg/kg	-	13.2	12.1	50
		Bromofluorobenzene (Surrogate)	mg/kg	-	8.0	7.8	50
		Totals	mg/kg	0.3	<0.3	<0.3	200
		Total BTEX	mg/kg	0.6	<0.6	<0.6	200
SE206547.005	LB200182.022	Monocyclic					
		Benzene	mg/kg	0.1	<0.1	<0.1	200
		Aromatic					
		Toluene	mg/kg	0.1	<0.1	<0.1	200
		Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200
		m/p-xylene	mg/kg	0.2	<0.2	<0.2	200
		o-xylene	mg/kg	0.1	<0.1	<0.1	200
		Polycyclic					
		Naphthalene	mg/kg	0.1	<0.1	<0.1	200
		Surrogates					
		d4-1,2-dichloroethane (Surrogate)	mg/kg	-	13.5	10.9	50



DUPLICATES

SE206541 R0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula:  $RPD = |OriginalResult - ReplicateResult| \times 100 / Mean$

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula:  $MAD = 100 \times SDL / Mean + LR$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in Green when within suggested criteria or Red with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: MS(AU)-EPA/14993

Original	Duplicate	Parameter	Units	ULH	Original	Duplicate	Colpass	RPD %
SE206547.005	LB200182.022	Surrogates						
		d8-toluene (Surrogate)	mg/kg	-	12.1	10.2	50	18
		Bromofluorobenzene (Surrogate)	mg/kg	-	8.7	7.7	50	12
		Totals						
		Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
		Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0

Volatile Petroleum Hydrocarbons in Soil

Method: MS(AU)-EPA/14993

Original	Duplicate	Parameter	Units	ULH	Original	Duplicate	Colpass	RPD %
SE206541.011	LB200182.014	TRH C6-C10	mg/kg	25	<25	<25	200	0
		TRH C6-C5	mg/kg	20	<20	<20	200	0
		Surrogates						
		d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.9	12.1	30	18
		d8-toluene (Surrogate)	mg/kg	-	13.2	12.1	30	9
		Bromofluorobenzene (Surrogate)	mg/kg	-	8.0	7.8	30	3
		VPH F Bands						
		Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
		TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE206547.005	LB200182.022	TRH C6-C10	mg/kg	25	<25	<25	200	0
		TRH C6-C5	mg/kg	20	<20	<20	200	0
		Surrogates						
		d4-1,2-dichloroethane (Surrogate)	mg/kg	-	13.5	10.9	30	21
		d8-toluene (Surrogate)	mg/kg	-	12.1	10.2	30	16
		Bromofluorobenzene (Surrogate)	mg/kg	-	8.7	7.7	30	12
		VPH F Bands						
		Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
		TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0





LABORATORY CONTROL SAMPLES

SE206541 R0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (Ref. MP-(AU)-ENV/QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in Green when within suggested criteria or Red with an appended dagger symbol (†) when outside suggested criteria.

**Mercury In Soil** Method: MS(AU)-ENV/QU-022

Sample Number	Parameter	Units	LOR	Result	Expectation	Criteria %	Recovery %
LB20048.002	Mercury	mg/kg	0.05	0.21	0.2	70 - 130	105

**PAH (Polycyclic Aromatic Hydrocarbons) In Soil** Method: MS(AU)-ENV/QU-022

Sample Number	Parameter	Units	LOR	Result	Expectation	Criteria %	Recovery %	
LB200187.002	Naphthalene	mg/kg	0.1	4.4	4	60 - 140	110	
	Acenaphthylene	mg/kg	0.1	4.6	4	60 - 140	116	
	Acenaphthene	mg/kg	0.1	4.3	4	60 - 140	107	
	Phenanthrene	mg/kg	0.1	3.8	4	60 - 140	95	
	Anthracene	mg/kg	0.1	4.4	4	60 - 140	109	
	Fluoranthene	mg/kg	0.1	4.0	4	60 - 140	90	
	Pyrene	mg/kg	0.1	4.5	4	60 - 140	112	
	Benzo(a)pyrene	mg/kg	0.1	4.4	4	60 - 140	109	
	Sumogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	93
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	92
	d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	85	

**Soluble Anions (10) In Soil by Ion Chromatography** Method: MS(AU)-ENV/QU-022

Sample Number	Parameter	Units	LOR	Result	Expectation	Criteria %	Recovery %
LB200487.002	Chloride	mg/kg	0.25	92	100	70 - 130	92
	Sulfate	mg/kg	5	91	100	70 - 130	91

**Total Recoverable Elements In Soil/Waste Solids/Materials by XRF** Method: MS(AU)-ENV/QU-022

Sample Number	Parameter	Units	LOR	Result	Expectation	Criteria %	Recovery %
LB200940.002	Arsenic, As	mg/kg	1	360	318.22	80 - 120	109
	Cadmium, Cd	mg/kg	0.3	5.7	5.41	80 - 120	98
	Chromium, Cr	mg/kg	0.5	41	38.31	80 - 120	107
	Copper, Cu	mg/kg	0.5	320	290	80 - 120	109
	Nickel, Ni	mg/kg	0.5	200	187	80 - 120	107
	Lead, Pb	mg/kg	1	95	83.9	80 - 120	105
	Zinc, Zn	mg/kg	2	250	273	80 - 120	105

**TRH (Total Recoverable Hydrocarbons) In Soil** Method: MS(AU)-ENV/QU-022

Sample Number	Parameter	Units	LOR	Result	Expectation	Criteria %	Recovery %	
LB200187.002	TRH C 10-C14	mg/kg	20	39	40	60 - 140	98	
	TRH C 15-C28	mg/kg	45	<45	40	60 - 140	98	
	TRH C 29-C36	mg/kg	45	<45	40	60 - 140	70	
	TRH F Bands	TRH >C 10-C16	mg/kg	25	40	40	60 - 140	103
		TRH >C 16-C34 (F3)	mg/kg	90	<90	40	60 - 140	85
		TRH >C 34-C40 (F4)	mg/kg	120	<120	20	60 - 140	60

**VOC's In Soil** Method: MS(AU)-ENV/QU-022

Sample Number	Parameter	Units	LOR	Result	Expectation	Criteria %	Recovery %	
LB200182.002	Monocyclic	Benzene	mg/kg	0.1	3.5	5	60 - 140	71
		Toluene	mg/kg	0.1	3.6	5	60 - 140	75
	Aromatic	Ethylbenzene	mg/kg	0.1	3.7	5	60 - 140	74
		m,p-xylene	mg/kg	0.2	7.7	10	60 - 140	77
		o-xylene	mg/kg	0.1	3.6	5	60 - 140	73
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	11.2	10	70 - 130	112
		d8-toluene (Surrogate)	mg/kg	-	10.1	10	70 - 130	101
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.3	10	70 - 130	93

**Volatle Petroleum Hydrocarbons In Soil** Method: MS(AU)-ENV/QU-022

Sample Number	Parameter	Units	LOR	Result	Expectation	Criteria %	Recovery %	
LB200182.002	TRH C5-C10	TRH C5-C10	mg/kg	25	71	82.5	60 - 140	77
		TRH C6-C9	mg/kg	20	60	80	60 - 140	75
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	11.2	10	70 - 130	112
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.3	10	70 - 130	93
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	45	62.5	60 - 140	78





MATRIX SPIKES

SE206541 R0

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub-sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in Green when within suggested criteria or Red with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: MS(AU)-EPA-8290C

QC Sample	Sample Number	Parameter	Unit	LOR	Result	Original	Spikes	Recovery %
SE206541.003	LB200948.004	Mercury	mg/kg	0.05	0.20	<0.05	0.2	69

PAH (Polycyclic Aromatic Hydrocarbons) in Soil

Method: MS(AU)-EPA-8210C

QC Sample	Sample Number	Parameter	Unit	LOR	Result	Original	Spikes	Recovery %
SE206541.004	LB200187.023	Naphthalene	mg/kg	0.1	4.4	<0.1	4	108
		2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Acenaphthylene	mg/kg	0.1	4.4	<0.1	4	111
		Acenaphthene	mg/kg	0.1	4.3	<0.1	4	127
		Fluorene	mg/kg	0.1	<0.1	<0.1	-	-
		Phenanthrene	mg/kg	0.1	4.0	<0.1	4	139
		Anthracene	mg/kg	0.1	4.6	<0.1	4	114
		Fluoranthene	mg/kg	0.1	4.3	<0.1	4	103
		Pyrene	mg/kg	0.1	4.5	<0.1	4	112
		Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
		Chrysene	mg/kg	0.1	<0.1	<0.1	-	-
		Benzo(b)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
		Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
		Benzo(a)pyrene	mg/kg	0.1	4.4	<0.1	4	110
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	-	-
		Dibenz(a,h)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
		Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	-	-
		Carcinogenic PAHs, BaP TEQ <LOR-II	TEQ (mg/kg)	0.2	4.4	<0.2	-	-
		Carcinogenic PAHs, BaP TEQ <LOR-LOR	TEQ (mg/kg)	0.3	4.6	<0.3	-	-
Carcinogenic PAHs, BaP TEQ <LOR-LOR/2	TEQ (mg/kg)	0.2	4.6	<0.2	-	-		
Total PAH (18)	mg/kg	0.8	35	<0.8	-	-		
Surrogate	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	-	57	
	2-fluorophenyl (Surrogate)	mg/kg	-	0.5	0.4	-	54	
	d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.6	-	67	

Total Recoverable Elements in Soil/Paste Solids/Materials by ICP-OES

Method: MS(AU)-EPA-8210C

QC Sample	Sample Number	Parameter	Unit	LOR	Result	Original	Spikes	Recovery %
SE206541.003	LB200340.004	Arsenic, As	mg/kg	1	59	4	50	52
		Cadmium, Cd	mg/kg	0.3	43	<0.3	50	66
		Chromium, Cr	mg/kg	0.5	61	15	50	59
		Copper, Cu	mg/kg	0.5	55	11	50	59
		Nickel, Ni	mg/kg	0.5	55	8.6	50	56
		Lead, Pb	mg/kg	1	54	9	50	63
		Zinc, Zn	mg/kg	2	80	37	50	65

TRH (Total Recoverable Hydrocarbons) in Soil

Method: MS(AU)-EPA-8210C

QC Sample	Sample Number	Parameter	Unit	LOR	Result	Original	Spikes	Recovery %	
SE206541.004	LB200187.023	TRH C10-C14	mg/kg	20	42	<20	40	135	
		TRH C15-C28	mg/kg	45	<45	<45	40	59	
		TRH C29-C36	mg/kg	45	<45	<45	40	59	
		TRH C37-C40	mg/kg	100	<100	<100	-	-	
		TRH C10-C36 Total	mg/kg	110	<110	<110	-	-	
		TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	-	-	
		TRH F Bands	TRH >C10-C16	mg/kg	25	41	<25	40	132
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	41	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	50	<50	<50	40	55
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	-	-

VOC's in Soil

Method: MS(AU)-EPA-8210C

QC Sample	Sample Number	Parameter	Unit	LOR	Result	Original	Spikes	Recovery %	
SE206541.003	LB200182.024	Monocyclic Aromatic	Benzene	mg/kg	0.1	3.4	<0.1	5	67
			Toluene	mg/kg	0.1	3.8	<0.1	5	76
			Ethylbenzene	mg/kg	0.1	3.4	<0.1	5	69
			m,p-xylene	mg/kg	0.2	6.9	<0.2	10	69
			o-xylene	mg/kg	0.1	3.3	<0.1	5	65



MATRIX SPIKES

SE206541 R0

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub-sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in Green when within suggested criteria or Red with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Matrix MS (AU)-EINJ16699

QC Sample	Sample Number	Parameter	Units	LOE	Result	Original	Spk	Recovery	
SE206541.003	LB200182.024	Polycyclic							
		Naphthalene	mg/kg	0.1	<0.1	<0.1	-	-	
		Surrogate							
		4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.9	10.4	10	139	
		oB-toluene (Surrogate)	mg/kg	-	10.4	11.7	10	134	
		Bromofluorobenzene (Surrogate)	mg/kg	-	8.4	7.6	10	84	
Totals									
Total Xylenes	mg/kg	0.3	10	<0.3	-	-			
Total BTEX	mg/kg	0.6	21	<0.6	-	-			

Volatile Petroleum Hydrocarbons in Soil

Matrix MS (AU)-EINJ16699

QC Sample	Sample Number	Parameter	Units	LOE	Result	Original	Spk	Recovery	
SE206541.003	LB200182.024	TRH C6-C10	mg/kg	25	73	<25	82.5	78	
		TRH C6-C9	mg/kg	20	65	<20	80	81	
		Surrogate							
		4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.9	10.4	10	139	
		oB-toluene (Surrogate)	mg/kg	-	10.4	11.7	10	134	
		Bromofluorobenzene (Surrogate)	mg/kg	-	8.4	7.6	-	84	
		VPH F							
		Benzene (FD)	mg/kg	0.1	3.4	<0.1	-	-	
		Bands							
TRH C6-C10 minus BTEX (F1)	mg/kg	25	53	<25	62.5	81			



## MATRIX SPIKE DUPLICATES

SE206541 R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula:  $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula:  $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in Green when within suggested criteria or Red with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.



## FOOTNOTES

SE206541 R0

id samples expressed on a dry weight basis.

criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: [https://www.sgs.com.au/-/media/Local/Australia/Documents/Technical/Decommission/MP-AU-ENV-QU-022\\_QA\\_QC\\_Plan.pdf](https://www.sgs.com.au/-/media/Local/Australia/Documents/Technical/Decommission/MP-AU-ENV-QU-022_QA_QC_Plan.pdf)

\* NATA accreditation does not cover the performance of this service.  
 \*\* Indicative data, theoretical holding time exceeded.  
 - Sample not analysed for this analyte.  
 IS Insufficient sample for analysis.  
 LNR Sample listed, but not received.  
 LOR Limit of reporting.  
 QFH QC result is above the upper tolerance.  
 QFL QC result is below the lower tolerance.

- ① At least 2 of 3 surrogates are within acceptance criteria.
- ② RPD failed acceptance criteria due to sample heterogeneity.
- ③ Results less than 5 times LOR preclude acceptance criteria for RPD.
- ④ Recovery failed acceptance criteria due to matrix interference.
- ⑤ Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
- ⑥ LOR was raised due to sample matrix interference.
- ⑦ LOR was raised due to dilution of significantly high concentration of analyte in sample.
- ⑧ Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
- ⑨ Recovery failed acceptance criteria due to sample heterogeneity.
- ⑩ LOR was raised due to high conductivity of the sample (required dilution).
- † Refer to relevant report comments for further information.


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Chain of Custody Form – Ref 11858

Sheet 1 of 1

Ref: 11858 Investigator: Envirowest Consulting 9 Cameron Place PO Box 8158 ORANGE NSW 2800 Telephone: (02) 6361 4954 Email: Luke@envirowest.net.au Contact Person: Luke Niven Invoice: accounts@envirowest.net.au			Sample matrix			Sample preservation			Analysis					
Laboratory: SGS SYDNEY 16/33 Maddox Street ALEXANDRIA NSW 2015 Quotation #: _____ Courier/CN: _____			Water	Soil	Sludge	Cool	HNO3/HCl	Unpreserved	SGS Method Code					
Sample ID	Container <sup>a</sup>	Sampling Date/Time							Exchangeable sodium, chloride and sulphate	CL10				
1 B1-300	A	19/05/2020		X		X		X	X					
2 B1-1500	A	19/05/2020		X		X		X	X					
3 C1	A	19/05/2020		X		X		X						
4 C2	A	19/05/2020		X		X		X						
5 C3	A	19/05/2020		X		X		X						
6 C4	A	19/05/2020		X		X		X						
7 C5	A	19/05/2020		X		X		X						
8 C6	A	19/05/2020		X		X		X						
9 C7	A	19/05/2020		X		X		X						
10 C8	A	19/05/2020		X		X		X						
11 C9	A	19/05/2020		X		X		X						
12 C10	A	19/05/2020		X		X		X						
13 DA	A	19/05/2020		X		X		X						
Investigator: I attest that the proper field sampling procedures were used during the collection of these samples.						Sampler name: Luke Niven Date: 19/05/2020 Time: 1300-1500			SGS EHS Sydney COC <b>SE206541</b> 					
Relinquished by: Luke Niven (print and signature) <i>[Signature]</i>			Date: 20/05/2020	Time: 16:00	Received by: <i>[Signature]</i> (print and signature)			Date: 21/05/2020	Time: @ 12:30					

Please return completed form to Envirowest Consulting, \*A = Solvent rinsed glass jar with Teflon lined lid and green label, B= Plastic with green label, C= Amber with green label, D= Vial with white label, E= Plastic with red label





# PROPOSED RSL LOT SERVICING STRATEGY

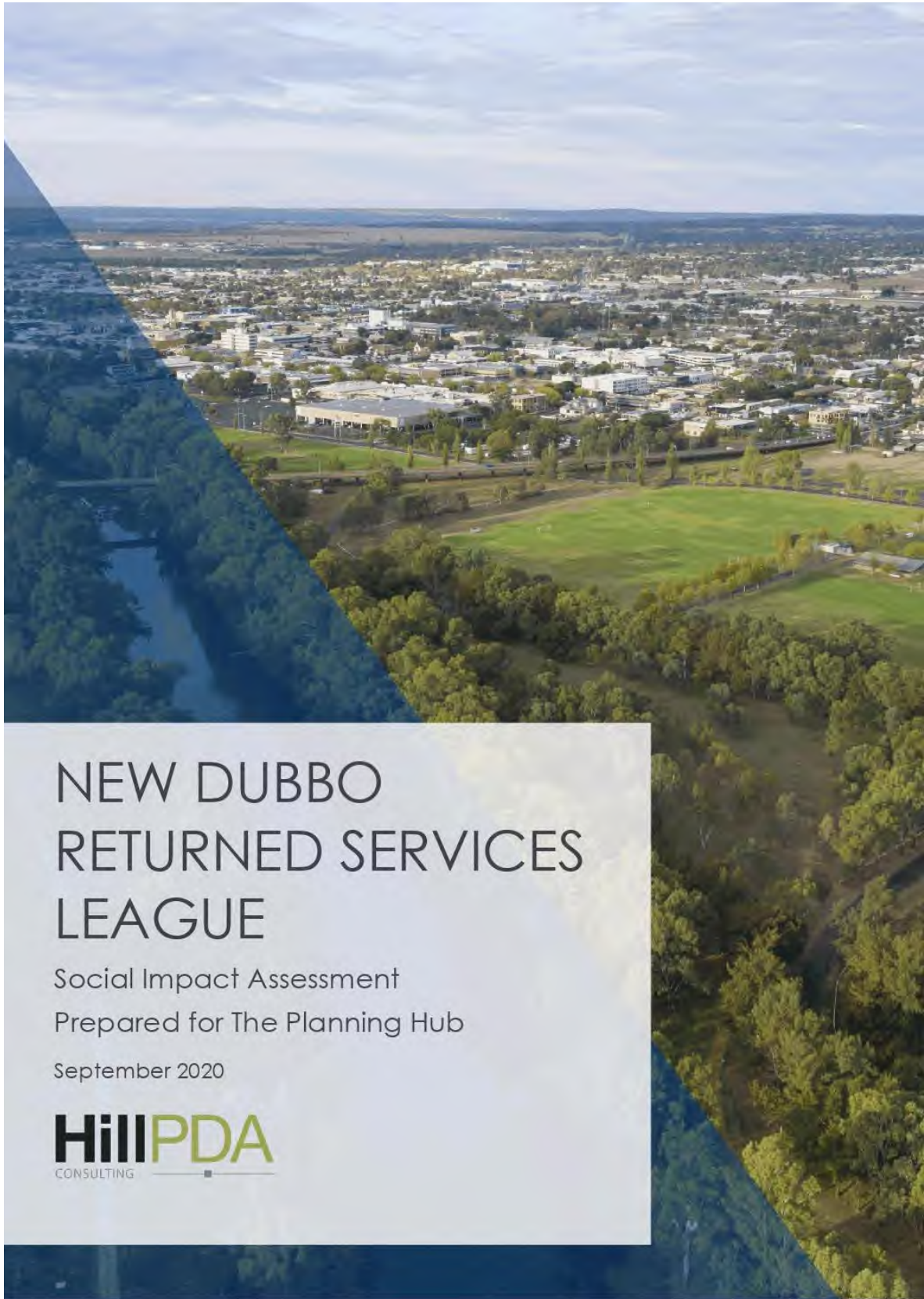




# PROPOSED RSL LOT SERVICING STRATEGY







# NEW DUBBO RETURNED SERVICES LEAGUE

Social Impact Assessment  
Prepared for The Planning Hub

September 2020







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# Quality Assurance

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## Quality Control

This document is for discussion purposes only unless signed and dated by a Principal of HillPDA.

## Reviewer

Signature  Dated 

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# INTRODUCTION



## 1.0 INTRODUCTION

HillPDA has been engaged by The Planning Hub to prepare a social impact assessment to accompany a Planning Proposal to amend the Dubbo Local Environmental Plan 2011 to accommodate a new registered RSL club facility and associated recreational facilities.

The Dubbo RSL Club (The Club) is a registered club currently located at 178-188 Brisbane Street, Dubbo. The Club provides a range of community facilities and services at the Brisbane Street site including event and conference space, gym and aquatic centre and several bars and food outlets. The Club also operates a number of other community facilities and services in the Dubbo region including the Dubbo RSL, the Dubbo City Bowling Club and the Rhino Lodge.

To expand this portfolio, The Club propose to use a newly subdivided site in Dubbo's southeast that is commonly known as Volta Avenue, Dubbo (Lot 502, DP1255115) and develop a new Dubbo RSL club with an associated community and recreation facility. The site is within an area identified for future residential development and forms part of an existing residential estate known as Keswick Estate and the wider South-East Dubbo Urban Release Residential Area. The site is currently zoned R2 Low Density Residential under the provisions of the Dubbo Local Environmental Plan (LEP) 2011. Registered clubs are prohibited in the R2 zone under the Dubbo LEP. As such it is proposed to rezone the site to include the additional permitted uses of a registered club and recreation facilities to facilitate the future development of the site.

This Social Impact Assessment provides background to the planning proposal, a description of the existing social environment and an assessment of the potential social impacts from the proposed development. The methodology used to assess the potential social impacts for the proposed development is consistent with current best practice and NSW Government policy.

This report provides an assessment of the social impacts that may arise as a result of the proposed development. The impact assessment also considers potential impacts to sensitive receivers in the area.

HillPDA is a suitably qualified planning and economics firm with extensive experience in social impact assessment for licensed venues and other services-based developments.

# METHODOLOGY



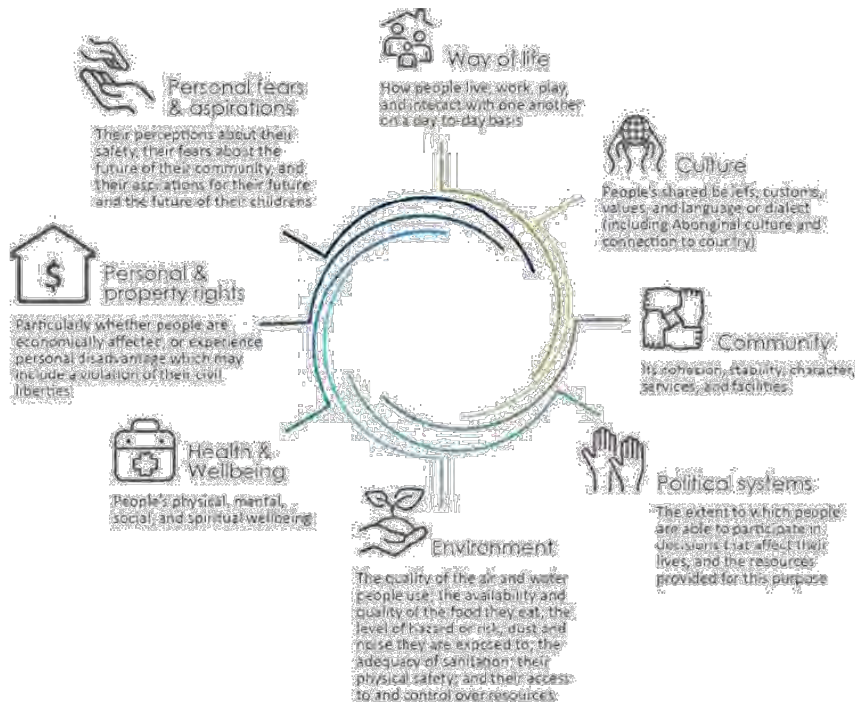
## 2.0 METHODOLOGY

### 2.1 Defining social impacts

A social impact can be defined as the net effect of an activity on a community and the well-being of individuals and families. The NSW Department of Planning, Industry and Environment (DPIE) *Social Impact Assessment Guideline* provides a detailed guideline that can be applied to any social impact assessment across NSW. Dubbo City Council provides guidance on preparation of a Social Impact Assessment through the Dubbo development Control Plan 2013 (DCP). Additionally, HillPDA has carried out research into best practice social impact assessment. This social impact assessment covers the requirements of the NSW DPIE guideline, Dubbo City Council DCP 2013 and best practice research.

The DPIE Guideline is designed to establish a clear, consistent and rigorous framework for identifying, predicting, evaluating and developing responses to the social impacts of those projects, as part of the overall environmental impact assessment. The guideline builds on work from Vanclay (2003) and establishes that social impacts arise from changes that impact people in any of several ways. Figure 1 details these potential areas that could be impacted by a development.

Figure 1: Social impacts



Source: Adapted from Vanclay, F. (2003). International Principles for Social Impact Assessment. *Impact Assessment & Project Appraisal* 21(1), 5-11





**2.2 Assessment methodology**

This social impact assessment has been prepared having regard to the relevant NSW Government and Council guidelines. Figure 2 presents the key steps and tasks undertaken to prepare this Social Impact Assessment.

Figure 2: Assessment methodology



Adapted from Vanclay, F., et al. (2015): p. 7

**2.3 Impact assessment framework**

The impact assessment presented in this report identifies and evaluates changes to existing social conditions due to the project. This includes the assessment of direct and indirect benefits and effects/impacts, as well as consideration of any cumulative impacts. Individual impacts are evaluated in terms of the likelihood of the impact occurring, the magnitude of the consequence and the significance of the impact.

Figure 3: Social Impact Assessment process





**2.3.1 Likelihood of impact**

The likelihood of a potential impact is a primary element of considering each social impact and its risk rating. The criteria used to determine the likelihood of any potential impact are described in Table 1.

**Table 1: Likelihood of impact**

Likelihood	Description	Indicative Probability
Almost certain	Expected to occur, almost frequently	90 percent
Likely	Could occur in many instances	70 percent
Possible	Just as likely to happen as not	50 percent
Unlikely	Limited occurrence	30 percent
Rare	Very limited occurrence	10 percent

**2.3.2 Consequence of impact**

The consequence of a potential impact is a key consideration to determine a risk rating. Each consequence is detailed below in Table 2.

**Table 2: Consequence**

Consequence	Description
Insignificant	No lasting detrimental or negligible impact on the community or environment.
Minor	Minor, short-term isolated impact on the community or environment.
Moderate	Modest, medium-term, widespread impact on the community or environment.
Major	Serious, long-term/widespread impact on the community or environment. Widespread community unrest or discomfort.
Catastrophic	Severe/ extensive on-going, widespread impact on the community or environment.

**2.3.3 Significance of impact**

Potential impacts are identified as part of the scoping process (see Section 6). They are then analysed based on the nature of the impact and its predicted severity. A mitigation strategy is proposed if necessary and finally both impacts are assigned a Social Risk Rating (SRR). The matrix used to calculate SRR is below in Table 3.

**Table 3: Social Risk Matrix**

		Consequence				
		Insignificant	Minor	Moderate	Major	Catastrophic
Likelihood	Almost certain	High	High	Extreme	Extreme	Extreme
	Likely	Moderate	High	High	Extreme	Extreme
	Possible	Low	Moderate	High	Extreme	Extreme
	Unlikely	Low	Low	Moderate	High	High
	Rare	Low	Low	Moderate	High	High

Source: NSW Planning & Environment (2017) | Vanclay, F; Esteves, A; Aucamp, G; Franks, D (2015)

# POLICY CONTEXT

## 3.0 POLICY CONTEXT

### 3.1 Central West and Orana Regional Plan 2017

The Central West and Orana Regional Plan was developed by the then Department of Planning and Environment and published in 2017. The Plan sets out a vision, goals, directions and actions for the future of this growing region to 2036.

The Plan identifies the region, that spans from approximately Lithgow to Nyngan and Cowra to Coonabarabran, as one of NSW's most diverse regional economies. The region is expected to grow by over 23,000 people by 2036 to 308,000 people. This population is ageing population and 15,800 new dwellings are required to meet the housing needs.

The region has several centres at Forbes, Parkes, Orange, Bathurst and Dubbo at the core, a network of opportunities with major road and rail connecting them. The region also includes the strategic centres of Cowra, Lithgow and Mudgee (Figure 4).

Figure 4: Central West and Orana 2036



The vision for the region is:

*“the most diverse regional economy in NSW with a vibrant network of centres leveraging the opportunities of being at the heart of NSW”*

To achieve this vision the NSW government acknowledges the two diverse part of the region. The distinctive agricultural hinterland of the Central West and the vast slopes and plains of the Orana (Figure 5). Dubbo serves as the central hub for connections to a large number of dispersed rural communities. It is not only the

geographical centre of the region but is also the economic centre. To help reach the above-mentioned vision the following regionally focused goals are outlined in the strategy:

- The most diverse regional economy in NSW
- A stronger, healthier environment and diverse heritage
- Quality freight, transport and infrastructure networks
- Dynamic, vibrant and healthy communities.

Figure 5: Two parts of the Central West and Orana



The site is located in the Dubbo residential area and will provide the growing community with recreational infrastructure and entertainment options, aligning with goal 4: Dynamic, vibrant and healthy communities.

### 3.2 Dubbo Regional Council Community Strategic Plan 2018

The Dubbo Regional Council Community Strategic Plan is a plan for the growing community of the Dubbo region up to 2040. The LGA is expected to see an increase of 12,288 people, with a need for an additional 4,291 dwellings required in Dubbo centre. Dubbo's affordable housing market is a key attractor to the region and there is ample space for the required dwellings to meet the needs of the projected population and beyond.

The Strategic Plan outlines the vision for the future of the Dubbo Region:

*"In 2040 we will celebrate our quality of life, the opportunities available for us to grow as a community, our improved natural environment, and being recognised as the inland capital of regional NSW."*

The Strategy covers key themes for the future of Dubbo Regional Council with goals and strategies for each:

1. Housing
2. Infrastructure
3. Economy
4. Community leadership
5. Liveability

Key strategies relevant to this development:

- 3.1.5 events that provide for activities that foster cultural and recreational opportunities and community interaction
- 5.3.2 a variety of youth activities and entertainment is available



- 5.5.1 access to recreation and cultural activities for young people is improved
- 5.5.3 unique recreational facilities and opportunity are available
- 5.5.4 our sporting facilities are recognised as catering for a wide range of local, regional and state sporting events and opportunity

### 3.3 Guide for Establishing and Managing Night Time Economy Uses 2018

This guide was published by the NSW Government in 2018 to help guide businesses that operate or have a desire to operate within the night time economy and councils to plan a thriving and safe night time economy. It is intended to be a quick and easy reference tool.

The night time economy can be defined as social or business activities that take place between 6pm and 6am. The night time economy includes but is not limited to:

- Entertainment
  - Performing arts, music and culture
  - Sports
  - Amusement parks and centres
  - Casinos and other gambling activities
- Food
  - Cafes and restaurants
  - Takeaway food services
- Drink
  - Liquor retailing
  - Pubs, taverns, clubs and bars hotels

The guideline details the application process through the planning system and the elements that should be considered throughout the preparation. The guideline also includes a DA checklist and instructions on how to obtain a liquor licence.

# THE PROPOSAL



## 4.0 THE PROPOSAL

### 4.1 The site

The site commonly known as Volta Avenue, Dubbo (Lot 502 DP1255115) is located to the southeast of Dubbo town centre. The site is proposed to be subdivided as shown in Figure 6. It sits within an area identified for future residential development forming part of the existing residential estate to the west known as Keswick Estate and the wider South-East Dubbo Urban Release Residential Area.

The site is currently zoned R2 Low Density Residential under the provisions of the Dubbo Local Environmental Plan (LEP) 2011. Registered clubs are prohibited in the R2 zone under the Dubbo LEP. As such it is proposed to rezone the site to include the additional permitted uses of a registered club and recreation facilities to facilitate the future development of the site.

The proposed new lot is located on a proposed extension of the existing Boundary Road. The extended road will connect to Sheraton Road with a four way round about. A round-about will also be located on the south eastern corner of the proposed RSL. The proposed RSL is envisioned to service the future Keswick estate community as beyond.

Figure 6: Proposed RSL Lot locality



Source The Planning Hub

### 4.2 Concept proposal

The proposal is intended to facilitate the construction and operation of a new Dubbo RSL Club including:

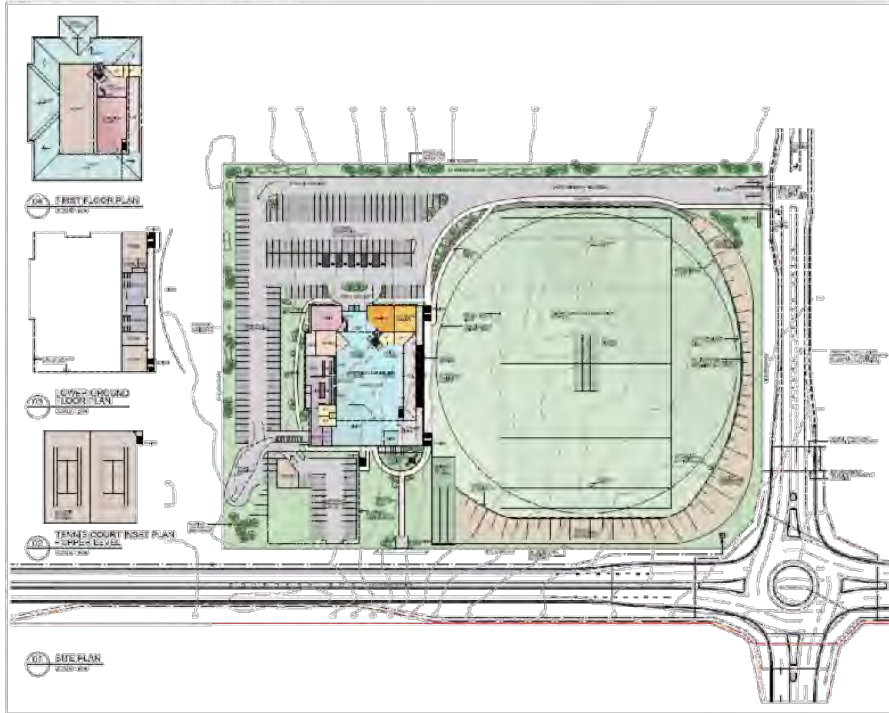
- Club building including food prep/bars, lounges, gaming, sports, terraces, function rooms, reception and back-of-house facilities
- Kids play and family area
- 2 x tennis courts





- On-grade parking for 197, undercroft parking for 22
- Cricket and rugby league field
- 3 x Cricket nets
- supporting amenities and landscaping to support spectators .

Figure 7: Proposed RSL concept plan



# COMMUNITY PROFILE

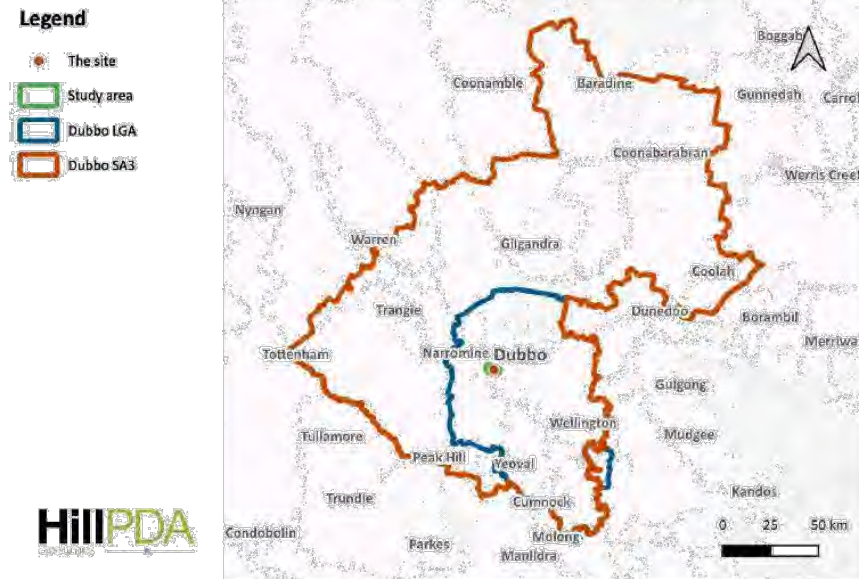


## 5.0 COMMUNITY PROFILE

### 5.1 The study area

For the purposes of this demographic profile, the study area has been defined as Dubbo-South (SA2). The Dubbo Region (SA3) and the rest of NSW GCCSA has been used to compare and assess demographics against the wider region. The border of the selected SA2 (the study area) in relation to the site is seen in Figure 8.

Figure 8: Location



Source HillPDA

Figure 9: Study area boundary



Source HillPDA

### 5.1.1 The surrounds

This section considers the surrounding development in order to understand the proximity of the hotel to sensitive receivers and to other licensed venues, noting that a high density of licensed premises can present a greater risk of social harm.

### 5.1.2 Sensitive receivers

The following section provides an overview of potential sensitive receivers based on land uses located within the study area. This audit has been informed by a desktop analysis of geographical data and resources, including;

- Dubbo Regional Council website
- Transport for NSW website
- NSW Education website
- Australian Curriculum Assessment and Reporting Authority My School website
- Australian Children's Education & Care Quality Authority (ACECQA) Starting Blocks website.

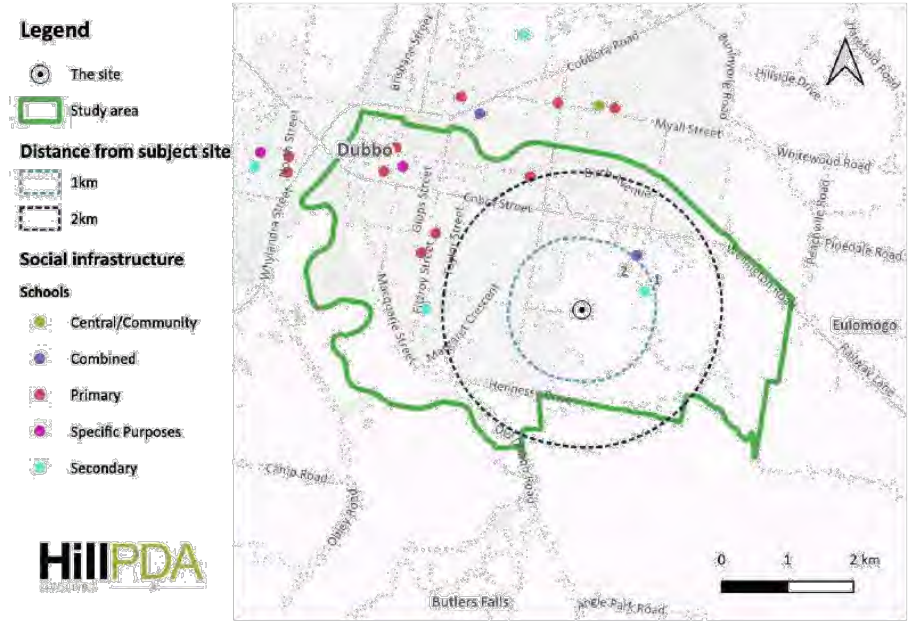
The audit is indicative and based on the data available at the time of preparing this report.

Sensitive receivers considered are schools, childcare centres and places of worship as the primary purposes of these facilities have potential to be impacted by any change in land use or development of nearby land. The Dubbo Masonic Village Residential Care and Retirement Living community is located approximately 1km to the north of the site, the residents of this community could be considered sensitive receivers.

Figure 10 shows the schools in the area including St Johns College and Dubbo Christian School approximately 1km from the site. The schools have their own sporting facilities and are currently surrounded by farmland to the east and will be surrounded by the future community of Keswick. These schools are generally open between 8am and 4pm.



Figure 10: Nearby sensitive receivers – School



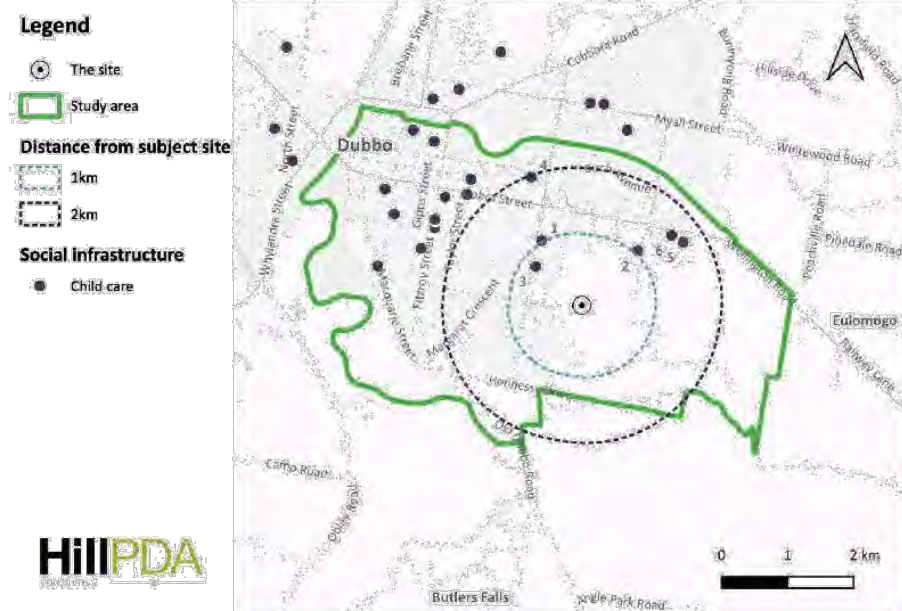
ID	Schools within 2km of the Site
1	St Johns Primary and College schools
2	Dubbo Christian School





Figure 11 shows the childcare facilities in the area with six facilities within 2 km of the site. All of the existing childcare facilities are in residential areas. They are primarily open between 7am and 6pm.

Figure 11: Nearby sensitive receivers – Childcare

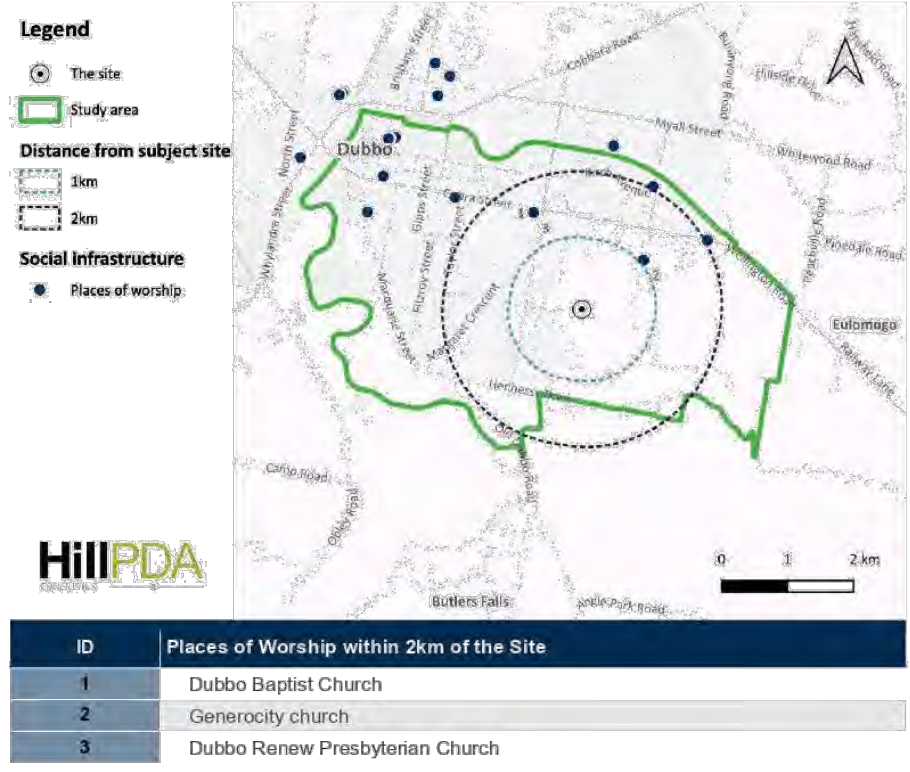


ID	Childcare within 2km of the Site
1	Goodstart Early Learning Dubbo - Wheelers Lane
2	Dubbo Christian Preschool
3	Little Learners Long Day Care and Preschool
4	Orana Heights After School Care Inc
5	Dubbo Early Learning Centre
6	Imagine Childcare and Preschool Blueridge Park



Figure 12 shows places of worship in the area with three facilities located within 2km. Each facility is located in a residential area and hours of operation are generally early evenings and daytime on weekends.

Figure 12: Nearby sensitive receivers – Places of worship





### 5.1.3 Nearby licences

Existing hotel, packaged liquor and club licenses within the study area are indicated in Figure 13. The location of licenses has been identified from the register of licensed premise provided by Liquor and Gaming NSW in May 2020. The study area of Dubbo South (SA2) has 12 relevant licences as of May 2020<sup>1</sup>. As shown in Table 4 the study area has a slightly lower rate of licences per 1,000 people than the Dubbo LGA and NSW quotient.

Table 4: Licences per 1,000 people

	Study Area (Dubbo South)	Dubbo LGA	NSW total
Population (2016)	<b>16,942</b>	<b>51,404</b>	<b>7,480,228</b>
Club licences	3	9	1,286
Hotel licence:	9	26	2,121
Packaged/Liquor licences:	-	9	2,662
Total Licences (Club, packaged liquor and hotel)	<b>12</b>	<b>44</b>	<b>6,069</b>
Licences/1,000 people	<b>0.71</b>	<b>0.86</b>	<b>0.81</b>

Source: NSW Government Customer Service Liquor Licence data, April 2020 and ABS, 2016

The suburb of Dubbo-South has 12 registered licences in the clubs, hotels and packaged liquor categories, these are primarily clustered within the city centre focused south of the Dubbo railway station and bound by the Macquarie River, Fitzroy Street and the southern alignment of Cobra Street.

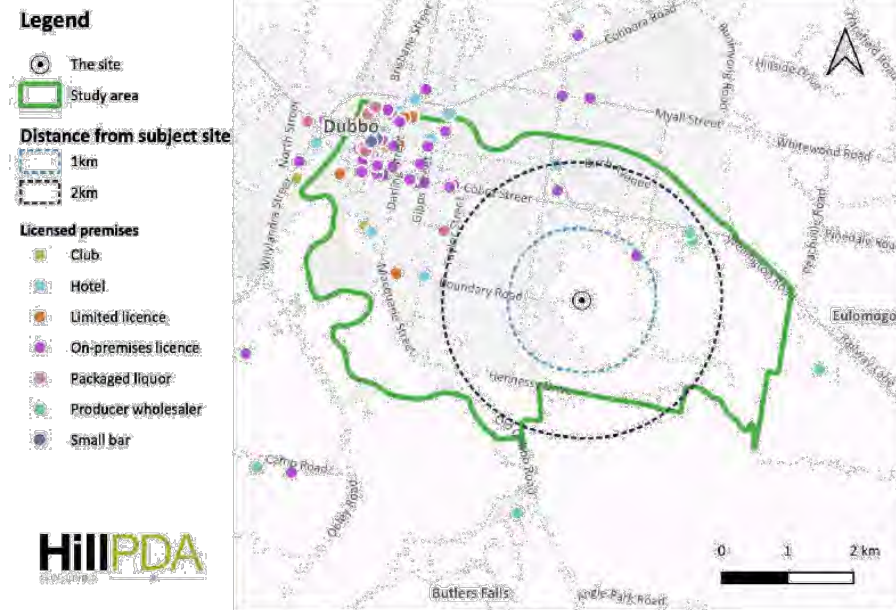
The closest hotel or club licence to the site is the Macquarie Inn Hotel/Motel located approximately 2 kilometres to the northwest. The general opening hours are until midnight to 1am the next day on weeknights and until 2am the next day on Friday and Saturday nights, however the bistro closes at 9pm every day.

<sup>1</sup> NSW Government Customer Service Liquor Licence data, April 2020





Figure 13: Nearby licenced venues



5.1.4 Key findings

- There are several schools and churches within 2 kilometres of the site, which could be sensitive receivers to proposed activity
- The study area currently has a marginally lower rate of licences per 1,000 people than the LGA and NSW. There are limited competing premises the closest hotel or club licence to the site is the Macquarie Inn Hotel/Motel located approximately 2 kilometres to the northwest.
- There is evidence of clustering of licenced clubs/hotels within the town centre.
- There are no other club, hotel or packaged liquor licenced within a two kilometre radius of the site.



## 5.2 Demographic profile

This section provides a community profile and social baseline for the social impact assessment in section 7.0.

### 5.2.1 Population and growth projections

This population of the study area was 16,942 in 2016, compared with approximately 69,414 for the Dubbo Region (SA3). The study area has a comparable rate of persons per household as the Rest of NSW (GCCSA) but a slightly smaller household than the Dubbo region and NSW average size household.

Table 5: Summary of demographics

2016	Study area (Dubbo-South)	Dubbo Region (SA3)	Rest of NSW outside of Sydney (GCCSA)	NSW
Population	16,942	69,414	2,643,536	7,480,228
Families	4,284	17,577	693,180	1,940,226
Households	7,416	30,194	1,203,865	3,059,599
Average people per household	2.4	2.5	2.4	2.6

Source: ABS Census 2016, Dubbo-South (SA2), Dubbo (SA3), Rest of NSW (GCCSA), New South Wales (STE)

Projected population is not available at the study area scale, however, the Dubbo LGA is projected to increase in population to 57,980 by year 2036 (Table 6: Population Projections). This growth represents a 11 percent increase from 2016, in contrast over the same period the population of NSW is expected to increase by 30 percent.

Table 6: Population Projections

	2016	2021	2026	2031	2036	% change between 2016 and 2036
Dubbo LGA	51,404	53,724	55,530	56,926	57,980	11.3%
NSW Total	7,732,858	8,414,978	9,011,010	9,560,507	10,077,964	30%

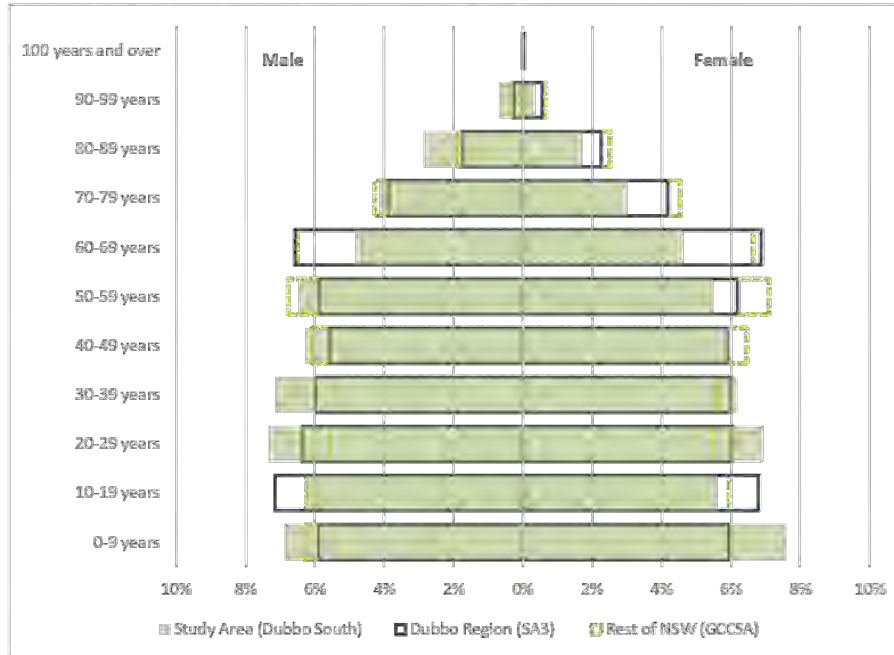
Source: NSW ASGS 2019 IA Projections



**5.2.2 Age structure**

The age distribution in the study area tends to be younger than that of the wider Dubbo Region and Rest of NSW GCCSA, with a greater representation of people aged 20 to 39 and children between 0-9 while there is a lower proportion of 50 to 69 year olds.

**Figure 14: Age by ten-year group (study area and Dubbo Region SA3)**



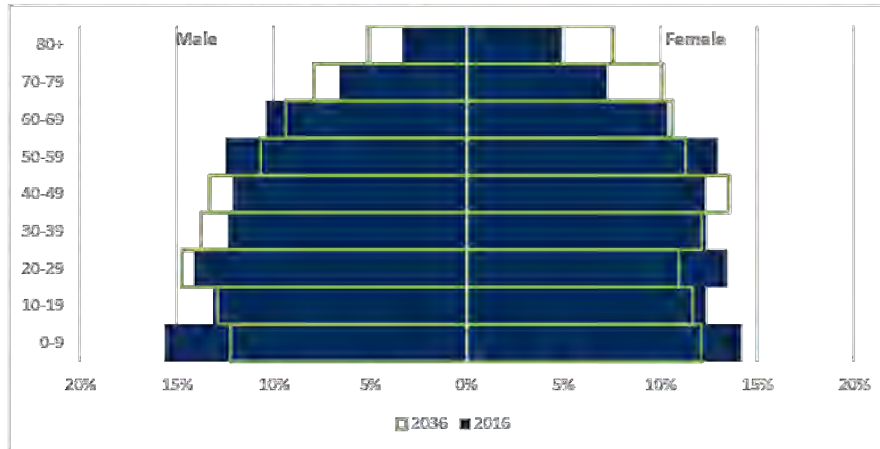
Source: ABS Census Tablebuilder 2016

**5.2.3 Population projections**

Population forecasts are calculated by local government area by the Department of Planning, Industry and Environment. Population projections for Dubbo Regional LGA show an increase of 6,576 people between 2016 and 2036. However, as shown in Figure 15, the greatest increase in population age range will be both in the younger age bracket of 20 to 49 in males and 40 to 49 age bracket for females and older age groups, indicating that the Dubbo Regional has an ageing population, which is consistent with state and national population trends. This is important for social infrastructure planning when considering health and recreation needs of older people.



Figure 15: Population projections (Dubbo Regional LGA)

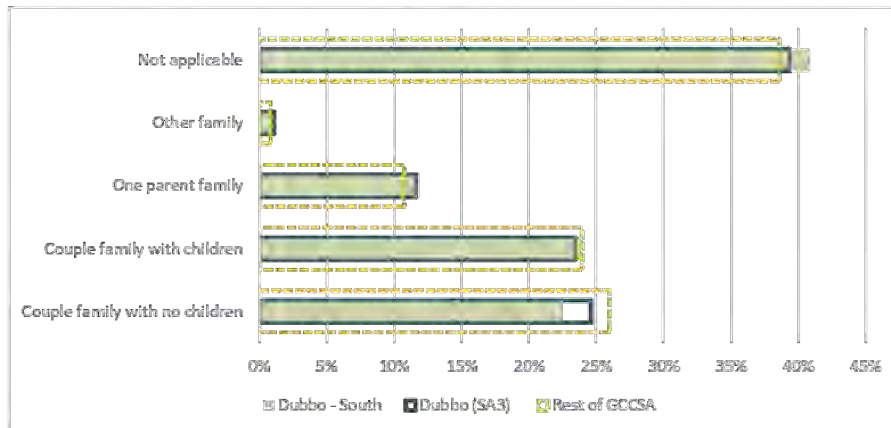


Source: NSW Department of Planning, Industry and Environment Population Projections, 2019

5.2.4 Family and household structure

The study area reflects a similar family structure as the NSW average with couples with children as the most common family structure, however the rest of NSW (GCCSA) showed couples with no children as the most common family structure. The study area showed a slightly higher representation of one parent family structure and a lower representation of Couple family with no children compared to Rest of NSW GCCSA.

Figure 16: Family composition Liverpool LGA and NSW (2016)



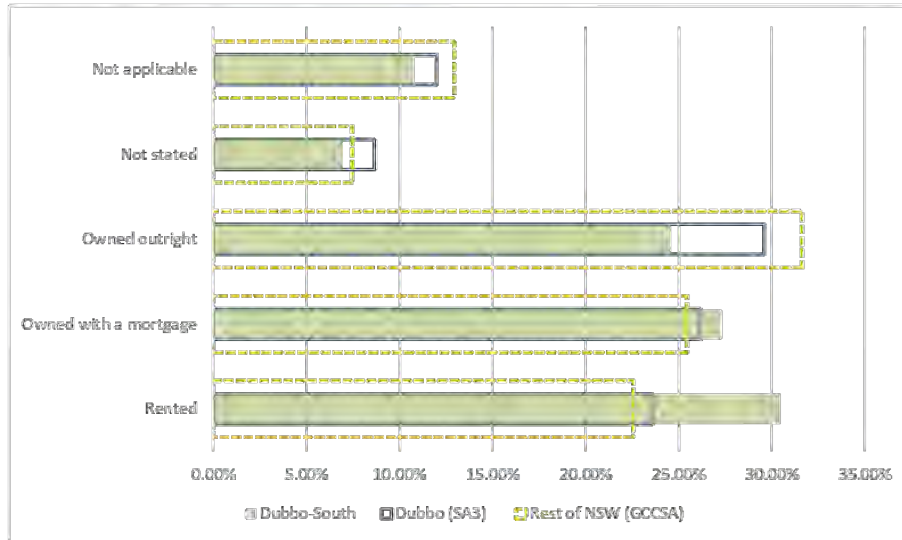
Source: ABS Census Tablebuilder 2016

5.2.5 Housing tenure

Housing tenure in the study area and greater Dubbo region showed a higher proportion of home owners with a mortgage and renters, whilst a lower representation of home owners owned outright compared to the Rest of NSW GCCSA. The study area showed a comparatively lower proportion of home owners owned outright that the greater Dubbo region.



Figure 17: Housing tenure



Source: ABS Census Tablebuilder 2016

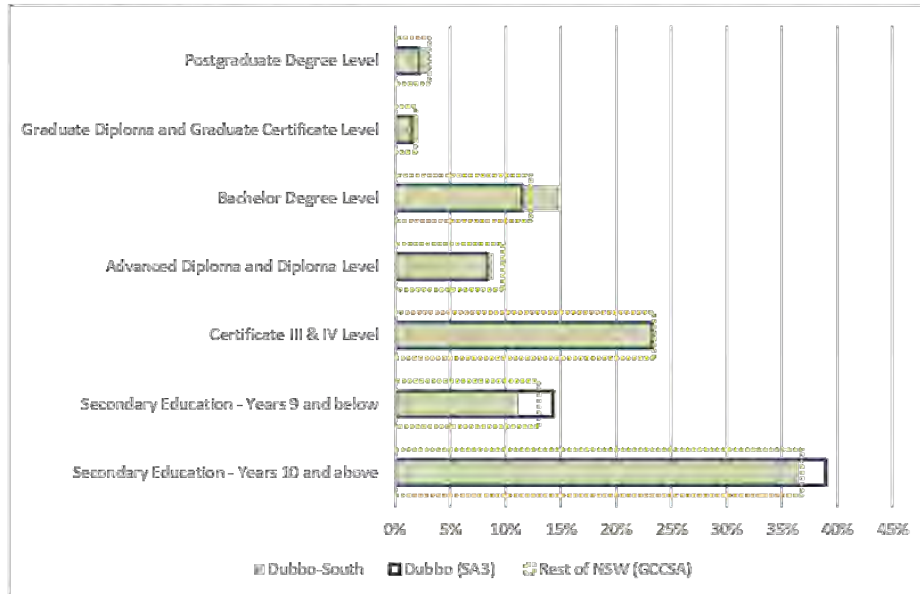
**5.2.6 Education, Employment and Labour force**

The study area and greater Dubbo area have generally the same results when considering education, employment status and occupation, as such this section will consider the variances between these areas and the rest of NSW (GCCSA).

The study area has a higher proportion of bachelor attainment compared to both the Dubbo region and rest of NSW (GCCSA). The data shows a similar proportion of people who list Certificate III & IV Level (23%) and Graduate Diploma and Graduate Certificate Level (2%) as their highest level of attainment compared to rest of NSW (GCCSA). Whilst in the study area, there was a lower proportion of Advanced Diploma and Diploma Level and Secondary Education - Years 9 and below compared to the rest of NSW (GCCSA). This correlates with the higher proportion of professional employment as demonstrated below.



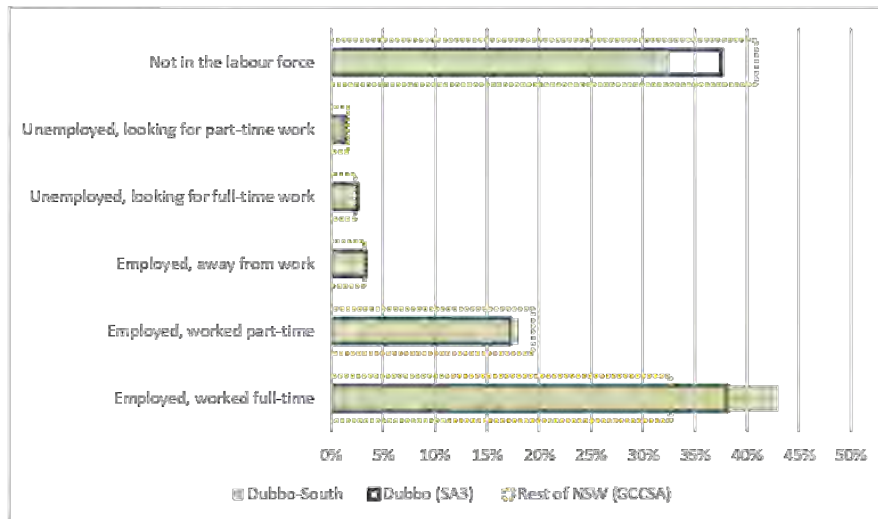
Figure 18: Highest level of Education Attained



Source: ABS Census Tablebuilder 2016

Employment in the Dubbo region and the study area is similar to that of NSW; however the study area has a greater representation of people working full-time but a lower proportion of people working part-time and not in the labour force.

Figure 19: Employment status

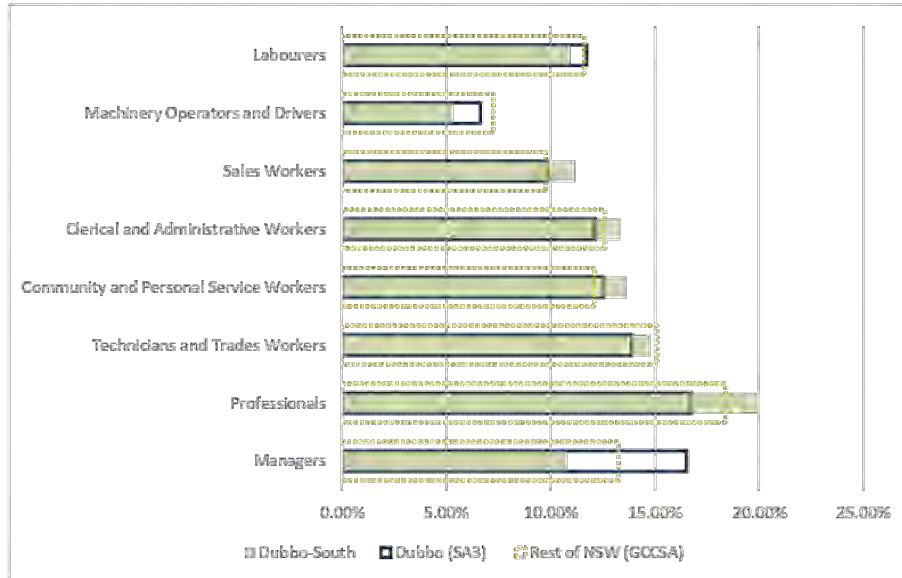


Source: ABS Census Tablebuilder 2016



Residents within the study area and the Dubbo region are generally more likely to be in occupations classified as Professional, Sales Workers, Community and Personal Service Workers, Clerical and Administrative Workers or Technicians and Trades Workers compared to the Rest of NSW (GCCSA), with other occupation categories showing lower representation, particularly Managers, Labourers and Machinery Operators and Drivers. This indicates a young and professional population.

Figure 20: Occupation of employment



Source: ABS 2016. Excludes not stated, not applicable and inadequately described.

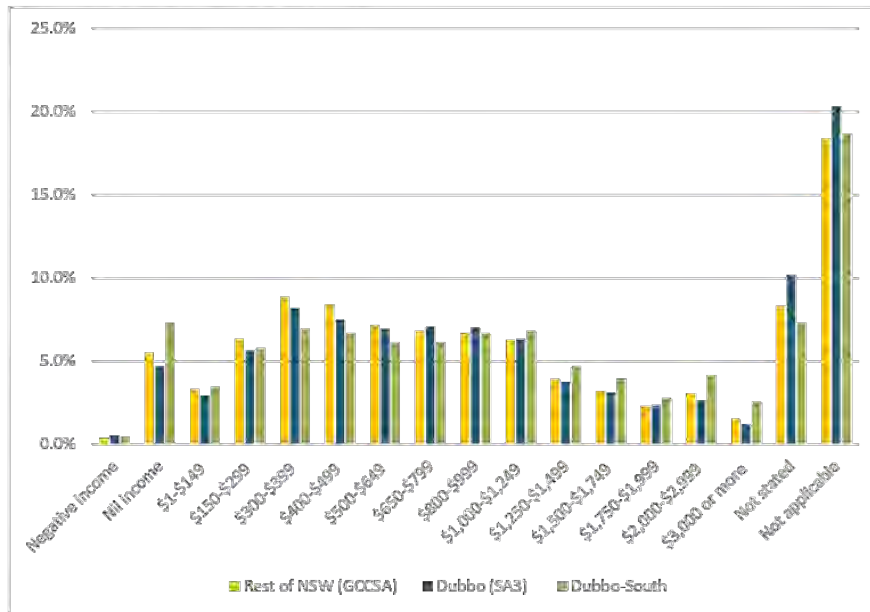
5.2.7 Income

Personal income ranges are shown below in Figure 21. It can be seen that the community within the study area have slightly higher than average income compared to the wider Dubbo region. The study area has a lower representation of those with nil income compared to the wider Dubbo region.





Figure 21: Total personal income ranges (weekly)



Source: ABS 2016

**5.2.8 Transport**

There is no public transport services available to the site, the closest bus services is along Mitchell Highway which connects to the city centre, Orana Mall and Richmond.

Bus services along Mitchell Highway end services between 2.03pm to 5.55pm depending on the service and day. The site is also located approximately 900 metres from Mitchell Highway which connects to Newell Highway, Narromine Road and Dunedoo Road.

**5.2.9 Socioeconomic advantage and disadvantage**

The Socio-Economic Indices for Areas (SEIFA) has been developed by the ABS to provide an overview of social and economic wellbeing and welfare of communities across a range of spatial scales based on characteristics such as income, education, unemployment and occupations. The output is an index which ranks the relative socioeconomic status of areas against each other at state and national levels (Figure 22). Areas without a colour do not have sufficient population to conclude a ranking.





Figure 22: SEIFA deciles of relative socio-economic Disadvantage



Source: ABS Census of Population and Housing: Socio-Economic Indexes for Areas (SEIFA), Australia, 2016

Generally, the study area ranks in the centre quintile indicating an average level of advantage and disadvantage. Comparatively the areas to the north are generally ranked in the lower quintiles and the areas to the south are ranked in the upper quintiles indicating greater disadvantage. This is likely to change following the development of the Keswick estate as planned, however current community reflects some risk for vulnerable communities.

**5.2.10 Crime**

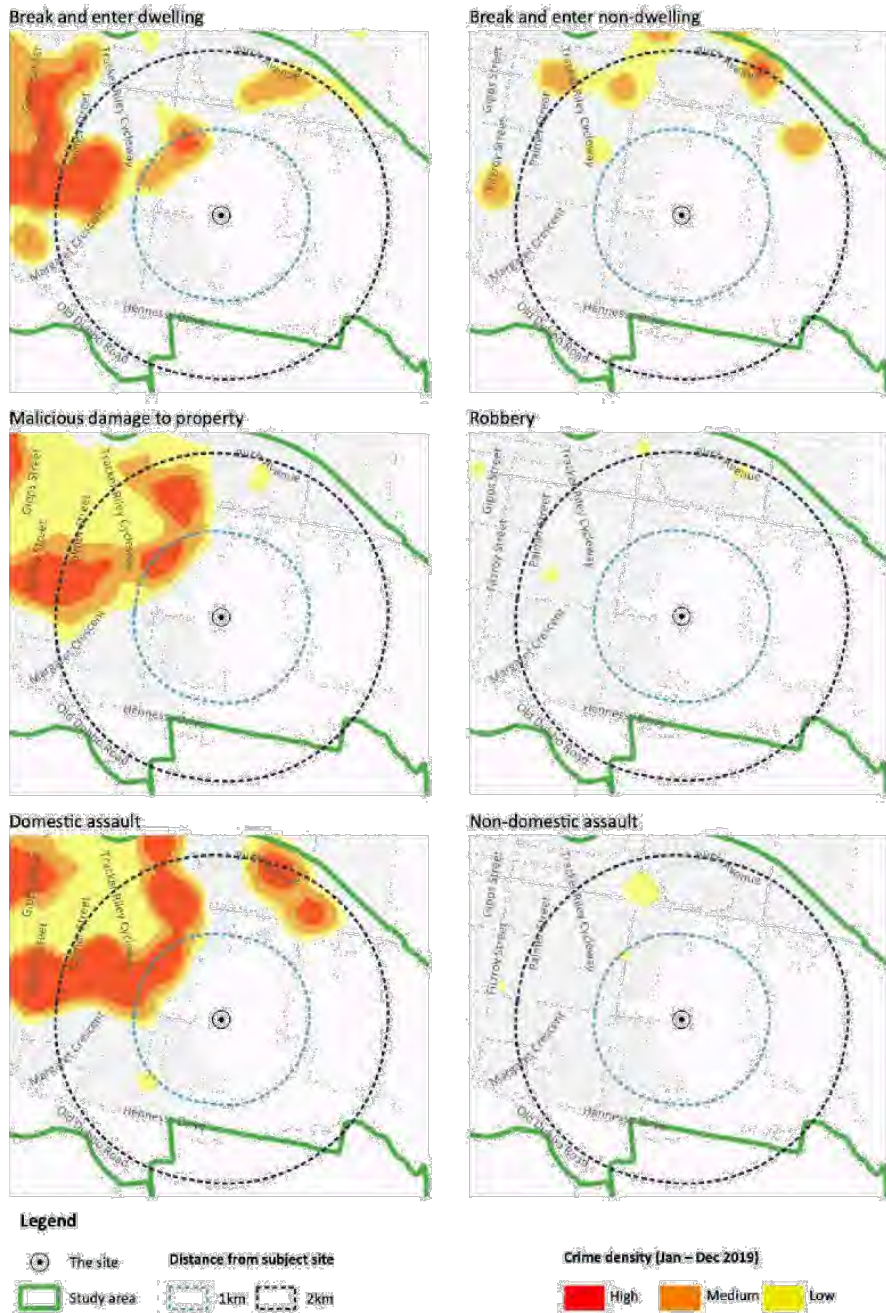
Assaults are the most common crime associated with licenced hotels. Figure 23 indicates the location of crime in the area surrounding the site for the period between January and December 2019. It can be seen that there are high concentrations of Domestic assault, break and enter dwelling and malicious damage to property in nearby areas. There are no hotspots for non-domestic assault, robbery or break and enter non-dwelling in the immediate area.

There is a relatively high concentration of crime of all varieties approximately one kilometre to the west in the direction of the Dubbo town centre.

The overall level of crime at the site is relatively low, the concentrations of assaults near the site have been analysed below.



Figure 23: BOCSAR crime hotspots (incidents between January and December 2019)





Source: Bureau of Crime Statistics and Research Crime mapping Tool. Maps are for incidents of crime occurring January to December 2019.

Table 7 states the number of assaults at licenced premises in the suburb of Dubbo. It shows there was on average 180 alcohol related assaults per year and about 520 non-alcohol related assaults per year.

**Table 7: Incidents of alcohol related assault at licensed premises in Dubbo (suburb)**

	2015	2016	2017	2018	2019
<i>Alcohol related assaults (per 10,000 population)</i>					
Non domestic violence	1.1	1.3	1.4	1.3	1.3
Domestic violence related	1.1	1.2	0.9	1.5	1.8
total	2.3	2.5	2.3	2.8	3.1
<i>Alcohol related non-alcohol related assaults (per 10,000 population)</i>					
Non domestic violence	2.4	2.9	2.9	3.8	3.5
Domestic violence related	3.7	3.2	3.1	5.3	6.5
total	6.1	6.1	6.0	9.1	10.0

Source: NSW Bureau of Crime Statistics (2020)

**5.2.11 Potentially vulnerable population groups**

**Those needing assistance for core activities**

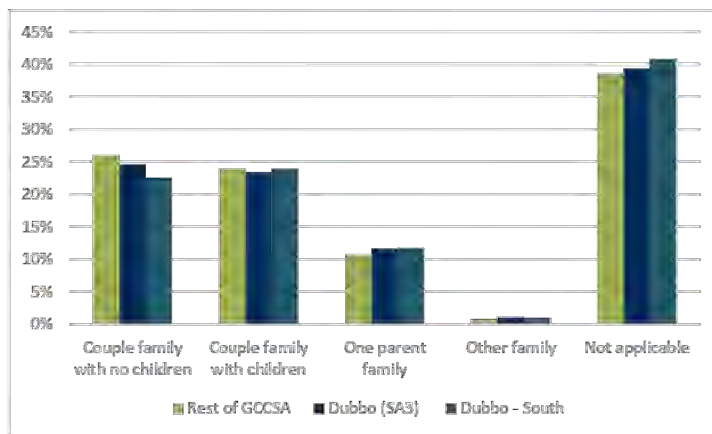
The study area, Dubbo Region and Rest of NSW (GCCSA) present similar proportions of the community requiring assistance with core activities. Approximately six per cent of the community require assistance with core activities in the study area, Dubbo and the Rest of NSW.

**Lone parent households**

As shown in Figure 24 one parent families similar across the board and are slightly more common in the study area and greater Dubbo region (12 percent) compared to that of rest of NSW (11 per cent).

Similarly to NSW both Dubbo and the study area, lone parents are most common with females representing approximately 82 to 84 percent of lone parent households.

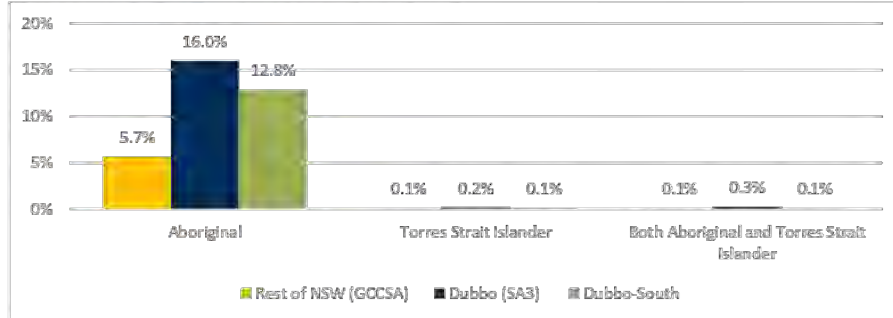
**Figure 24: Family structure (2016)**



#### Aboriginal and Torres Strait Islanders

The study area and greater Dubbo area have approximately 13% and 16% people who identify as Aboriginal and less than 1 per cent identification of Torres Strait Islander. In comparison to the rest of NSW (GCCSA) which shows a representation of 6% of people of Aboriginal heritage.

Figure 25: Aboriginal and Torres Strait Islander Status (2016)



Source: ABS 2016

#### 5.2.12 Local history and community values

The Tubbagah People of the Wiradjuri Nation are Dubbo's traditional owners of the land on which the Dubbo RSL. The Wiradjuri Nation is geographically the largest Indigenous Nation within NSW which extends from Coonabarabran in the north, straddling the Great Dividing Range down to the Murray River and out to western NSW. Wiradjuri traditional country includes the townships of Dubbo, Condobolin, Orange, Bathurst, Wagga Wagga, Albury, Narrandera, and Griffith.

There are a number of iconic events, sites and landmarks across the Dubbo City that promotes and represent Aboriginal tradition and heritage. This includes the Red Ochre Festival, museum and galleries of the Western Plains Cultural Centre and Terramungamine Reserve.

#### 5.2.13 Key findings

- The community in the Dubbo Region is expected to grow significant by 11.3 per cent by 2036 with a shift towards middle age and older age groups
- The study area has a younger population than that of the wider Dubbo Region and Rest of NSW GCCSA
- Households with one parent are somewhat more common in the Dubbo Region compared to NSW
- A greater portion of residents are homeowners with a mortgage in the greater Dubbo region compared to the rest of NSW
- The study area has a higher proportion of bachelor attainment compared to both the Dubbo region and rest of NSW (GCCSA), with a higher level of workforce participation and strong representation of professional employment
- Personal income in the study area is marginally higher than the average income compared to the wider Dubbo area and Rest of NSW (GCCSA)
- The study area overall has an average level of socioeconomic disadvantage when compared to other areas in NSW and Australia
- There are concentrations of socioeconomically disadvantaged people in the south and east of the site
- Crime records show on average 180 alcohol related assaults per year and about 520 non-alcohol related assaults per year.





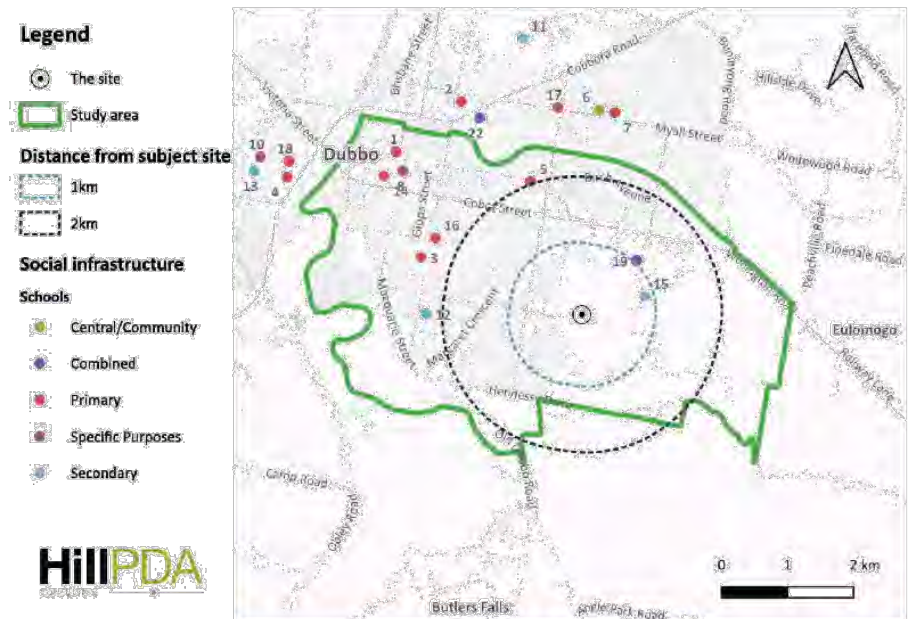
**5.3 Existing social infrastructure in the locality**

This section details the surrounding social infrastructure with particular note of those items within 1 km of the site. The hours of operation of these items are of primary concern for the assessment of social impact.

**5.3.1 Education**

There are several educational institutions within the study area, with the Dubbo Christian School and St Johns Primary and College schools located approximately 1 km from the site in the general north-easterly direction. Neither school appears to provide Out of School Hours care.

Figure 26: Schools



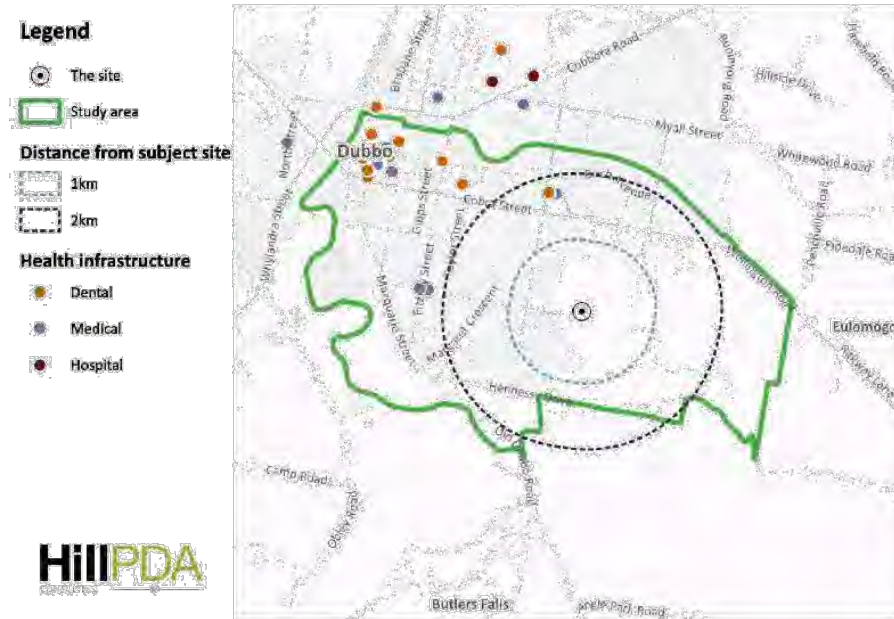
ID	School name	ID	School name
1	Dubbo Public School	12	Dubbo College South Campus
2	Dubbo North Public School	13	Dubbo College DeRoy Campus
3	Dubbo South Public School	14	St John's Primary School
4	Dubbo West Public School	15	St John's College
5	Orana Heights Public School	16	St Laurence's Primary School
6	Dubbo School of Distance Education	17	St Mary's Primary School
7	Buninyong Public School	18	St Pius X Primary School
8	Mian School	19	Dubbo Christian School
9	Lincoln School	20	Burrabadine Cornerstone Christian School
10	Yawarra Community School	21	Macquarie Anglican Grammar School
11	Dubbo College Senior Campus	22	Western College Alesco Learning Centre



**5.3.2 Health**

There are several health hubs in the area particularly at within the city centre, Dubbo has Dubbo Base Hospital and Dubbo Private Hospital. Dubbo Hospital is under development to provide expanded and upgraded clinical services to the people of Western NSW. In 2015, a new clinical services building that features maternity, operating theatres and day surgery services was completed. The following stages includes new 34-bed surgical unit, new clinical building which will include an emergency department, medical imaging, ambulatory care services and critical care floor and the Western Cancer Centre Dubbo.

Figure 27: Health service providers



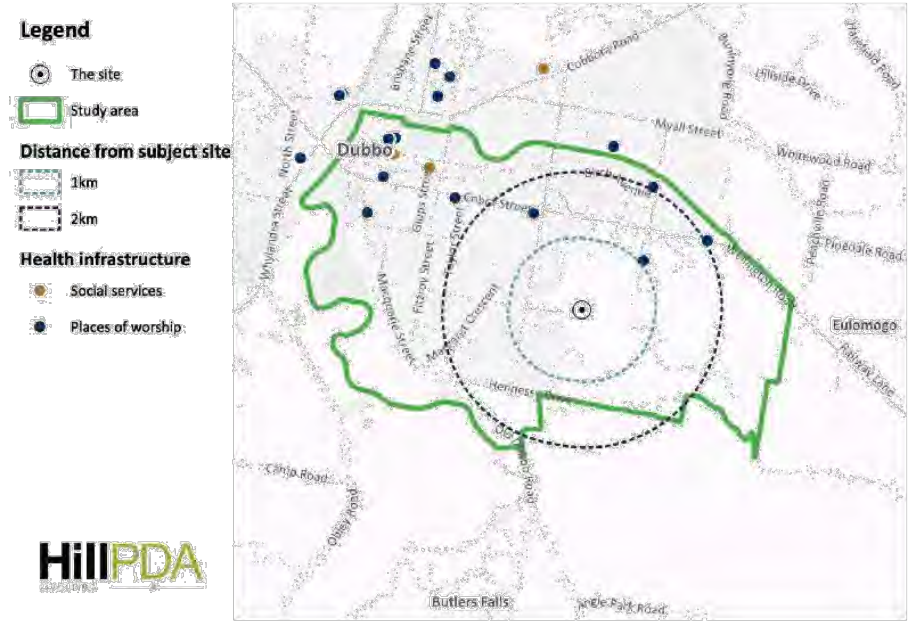
**5.3.3 Social services**

Social services and places of worship are located throughout the study area as illustrated below in Figure 28 but clusters within the city centre.

Within 2 km of the site are four places of worship, the closest places of worship are Generocity Church (2 premises), Dubbo Presbyterian Church and Dubbo Baptist Church. These would operate primarily on weekends during the day and some evenings during the week. It is unlikely to be a conflicting use during the proposed additional morning hour and will be closed during the early hours of the morning when the remaining extension is proposed.



Figure 28: Social Services and Places of Worship

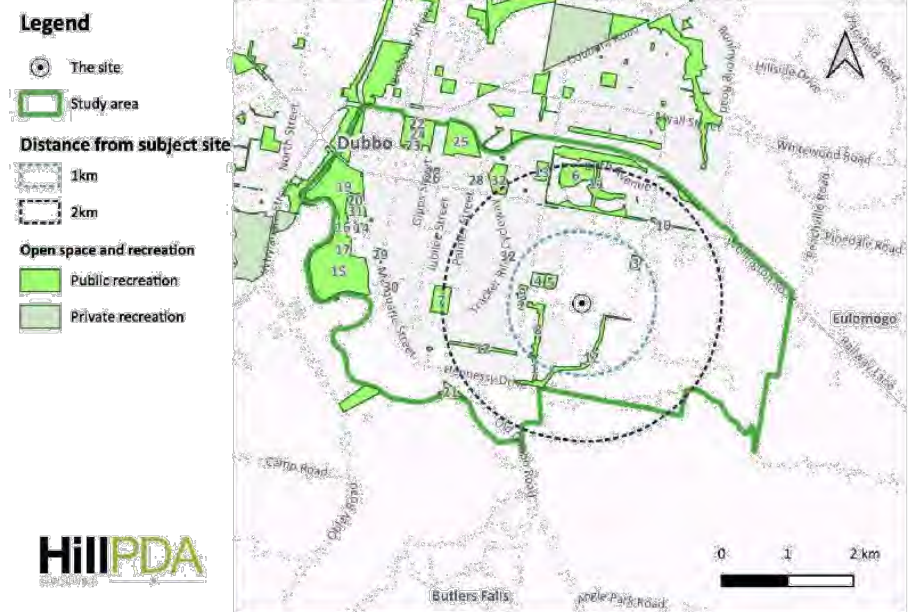


5.3.4 Open space and recreation

The existing open space and recreation facilities in the study area (Figure 29) include several linear parks to the north and south, a greyhound track to the west and three general recreation parks. The schools to the north east have several sports fields and Dubbo Sports field provides indoor sports facilities for the community.



Figure 29: Open Space and Recreation



ID		ID	
1	Southlakes Park	17	Sunderlands Park
2	Diets Park	18	Sandy Beach Park
3	Dubbo Sportsworld	19	Lady Cutler Ovals
4	Dawson Park (greyhound track)	20	Bastille Land
5	Egret Park	21	Caroline Reserve
6	Elizabeth Park	22	Dubbo Aquatic Centre
7	Mona Alice Berruex Park	23	Dubbo City Bowling Club
8	Southlakes Park	24	Victoria Park
9	Brian Dickens Park	25	Dubbo Showground
10	Corner park	26	Elston Park
11	Buckingham Drive Park	27	Paramount Tennis Club
12	Future linear park	28	Daphne Park
13	Jubilee Oval	29	Wahroonga Park
14	The Macquarie Club	30	Bennets Park
15	Regland Park	31	Pavans Park
16	Lady Cutler Park	32	Cormorant Crescent Park

Source: Openstreetmap, 2020 and DPIE, 2020



# POTENTIAL SOCIAL IMPACTS



## 6.0 POTENTIAL SOCIAL IMPACTS

The potential social impacts of this project are summarised in this section with potential mitigation measures suggested.

### 6.1 Access and connectivity

How patrons arrive to and from a licensed premise can have a significant impact on the amenity and safety of an area. The longer a patron must wait for transport generally increases the opportunity for antisocial behaviour and risk to themselves and the community.

The proposal would result in people arriving and departing from the venue throughout the day and evening, including patrons and staff as well as users of the recreational facilities. This will create demand for private vehicle parking, public transport, taxis or rideshare services. Vehicular parking could be accommodated on site.

Bus services are currently available along Wheelers Lane to the west of the site from early morning until early evening, however it is expected additional services will be added following the development of the residential areas to the north and south of the site. Public transport is not a viable option for patrons to travel home during the late night-time, however it is expected that the majority of patrons would depart the venue prior to approximately 9pm. Dubbo has several taxi services and was expected to launch rideshare services in May 2020 (the 2020 global health crisis may impact the timing of this launch) that would provide services outside of public transport operational hours.

Ensuring that the proposed development has adequate public transport and a high quality and frequent taxi service would improve safety and amenity of the area. Patrons should be encouraged to use an alternative transport from their private vehicles to reduce drink driving, this should be supported by a dedicated pick up/drop off area.

The existing Dubbo RSL runs a free courtesy bus on Thursday, Friday and Saturday evenings from 6:00pm for pick-ups with regular departures from 9:30 until 11:30. There is the potential for this service to be extended.

It is noted that the technical traffic and transport assessment prepared by ttm consulting concludes the proposed development includes appropriate servicing arrangements and traffic engineering.

#### Mitigation measures:

Mitigation measures can be considered at the Development application stage to ensure potentially including:

- A courtesy bus could operate throughout the evening, similar to the service for the existing Dubbo RSL.
- Liaise with taxi and rideshare operators to manage pick up-drop off areas
- Work with Council and bus service providers to ensure the proposed club is serviced by an extended bus route in the area.
- Security until closing to encourage safe passage of patrons from the premises.

### 6.2 Amenity

Licensed premises and commercial operations have the potential to result in additional environmental noise. Unwanted noise may result in reduced residential amenity for neighbouring residents.

Noise at late hours could emanate from activity on the club and sporting amenities deck area, or from patrons arriving/leaving the venue. The sports facilities have potential to create some negative noise impacts from large crowd gathering and amplified horns and music during games.



Adopting the recommendations of the acoustic report would manage the potential noise impacts generated from the proposal. Doing so would ensure compliance with the NSW Government's Office of Liquor, Gaming and Racing (OLGR) noise limits and help mitigate potential social impacts resulting from increased noise.

The Muller Acoustic Consulting acoustic assessment notes the following regarding operational noise:

*"During operation of a potential registered club, there is a moderate to high risk of noise impacts within the community. The risk of potential impacts would be greater during the evening and night period as a result of the more stringent period criteria. It is therefore considered that management and mitigation measures may be required to reduce the potential impacts on the community."*

The acoustic assessment concludes the proposal site is considered suitable for rezoning to allow for the development of a registered club.

The proposal could result in positive amenity benefits for the future community of Keswick with the addition of the football field, bowling greens and supporting amenities as private recreation facilities and the club building services providing entertainment for the community.

#### Benefit enhancements

- Potential for visual amenity improvements with the recreational facilities providing diversity in the streetscape of the residential area
- General amenity improvements for the community with greater access to recreation facilities and entertainment options.

#### Mitigation measures:

At the development application stage, mitigation measure can be established to minimise the potential for amenity impacts such as:

- A notice should be clearly displayed to remind patrons to arrive and leave in a quiet manner to avoid disturbing the neighbours
- Minimise noise at the outdoor and deck areas during night time hours (10pm – 2am)
- A contact phone number for the hotel manager should be made available to neighbours to facilitate communication and issues
- Complaints from the community should be noted in an incident diary with details of the complaint and the action taken to address the complaint
- Management should monitor incidents and review management practices if needed.

### 6.3 Community cohesion

The review of the surrounds (section 5.1.1) indicates that the proposed venue is isolated from other licenced venues and late-night venues. The proposal is likely to benefit the community both, adults and children, in the eastern Dubbo area who may use the new Dubbo RSL as an option for entertainment and recreation.

There is notable research that indicates that better social outcomes are achieved within socially connected and cohesive communities. As identified in section 5.0, the site is not currently within walking distance to any community facilities. Limited access to community facilities and high car dependency can result in inadequate opportunities for residents to 'cross paths' and interact and engage. It is likely that some other facilities will be provided in the existing residential zone, however, there is unlikely to be a cluster of licenced venues.

The proposed development is expected to be generally publicly accessible and would act as a place for social interaction. As such, it could increase the opportunities for residents of the surrounding residential community



and surrounds to interact, subsequently would be beneficial to community cohesion within the study area and provide social benefits.

At the DA stage it will be important for operational procedures to be detailed in a Plan of Management prepared by Club management. This should include procedures for emergency management, incident reporting and liaison with future neighbouring landowners. These procedures have been established to enable a line of communication with relevant stakeholders. This could positively affect the community by providing a voice for local area management.

#### Benefit enhancements

- Raise awareness of the proposed recreation facilities and services available
- Increase the range of sporting facilities available to the population in Dubbo
- Provision of an additional high quality cricket and rugby field, tennis courts and cricket nets
- Encourage future surrounding residents to walk to the proposed facilities on site, reducing private vehicle use and increasing opportunities for social interaction.

#### Mitigation measures

Mitigation measure can be put in place at the development application stage such as:

- A description of the behaviour, complaints and conflicts procedure should be detailed in a Plan of Management prepared by Club management
- A commitment by management to participate in the Dubbo Local Liquor Accord, as per the existing club, to be aware of local issues relating to licensed premises and to maintain arrangements with local police in monitoring patron behaviour.
- Encouragement of management establishing a good working relationship with the local Police so that any issues, should they arise, may be discussed and interventions implemented.

## 6.4 Community health and safety

### Public safety

Crime associated with alcohol consumption could be perceived as a risk to public safety in the local area. Alcohol related antisocial behaviour can negatively impact patrons, employees, property, neighbouring residents, police and emergency service workers, and hospitality workers in general.

As identified in the joint select committee report on Sydney's night-time economy, venues with later trading hours are associated with alcohol-related violence.<sup>2</sup> The clustering of venues together is another factor that can increase the risk of alcohol-related violence. Alcohol related violence can cause severe impacts to patrons and employees. The concept proposal would not result in a clustering of licensed premises.

Section 5.2.10 of this report indicates that the area surrounding the site does not have a high incidence of alcohol-related assault or non-domestic assault crimes. The proposed venue is not located near other licensed venues which indicates that a clustering effect of alcohol-related antisocial behaviour is less of a risk.

### Vulnerability to alcohol and gambling

Health surveys and clinical studies have demonstrated that some groups are more at risk of alcohol and gambling related harm than others. In order to reduce alcohol related health issues in disadvantaged and vulnerable communities, local Councils may consider:

- Limiting the accessibility of alcohol and gambling

<sup>2</sup> Parliament of New South Wales, Report on the Joint Select Committee on Sydney's Night Time Economy, 1/57 – September 2019



- Improving access to non-alcohol or gambling related services and facilities
- Provide support services targeted to specific at-risk groups

Social capital and community connectedness in an area can also reduce alcohol related harm.

Groups considered to be at risk of alcohol related harm are detailed in Table 8.

Table 8: Groups most at risk of alcohol related harm

Group	Considerations	Study area	NSW
Young people and young adults (15-24 years)	<ul style="list-style-type: none"> <li>• There is an increased tendency to consume alcohol at levels of high-risk</li> <li>• Demonstrated issues include risk-taking, lower alcohol tolerance, increased risk of cognitive impairment and alcohol dependence in later life<sup>3</sup></li> <li>• Increased hospitalisation and admission rates at emergency departments over the past decade<sup>4</sup></li> <li>• Brain development is not complete until around 25 years of age, and excessive consumption before this point is a developmental risk<sup>5</sup></li> </ul>	12%	13%
Older adults (75+ years)	<ul style="list-style-type: none"> <li>• Older adults are the most likely to drink daily, despite having a lower tolerance to alcohol consumption, and the presence of co-morbidity factors or risky interactions with medicines<sup>6</sup></li> </ul>	9%	7%
Aboriginal and Torres Strait Islanders	<ul style="list-style-type: none"> <li>• Seventeen per cent of Aboriginal and Torres Strait Islanders were drinking at long term risk levels<sup>7</sup></li> </ul>	12%	3%
Gender	<ul style="list-style-type: none"> <li>• Males are more likely to drink at long-term and short-term risky levels than women</li> <li>• Women are more likely to experience some negative health and wellbeing impacts associated with alcohol consumption – including road related trauma, sexual abuse, interpersonal issues and family violence<sup>8</sup></li> </ul>	Males 47% Females 53%	Males 49% Females 51%
Disadvantaged communities	<ul style="list-style-type: none"> <li>• There is a complex evidence base in the relationship between socio-economic disadvantage and alcohol related harm. There is a correlation between the high levels of disadvantage and an increased likelihood of suffer from alcohol related health concerns.</li> </ul>	Overall the study area is more disadvantaged than average, with similar levels of disadvantage in surrounding areas and more advantaged on the outer areas of town.	

The Aboriginal and Torres Strait Islander population presents as an at-risk group with an above average representation in the study area. It is noted that Drug and Alcohol Services are available in Dubbo centre and the

<sup>3</sup> Australian Government Preventative Health Taskforce (2009)

<sup>4</sup> Australian Government Preventative Health Taskforce (2009)

<sup>5</sup> Australian Government Preventative Health Taskforce (2009)

<sup>6</sup> Australian Institute of Health and Welfare (2011) 2010 National Drug Strategy Household Survey report

<sup>7</sup> Australian Bureau of Statistics (2010) The Health and Welfare of Australian's Aboriginal and Torres Strait Islander Peoples

<sup>8</sup> National Institute on Alcohol Abuse and Alcoholism (1999)



Bila Muuji Aboriginal Corporation Health Service provides targeted support to this community offering education and services to promote healthy behaviour. Regular contact with this and other drug and alcohol service organisations could assist in monitoring the impact of the proposal to this group.

#### Benefit enhancements

- Additional sports facilities for the community encouraging healthy active lifestyles
- Increase in passive surveillance in the future residential neighbourhood

#### Mitigation measures:

- Implementing CPTED Principles in the development of proposed scheme and DA drawings
- Ensuring commitments at the DA stage to:
  - Ensuring secure access and dispersal, adequate crowd control
  - Ongoing staff training in responsible service of alcohol (mandatory in NSW)
  - Signage, including directions to transport and requests that patrons respect the residential amenity of the area
  - Regular checking that CCTV are in working order.
- A commitment at the development application stage to ensuring access to sufficient taxis and courtesy bus services at the development application stage

## 6.5 Local economy and employment

#### Employment generated

It is expected that the site will generate significant employment for the community during construction, providing employment for workers and economic benefits from materials and transport of goods. During operation the proposed facility would provide employment for staff required to run and service the restaurants and bars as well as maintain and run the sports facilities. There will also be ancillary employment benefits from the food and entertainment provided at the venue for general operation and special events.

Employment generated by the proposal could positively affect the local economy by encouraging economic activity. Staff will have income to spend in the general area.

#### Benefit enhancements

Potential for additional local employment through construction and operation phases

#### Mitigation measures:

No mitigation required

## 6.6 Provision of social infrastructure and recreation facilities

The proposal includes the following recreation facilities:

- Kids play and family area
- Bowling greens
- Football field and supporting amenities, maintenance shed and seating gallery

At current the proposal includes unique facilities that are not currently available within 2km of the site. The Club would provide facilities for the new and existing community to enjoy sports, recreation and entertainment locally. The additional facilities would have a positive impact on the community.



**Benefit enhancements**

Potential access to additional facilities for the local community encouraging healthy active lifestyles

**Mitigation measures:**

No mitigation required



# IMPACT ASSESSMENT FRAMEWORK



## 7.0 IMPACT ASSESSMENT FRAMEWORK

The impact assessment presented in this report identifies and evaluates changes to existing social conditions due to the project. This includes the assessment of direct and indirect benefits and effects/impacts, as well as consideration of any cumulative impacts.

The assessment process that was undertaken to determine the overall significance of impacts is described in section 2. The following sections outline the criteria that underpin each of the assessment components that contribute to the assessment framework. Professional judgement and experience is applied on a case-by-case basis to identify the significance of impact on the social environment.

As noted in section 2.3.3 the social risk matrix is the primary tool for assessing the social impact of a development. Each impact has been analysed based on the nature of the impact and its predicted severity. A mitigation strategy is proposed if necessary and finally both impacts are assigned a Social Risk Rating (SRR).

**7.1 Significance of impacts**

Table 6 provides the assessment of the social risk of each impacts expected to result from the proposal. This section includes an assessment of the likelihood and consequences of each impact which are input into the social risk matrix (section 2.3.3) to provide a significance rating. Mitigation measures have been provided for negative impacts.

**Table 6: Significance of social impacts**

Impact theme	Impact detail	Stakeholders impacted	Suggested mitigation during DA phase	Post mitigation		
				Likelihood	Consequence	Level of significance
Access and connectivity	Higher demand for private vehicle parking, public transport, taxi or ride share services	<ul style="list-style-type: none"> <li>Other users of the car park</li> <li>Public transport, Taxi and ride share operators</li> </ul>	<ul style="list-style-type: none"> <li>It is suggested that a courtesy bus operate throughout the evening, similar to the service for the existing Dubbo RSL.</li> <li>Promote public transport use to staff and customers.</li> <li>Work with Council and bus service providers to ensure an extended bus route in the area</li> </ul>	Possible	Minor	Moderate
	Increased traffic on surrounding streets caused by taxi and ride share services	<ul style="list-style-type: none"> <li>Neighbouring residents</li> <li>Road users</li> </ul>	<ul style="list-style-type: none"> <li>Liaise with taxi and rideshare operators to manage pick up-drop off areas</li> <li>Security until closing to encourage safe passage of patrons from the premises.</li> </ul>	Possible	Insignificant	Low
Amenity	Possible noise at late hours from egress of patrons	Neighbouring residents	<ul style="list-style-type: none"> <li>A notice should be clearly displayed to remind patrons to arrive and leave in a quiet manner to avoid disturbing the neighbours.</li> <li>Minimise noise at the outdoor restaurant dining area during night time hours (10pm – 2am) [note: the outdoor dining will close a midnight Monday -Saturday and 10pm Sunday]</li> <li>A contact phone number for the hotel manager should be made available to neighbours to facilitate communication and issues</li> <li>Complaints from the community should be noted in an incident diary with details of the complaint and the action taken to address the complaint.</li> <li>Management should monitor incidents and review management practices if needed.</li> </ul>	Unlikely	Moderate	Moderate



	Potential for visual amenity improvements with the recreational facilities providing diversity in the streetscape of the residential area	Local community	No mitigation required	Possible	Moderate	Positive high
	Additional local sports, recreation, and entertainment options	Local community	No mitigation required	Possible	Moderate	Positive high
Community cohesion	Additional sporting facilities available to the pop	Local community	No mitigation required	Possible	Moderate	Positive high
	Possible anti-social behaviour (i.e. property damage, public intoxication)	<ul style="list-style-type: none"> <li>- Patrons</li> <li>- Neighbouring residents and businesses</li> <li>- Nearby public open spaces</li> </ul>	<ul style="list-style-type: none"> <li>- A description of the behaviour, complaints and conflicts procedure should be detailed in a Plan of Management prepared by Club management</li> <li>- A commitment by management to participate in the Dubbo Local Liquor Accord and be aware of local issues relating to licensed premises</li> <li>- Encouragement of management establishing a good working relationship with the local Police so that any issues, should they arise, may be discussed and interventions implemented.</li> </ul>	Unlikely	Moderate	Moderate
Community health and safety	Possible alcohol related crime	<ul style="list-style-type: none"> <li>■ Patrons and employees</li> <li>■ Neighbouring businesses</li> <li>■ Neighbouring residents                             <ul style="list-style-type: none"> <li>■ Property</li> </ul> </li> <li>■ Emergency response workers</li> </ul>	<ul style="list-style-type: none"> <li>■ Implementing CPTED Principles in the development of proposed scheme and DA drawings</li> <li>■ Ensuring commitments at the DA stage to:                             <ul style="list-style-type: none"> <li>- Ensuring secure access and dispersal, adequate crowd control</li> <li>- Ongoing staff training in responsible service of alcohol (mandatory in NSW)</li> <li>- Signage, including directions to transport and requests that patrons respect the residential amenity of the area</li> <li>- Regular checking that CCTV are in working order.</li> </ul> </li> </ul>	Unlikely	Moderate	Moderate



			<ul style="list-style-type: none"> <li>A commitment at the development application stage to ensuring access to sufficient taxis and courtesy bus services at the development application stage</li> </ul>			
	Vulnerability to alcohol and gambling	<ul style="list-style-type: none"> <li>At risk groups (younger and older adults, Aboriginal and Torres Strait Islanders, males, disadvantaged communities)</li> <li>Patrons and employees</li> <li>Neighbouring business patrons and employees</li> <li>Neighbouring residents</li> <li>General community</li> </ul>	<ul style="list-style-type: none"> <li>Raise awareness of the health impacts associated with increased alcohol consumption</li> <li>Raise awareness of alternative, non-alcohol or gambling related recreational facilities in close proximity</li> <li>Management to participate the Dubbo Liquor Accord to ensure an awareness of local issues</li> </ul>	Possible	Moderate	High
Local economy and employment	Employment generation for the local community	Local community	No mitigation required	Likely	Moderate	Positive high
Provision of social infrastructure	Additional sports, recreation and entertainment facilities	Local community	No mitigation required			

# MITIGATION MEASURES



## 8.0 MITIGATION MEASURES

The following list summarises the mitigation measures suggested as a result of the social impact assessment detailed throughout this report.

- It is suggested that a courtesy bus operate throughout the evening, similar to the service for the existing Dubbo RSL.
- Work with Council and bus service providers to ensure the proposed club is serviced by an extended bus route in the area.
- Promote public transport use to staff and customers.
- Liaise with taxi and rideshare operators to manage pick up-drop off areas
- Security until closing to encourage safe passage of patrons from the premises.
- Ensure Construction Management Plan includes sufficient construction impact mitigation measures including dust screening and reasonable construction hours to reduce impact to neighbouring residents and businesses.
- A notice should be clearly displayed to remind patrons to arrive and leave in a quiet manner to avoid disturbing the neighbours
- Minimise noise at the outdoor restaurant dining area during night time hours (10pm – 2am) [note: the outdoor dining will close a midnight Monday -Saturday and 10pm Sunday]
- A contact phone number for the hotel manager should be made available to neighbours to facilitate communication and issues
- Complaints from the community should be noted in an incident diary with details of the complaint and the action taken to address the complaint.
- Management should monitor incidents and review management practices if needed.
- Raise awareness of the proposed public facilities and services available
- Encourage future surrounding residents to walk to the proposed facilities on site, reducing private vehicle use and increasing opportunities for social interaction.
- A description of the behaviour, complaints and conflicts procedure should be detailed in a Plan of Management prepared by Club management
- A commitment by management to participate in the Dubbo Local Liquor Accord, as per the existing club, to be aware of local issues relating to licensed premises and to maintain arrangements with local police in monitoring patron behaviour.
- 
- Management should establish a good working relationship with the local Police so that any issues, should they arise, may be discussed and interventions implemented.
- Implementing CPTED Principles
- Ensuring secure access and dispersal, adequate crowd control
- Ongoing staff training in responsible service of alcohol (mandatory in NSW)
- Access to sufficient public transport and taxis services would also mitigate any potential negative impacts associated with late night dispersal
- Signage, including directions to transport and requests that patrons respect the residential amenity of the area
- Regular checking that CCTV are in working order.
- Raise awareness of the health impacts associated with increased alcohol consumption
- Raise awareness of alternative, non-alcohol or gambling related recreational facilities in close proximity
- Management to participate the Dubbo Liquor Accord to ensure an awareness of local issues.



# CONCLUSION



## 9.0 CONCLUSION

The site is currently zoned R2 Low Density Residential under the provisions of the Dubbo LEP. Registered clubs are prohibited in the R2 zone under the Dubbo LEP. As such it is proposed to rezone the site to include the additional permitted uses of a registered club and recreation facilities to facilitate the development of a secondary Dubbo RSL Club and associated recreation facilities at the Volta Avenue site in Dubbo (Lot 502, DP1255115). The proposal is intended to facilitate the construction and operation of a new Dubbo RSL Club including:

- Club building including food prep/bars, lounges, gaming, sports, terraces, function rooms, reception and back-of-house facilities
- Kids play and family area
- 2 x tennis courts
- On-grade parking for 197, undercroft parking for 22
- Cricket and rugby league field
- 3 x Cricket nets
- supporting amenities and landscaping to support spectators.

The demographic characteristics of the study area show generally average levels of socioeconomic disadvantage and advantage with small pockets of disadvantage in nearby areas. The study area has generally average representation of most at risk groups, however there is a substantial over representation of Aboriginal and Torres Strait Islander people (13% per cent of the community compared to 5.7% per cent for the rest of NSW(GCCSA)). The immediate area has a low rate of alcohol related crime and there is only one other licensed premises within 1 km of the site. However, the area has a low density of licenses when compared to the LGA.

A tailored Plan of Management can be prepared at the DA stage to minimise the risk of antisocial behaviour at the site and ensure that ongoing operations at the site appropriately managed and monitored.

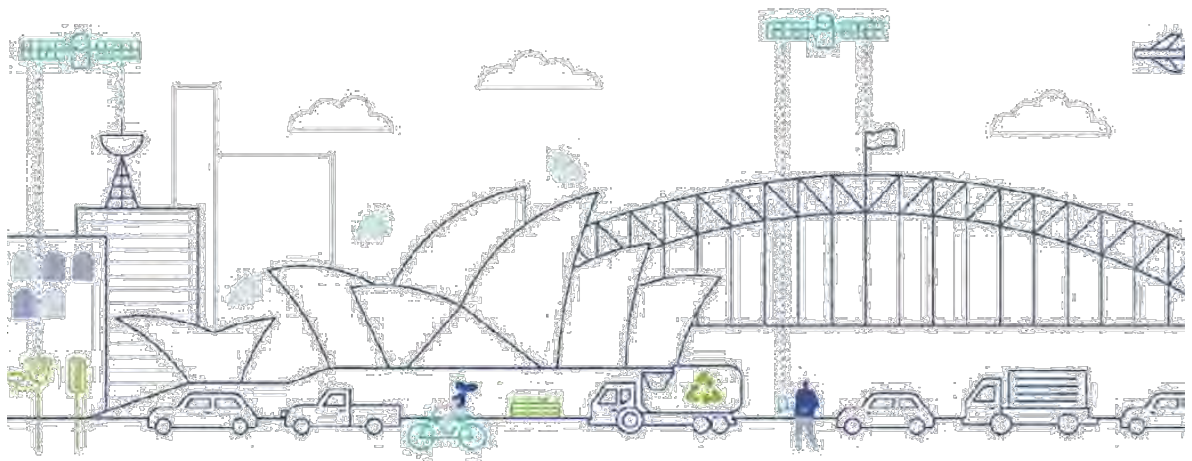
Overall, the negative impacts of the proposed development can be successfully managed with the implementation of the above mitigation measures. The community will benefit from the addition of local sports, recreation and entertainment facilities.





# Traffic Assessment – Planning Proposal

Proposed Dubbo RSL Club  
at Corner Boundary Road and Henty Drive  
on behalf of Dubbo RSL Club





Revision Record

No.	Author	Reviewed/Approved	Description	Date
1.	Baqir Husain/Richard Watson	Richard Watson	For submission	06/08/2020
2.	Baqir Husain/Richard Watson	Richard Watson	Interim access description	29/09/2020
3.				
4.				

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# 1 Introduction

## 1.1 Background

TTM Consulting was engaged by The Planning Hub to prepare a traffic assessment investigating the rezoning of the low-density residential land for future development of a new registered club facility and its associated recreational facilities. The development will be operated by Dubbo RSL Club and will be located at the future extension of Boundary Road and Henty Drive in South-East Dubbo. It is understood that a Planning Proposal for rezoning will be lodged with Dubbo Regional Council.

## 1.2 Scope

This report investigates the traffic aspects associated with the proposed development. The scope investigated includes:

- Review relevant background documentation and information, including relevant LEP, DCP, SEPP and planning documents for the local area
- Preliminary design advice of the development concept plans, with respect to the Dubbo Regional Council Traffic, Access, Parking and Servicing requirements
- Estimation of the future parking requirements (car, motorcycle, bicycle, loading etc.) for the site based on Council's LEP/DCP/SEPP and/or RMS requirements
- Estimation of the traffic generation of the proposed development and identification of potential traffic impacts on the local road network
- Preliminary advice on pedestrian, bicycle and public transport provisions

The development concept plan has been assessed against the following:

- Dubbo Local Environmental Plan 2011;
- Australian Standards (AS 2890); and
- RTA (RMS) Guide to Traffic Generating Developments.

## 1.3 Site Location

The proposed Dubbo RSL Club site currently forms part of a larger site that will be subdivided to accommodate the proposal. The development site is legally described as part Lot 502, DP 1255115. The subject size is approximately 3.3 ha and will be located on the future extension of Boundary Road and Henty Drive.





The site is in an area identified for future residential development forming part of the existing residential estate to the west known as Keswick Estate and the wider South-East Dubbo Urban Release Residential Area.

The site context and site map view location are shown in Figure 1.1 and Figure 1.2. The development concept plan along with the geometry of the adjacent roads are shown in Appendix A.



Figure 1.1: Site Location Context



Figure 1.2: Site Location Map View



## 1.4 Development Profile

### 1.4.1 Scale

The Club building will indicatively be in the order of 2000m<sup>2</sup> in gross area, with up to 950m<sup>2</sup> of this being licensed and dining area. Additionally, an outdoor terraced area of approximately 400 - 500m<sup>2</sup>, is proposed, and this area includes some terraced seating, children's play area and a recreational deck.

TTM are informed, that at this stage, it is anticipated that a maximum patronage at the club at any one time will be in the order of 450 people.

### 1.4.2 Probable Components

A detailed floor plan of the proposed club building has not been prepared. For a neighbourhood club of this size it is expected that a diverse range of facilities will be provided to include:

- indoor and outdoor gaming lounges
- large reception and foyer area
- sports lounge
- family lounges
- dining facilities and coffee shop
- entertainment and function lounge
- kids play areas
- extensive back-of-house storage and service area
- change room facilities for sporting activities.
- a sports field for local cricket and rugby league teams to both train during the week and play on weekends.

A development concept plan is included in Appendix A.

### 1.4.3 Access, Parking and Servicing

A single all movements vehicular access driveway is proposed on Henty Drive, approximately 130m north of the intersection with the Boundary Road extension. The median divided driveway will cater for all anticipated vehicles, including visitor / staff cars, and service vehicles up to and including HRVs.

A total of 197 at-grade car parking spaces (inclusive of PWD parking) are indicatively shown on the development concept plan.

A dedicated service vehicle loading and manoeuvring area, suitable for vehicles up to and including HRVs, is provided in the south-west corner of the site.



## 2 Existing Transport Network

### 2.1 Road Network Details

The proposed development is in South-East part of Dubbo where the road network is still under construction. The site will be located on the southern edge of the future Keswick Estate. Keswick State is bounded by Mitchell Highway to the north, Sheraton Road to the East and the extension of Boundary Road to the South. Mitchell Highway is the only State Road in the vicinity.

Construction has started on Dubbo Regional Council's Boundary Road extension project. The 1.2km two-lane sealed and fully kerbed extension will connect Boundary Road from Alexandrina Avenue through to Sheraton Road. There is no design for the road (Henty Drive) at this stage which will be another future extension off Boundary Road. Boundary Road and Henty Drive are proposed to form a roundabout intersection. All roads surrounding the project site will be maintained by Dubbo Regional Council.

### 2.2 Public Transport

Due to absence of existing road network near the development site area there are currently limited public transport options. Most of the bus services run along Mitchell Highway with one bus service (Route 570) travelling along Wheelers Lane. The current Dubbo bus network map is presented in Figure 2.1.

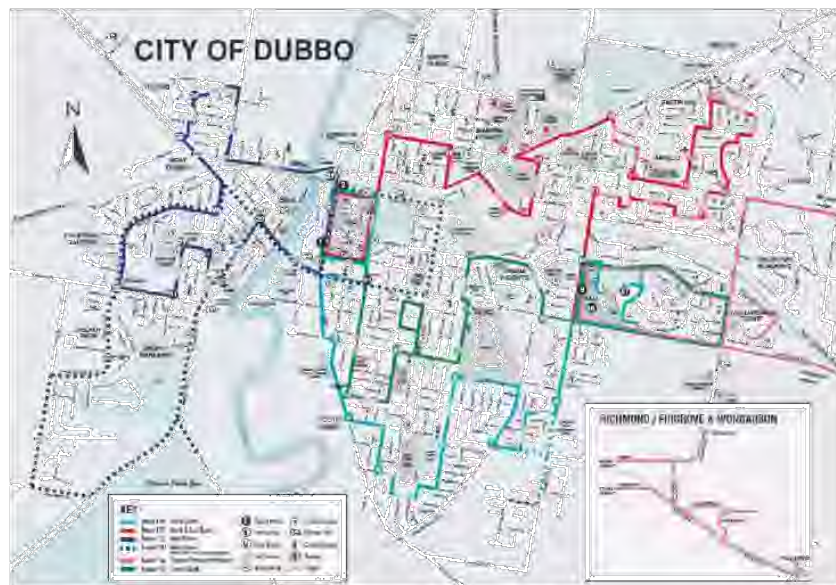


Figure 2.1: Existing Dubbo Bus Network



The Dubbo City Planning and Transportation Strategy 2036 proposes future public transport bus routes to be within 500m of developments in existing and new areas of Dubbo. The concept involves radiating bus service loops from the city centre as shown in Figure 2.2. This proposed concept may result in new bus services passing along Boundary Road and Henty Drive in future.

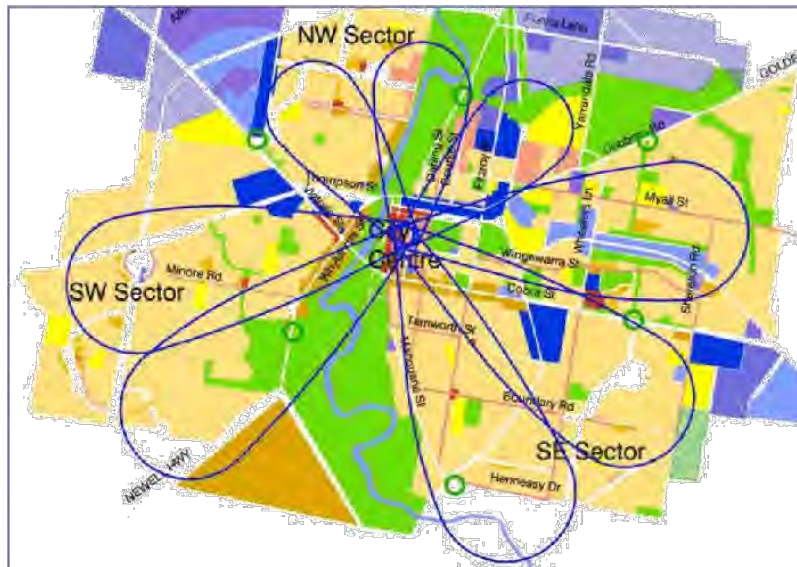


Figure 2.2: Concept for Future Bus Route

## 2.3 Pedestrian and Bicycle Facilities

Due to absence of existing road network near the development site area pedestrian footpath and bicycle path details are not available surrounding the project site.

The undergoing Boundary Road extension south of the project site will provide integrated bike lanes and pedestrian footpath on the southern side.

The Dubbo City Planning and Transportation Strategy 2036 incorporates design of a shared bike-walking system to provide safe, convenient crossings of all streets and highways and linking to all living area of Dubbo city.





## 3 Parking Supply

### 3.1 Council Car Parking Requirement

The relevant car parking supply requirements for the indicative proposed development, as outlined in the Dubbo Development Control Plan are presented in Table 3-1.

Table 3-1: Parking spaces requirement Council DCP

Land Use	Car Parking Rate	Extent	Required Car Parking Spaces
Registered Club	1 space per 5m <sup>2</sup> licensed / dining floor area	950m <sup>2</sup> #1	190
Recreation facilities (major) ie the sports oval	1 space per 10 seats	120 seats	12
TOTAL			202

#1: the project architect has estimated that up to 950m<sup>2</sup> of the total floor area could be allocated as licensed / dining floor area.

For a car park with greater than 100 spaces, the Dubbo DCP requires PWD parking for 'community uses' to be provided as follows:

*(2 PWDs for the first 40 total spaces) + (2 PWDs for the next 60 total spaces) + (1 PWD for each additional 100 total spaces, or part thereof).*

For a total of 202 parking spaces, this equates to 6 PWD spaces, and for a reduced total of 197 spaces, it equates to 5 PWD spaces.

### 3.2 Practical Car Parking Demand

#### 3.2.1 Registered Club

An estimate of the maximum practical parking demand has been made based on the following assumptions:

- maximum patronage of 450
- 15% of patrons/staff will arrive by other than private car, including taxi/Uber/private car drop-off, public bus, courtesy bus and walk / cycle.
- 85% of patrons/staff arrive by private car (parked on site)
- Average car occupancy is 2 persons per car

The preliminary estimate for maximum parking demand is  $450 \times 85\% \div 2 = 191$ , which is consistent with the Council requirement calculated in the previous section.



### 3.2.2 Recreation Facility (Major)

Application of the same transport assumptions, as applied to the club in the previous section, results in a parking demand of 51 spaces for the 120 terraced seats associated with the sports oval.

### 3.2.3 Temporal Distribution of Club Parking Demand

The peak parking demands for the sports oval are expected to be on game-day, which is likely to be in the morning / afternoon (but not the evening) on either Saturday or Sunday. Parking demands for sports training, at other times of the week, generally weekday evenings, is expected to be significantly lower.

To understand the likely corresponding parking demands of the RSL club at the time of peak demand for the sports oval, TTM used Google Maps to examine the temporal distribution of activity at three comparable clubs in the region. The results are indicated in Table 3-2.

This information suggests that there is generally quite low activity throughout Sunday, with Saturday activity until about 5pm, being at least 25% lower than the peak (evening) demand.

Table 3-2: Temporal Activity At Comparable Regional Clubs

	Saturday	Sunday
<b>Dubbo RSL Memorial Club</b>		
<b>Bathurst RSL Club</b>		
<b>Orange Ex-Services Club</b>		

Site: Proposed Dubbo RSL Club – Traffic Assessment Planning Proposal  
 Reference: 20S\T0001



### 3.2.4 Estimated Total Peak Parking Demand

The peak parking demand of the two primary uses on the site, is expected on Saturday afternoon, with the club generating a demand for 143 spaces (75% of its peak demand), and the sports oval generating a demand for 51 spaces. The total estimated demand is therefore 194 spaces.

### 3.3 Proposed Car Parking Supply

The development concept plan indicates a total of 197 car parking spaces, which is largely consistent with the Council parking requirement (202 spaces), and the estimated maximum practical parking demand (194 spaces).

The plans indicate 6 x PWD parking spaces, which complies with the requirements of the DCP.



## 4 Development Traffic Generation and Impact

During the development peak hour (expected to be on a Saturday afternoon, as discussed in Section 3.2.3), and assuming 75% of the peak patronage arrives in one hour, the estimated development peak hour traffic generation is in the order of 200vph.

The estimated traffic generation during the weekday AM peak hour is expected to be negligible, whilst the estimated traffic generation during the weekday PM peak hour is expected to be in the order of 100vph.

Given the local road network is currently non-existent, a detailed impact assessment has not been conducted. Traffic impacts would, however, normally be conducted for the weekday traffic peak hours, rather than for weekend periods. Given the estimates of development generated traffic during these times are relatively low, and that the access driveway has been located as far from the adjacent intersection as possible, it is considered likely that the future road network will easily accommodate the development generated traffic.





## 5 Access and Car Parking Layout

It is understood that Council has stated that access to the site will not be permitted from Boundary Road due to anticipated traffic volumes and road gradient considerations.

Vehicular access to the site is therefore proposed via a single driveway crossover on Henty Drive, in the north-east corner of the site. The preliminary design indicates an all-movements, unsignalized access with dedicated left and right turn lanes into the site from Henty Drive.

Given that the timing for the construction of Henty Drive is uncertain, and in order to facilitate access to the site, Council has advised that it will construct and maintain an interim arrangement on Henty Drive until such time as full construction takes place. TTM are advised that this interim arrangement will consist of a two lane bitumen sealed access from the roundabout along the entire eastern frontage of the site.

In order to minimise the potential for traffic impacts on the Henty Drive/Boundary Road roundabout, particularly during peak hours, the proposed access driveway is located at the northern corner of the site, approximately 120m from the roundabout. Given the spatial requirements for the sports field, there is no opportunity to locate it further south / closer to the roundabout.

Car parking is located on the northern and western sides of the site, in close proximity to the club building.



Table 5-1 identifies the characteristics of the proposed parking area and driveways with respect to the Council/AS 2890 requirements. The last column identifies the compliance of each design aspect.



Table 5-1: Access and Parking Layout Design Requirements And Provision

Design Aspect	Council DCP / AS 2890 Requirements	Proposed Provision	Compliance
Access Driveway Width	11m total, comprising a 6m entry + 1m median + 4m exit (AS2890.1)	11m total (6m entry+ 1m median + 4m exit)	Compliant
Crossover Grade	First 6m from the property boundary shall be a maximum of 1:20 (5%) (AS2890.1)	First 6m from the property boundary has a grade no greater than 1:20 (5%)	Compliant
Maximum roadway grade – Private Vehicle – Service Vehicle	1 in 6 (16.7%) max (AS2890.1) 1 in 6.5 (15.4%) max (AS2890.2)	Essentially flat	Compliant
Parking space length (min)	5.4m (AS2890.1)	5.5m	Compliant
Standard space width (min)	2.5m (AS2890.1)	2.5m	Compliant
PWD space width (min)	2.4m + 2.4m shared zone (AS2890.6)	2.5m + 2.5m shared zone	Compliant
Parking aisle width (min)	5.8m (AS2890.1) 6.0m (if serving 0-50 spaces, DCP) 6.5m (if serving 50+ spaces, DCP)	Generally 7.0m, and 6.4m connection to the 24 parking spaces under the tennis courts	Compliant
Circulation roadway width (min)	5.5m (AS2890.1) & 6.5m (AS2890.2)	8.0m	Compliant
Porte cochere height clearance	2.5m for PWD use (AS2890.6). Also suitable for B99 cars and vans (je Hiace minivan)	Unknown but easily achieved	
Blind aisle treatment	1m extension beyond the last parking space (AS2890.1)	1m extension (minimum)	Compliant

The geometry and layout of the car park complies with the requirements of the Dubbo DCP and Australian Standard AS2890.



## 6 Other Transport Facilities

### 6.1 Taxi / Uber / Private Dropoff

A dedicated porte cochere is proposed adjacent to the main pedestrian entry on the northern side of the club building. This facility is for use by taxi, Uber and private vehicles when dropping off and picking up patrons. If a courtesy bus is provided, it could also use this facility dependant on appropriate design.

Up to three cars can load / unload simultaneously in this facility, with the canopy large enough to allow two to do so under cover from inclement weather.

Assuming a generous 5 minute headway (between groups of 3 cars), this facility could accommodate up to 36 cars per hour, transporting, say 54 patrons.

### 6.2 Courtesy Bus

Typically, clubs such as the proposed development, offer a courtesy bus service for use by local club members. The vehicles generally used for this type of service range in size / capacity from a Toyota Hiace (11 passengers) to a Toyota Coaster (22 passengers).

The preliminary design and scale of the porte cochere would limit the size of a courtesy bus to Hiace size.

Assuming 4 services per hour (in the evening club peak), a single Hiace sized courtesy bus could transport up to 44 patrons per hour to the site.

### 6.3 Public Bus

Whilst no specifics are available, given the planned future increase in residential density in in the south east of the city, the proposed expansion of the bus network to serve the new communities, and the growth of the local road network (including the extension of Boundary Road), it is considered likely that one or more bus stops will be constructed on either Boundary Road or Henty Drive. Should this be the case, the local bus service could provide substantial capacity to move patrons to and from the proposed development.

Whilst bus stops on either road would be beneficial for the development, a stop on Boundary Road would be particularly convenient given the proximity of the club building to this frontage. The development concept plan indicates dedicated and convenient pedestrian access from the Boundary Road frontage to the club building.



#### 6.4 Cycle Access and Parking

The planning for Boundary Road and Henty Drive indicates the inclusion of bicycle lanes. As noted in the previous section, the development concept plan indicates dedicated and convenient pedestrian access from the Boundary Road frontage to the club building, and this could also be used as the primary cycle access into the site.

Whilst the Dubbo DCP does not specify any bicycle parking requirement for this type of development, it is not considered unreasonable to provide a nominal amount, say 10-20 spaces, for use by staff and patrons.



## 7 Service Vehicle Arrangements

The proposed development is expected to be serviced by vehicles up to and including medium / heavy rigid vehicles (MRVs and HRVs) for deliveries, with refuse collection being undertaken by similar sized vehicles.

Service vehicles will access the site via the Henty Drive access driveway, and traverse the site internally along the northern and western boundaries to reach the dedicated service area in the south west corner of the site. The service area comprises a dedicated loading bay of sufficient size to accommodate vehicles up to HRV size, plus a hardstand area to facilitate 3-point turns by these vehicles.

Servicing is generally likely to occur outside peak business hours (ie prior to lunch on weekdays), and as such interaction between heavy service vehicles and patrons cars will be minimised. Furthermore, whilst the single large loading bay at the rear of the site is considered sufficient to cater for the demands of the development, the fact that there will be minimal activity in the car park prior to lunch would permit small delivery / courier type vans to use the carpark for servicing purposes at these times, should this be more convenient.

The vehicles will be loaded/unloaded in the loading area shown on the development concept plan included in Appendix A.



## 8 Summary

### 8.1 Development Access

Vehicular access to the site is provided via a single 11m wide divided driveway crossover on Henty Drive, in the north-east corner of the site. The preliminary design indicates an all-movements, unsignalized access with dedicated left and right turn lanes into the site from Henty Drive.

The proposed access location is cognisant not only of Council restrictions, but also of the practical spatial requirements of the sports field and of the desire to minimise traffic impacts on the roundabout.

Given that the timing for the construction of Henty Drive is uncertain, and in order to facilitate access to the site, Council has advised that it will construct and maintain an interim arrangement on Henty Drive until such time as full construction takes place. TTM are advised that this interim arrangement will consist of a two lane bitumen sealed access from the roundabout along the entire eastern frontage of the site.

### 8.2 Parking Arrangements

The total proposed parking supply is 197 spaces including 6 x PWD spaces. This satisfies the estimated maximum practical demand for the development (194 spaces), and essentially satisfies the Council requirement as outlined in the Dubbo DCP, being just 5 spaces (or 2.5%) less than the calculated requirement.

The dimensions layout and geometry of the car park design are consistent with the requirements of AS2890, and the Dubbo DCP.

Whilst the Dubbo DCP does not specify any bicycle parking requirement for this type of development, it is not considered unreasonable to provide a nominal amount, say 10-20 spaces, for use by staff and patrons.

### 8.3 Impact on Surrounding Road Network

During the development peak hour (expected to be on a Saturday afternoon) the estimated development peak hour traffic generation is in the order of 200vph. The estimated traffic generation during the weekday AM peak hour is expected to be negligible, whilst the estimated traffic generation during the weekday PM peak hour is expected to be in the order of 100vph.

Given the local road network is currently non-existent, a detailed impact assessment has not been conducted, however traffic impacts would, however, normally be conducted for the weekday traffic peak hours, rather than for weekend periods. Given the estimates of development generated traffic during these times are relatively low, and that the access driveway has been located as far from the adjacent intersection



as possible, it is considered likely that the future road network will easily accommodate the development generated traffic.

#### 8.4 Service Vehicle Arrangements

The proposed development is expected to be serviced by vehicles up to and including medium / heavy rigid vehicles (MRVs and HRVs) for deliveries, with refuse collection being undertaken by similar sized vehicles.

The single large dedicated loading bay is of sufficient size to accommodate vehicles up to HRV size, plus a hardstand area to facilitate 3-point turns by these vehicles, with the access route through the site being via 7m wide aisles.

Servicing is generally likely to occur outside peak business hours, and as such interaction between heavy service vehicles and patrons cars will be minimised.

The servicing arrangements are considered appropriate for the proposed development.

#### 8.5 Conclusion

Based on the assessment on this report, TTM see no traffic engineering reason why the relevant approvals should not be granted.





## Appendix A Development Concept Plan



**CCL21/164      Consolidated Dubbo Regional Local Environmental Plan 2021**

**Attachment 1:** Amended Planning Proposal and Associated Documentation .....455

Version 2



# PLANNING PROPOSAL

## CONSOLIDATED DUBBO REGIONAL LOCAL ENVIRONMENTAL PLAN 2021

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## EXECUTIVE SUMMARY

The Dubbo Local Environmental Plan 2011 was gazetted by the Minister for Planning and Environment on 11 November 2011. The Wellington Local Environmental Plan 2012 was gazetted on 23 November 2012. Both LEPs were prepared in accordance with the Standard Instrument (Local Environmental Plans) Order, 2006.

The former Wellington and Dubbo City councils were amalgamated by proclamation on 12 May 2016. Following the amalgamation of the former Wellington Council and Dubbo City Council, Dubbo Regional Council has operated with two (2) separate Local Environmental Plans (LEPs).

Following the amalgamation and in accordance with the requirements of the NSW Department of Premier and Cabinet, Council is required to prepare a consolidated Local Environmental Plan for the newly formed Dubbo Regional Local Government Area.

The intent of the Planning Proposal is to undertake a consolidation and rationalisation of the Dubbo LEP 2011 and Wellington LEP 2012. The new LEP will assist the development industry and community in understanding the planning requirements for the new Dubbo Regional LGA.

The Planning Proposal has been prepared in accordance with Section 3.31 of the Environmental Planning and Assessment Act, 1979 and the NSW Government Department of Planning, Industry and Environment's, *a guide to preparing planning proposals*.



## **PART 1 OBJECTIVES OR INTENDED OUTCOMES**

The objective of this Planning Proposal is to prepare a new consolidated Local Environmental Plan as a compilation of the current provisions of the Dubbo Local Environmental Plan 2011 and the Wellington Local Environmental Plan 2012.

The Planning Proposal will consist of the following:

- (a) Consolidate the provisions contained in Part 1 Preliminary;
- (b) Consolidate the provisions contained in Part 2 Permitted or prohibited development;
- (c) Consolidate and rationalise the provisions contained in the Land Use Table;
- (d) Consolidate the provisions contained in Part 3 Exempt and complying development;
- (e) Consolidate the provisions contained in Part 4 Principle development standards;
- (f) Consolidate and rationalise the provisions contained in Part 5 Miscellaneous provisions;
- (g) Adopt the provisions contained in Part 6 Urban Release Areas;
- (h) Consolidate and rationalise the provisions contained in Part 6 (Wellington) and Part 7 (Dubbo) Additional local provisions;
- (i) Amend Schedule 1 Additional permitted uses provisions to include existing Dubbo LEP provisions and additional provisions relating to the former Wellington Local Government Area;
- (j) Adopt Schedule 2 Exempt development provisions from existing Dubbo and Wellington LEPs;
- (k) Adopt Schedule 3 Complying development provisions from existing Dubbo and Wellington LEPs;
- (l) Adopt Schedule 4 Classification and reclassification of public land from existing Dubbo LEP 2011;
- (m) Consolidate Schedule 5 Environmental Heritage tables; and
- (n) Consolidate LEP mapping with provision for minor changes to Heritage, Terrestrial Biodiversity, Natural Resource Water and Groundwater Vulnerability maps and the creation of Additional Permitted Use maps.

## PART 2 EXPLANATION OF PROVISIONS

The proposed objectives and intended outcomes will be achieved through the consolidation and rationalisation of the provisions contained under the Dubbo Local Environmental Plan 2011 and the Wellington Local Environmental Plan 2012. In the instance whereby a provision cannot be directly consolidated, rationalisation and justification has been provided to determine the best path forward.

A land use table assessment of the Dubbo LEP 2011 and the Wellington LEP 2012 has been undertaken and is provided as **Appendix 1**. A clause assessment has also been undertaken and is provided as **Appendix 2**. Both assessments provide an outline of the proposed changes and a justification for the amendments.

Explanation of the proposed amendments are as follows:

### (a) Consolidate the provisions contained in Part 1 Preliminary

The intent is to undertake a consolidation of the Part 1 planning provisions under the existing Dubbo and Wellington LEPs to form Part 1 under the proposed Consolidated LEP. The consolidation of Part 1 will result in no significant impacts as a result of the Planning Proposal.

### (b) Consolidate the provisions contained in Part 2 Permitted or prohibited development

The intent is to consolidate Part 2 planning provisions under the existing Dubbo and Wellington LEPs to form Part 2 under the proposed Consolidated LEP. The consolidation of Part 2 will result in no significant impacts as a result of the Planning Proposal.

### (c) Consolidate the provisions contained in the Land Use Table

The intent is to consolidate the Land Use Table provisions under the existing Dubbo and Wellington LEPs to form a combined land use table under the new LEP. The process has identified discrepancies between the following land use zones:

- The R1 General Residential zone under the Land Use Table in the current Dubbo LEP is an open zone whereas the provisions under the current Wellington LEP show the R1 zone as a closed zone. This means that Council can consider land uses not specifically defined in the Land Use Table (innominate uses) in the former Dubbo LGA but not in the former Wellington LGA.
- The R5 Large Lot Residential zone under the Land Use Table in the current Dubbo LEP is an open zone whereas the provisions under the current Wellington LEP show the R5 zone as a closed zone. This means that Council can consider land uses not specifically defined in the Land Use Table (innominate uses) in the former Dubbo LGA but not in the former Wellington LGA.

- The SP3 Tourist zone under the Land Use Table in the current Dubbo LEP 2011 is an open zone whereas the provisions under the current Wellington LEP show the SP3 zone as a closed zone. This means that Council can consider land uses not specifically defined in the Land Use Table (innominate uses) in the former Dubbo LGA but not in the former Wellington LGA.

In order to provide a level of consistency within the single Plan, the abovementioned zones are required to be amended. It is considered that the three (3) zones are considered appropriate as open zones as their functions provide a mix of commercial, residential, tourist and visitor and recreational activities. Consequently, the R1 General Residential, R5 Large Lot Residential and SP3 Tourist contained within the Wellington LEP have been converted from closed to open zones. It is not anticipated that this amendment will have any significant land use implications within the former Wellington LGA.

A land use table assessment has been undertaken as a component of this Planning Proposal as is provided as **Appendix 1**. The Assessment considers the land use permissibility for both the Dubbo LEP 2011 and the Wellington LEP 2012 aligned with the Directions prescribed by the Central West and Orana Regional Plan. The new Plan generally seeks to adopt the provisions as prescribed by the existing Dubbo LEP 2011. This is justified by the current strategic planning framework that underpins the Dubbo LEP 2011.

As a result of the proposed amendments, a number of existing land uses will become prohibited. To ensure that these uses remain permissible, the Planning Proposal seeks to allow additional permitted uses on certain development sites. These sites are discussed later in this Planning Proposal.

Residential accommodation is another consideration in the Wellington Town Centre with a number of representations through the B2 Local Centre zone. The Planning Proposal seeks to protect the existing use of this form of development in the zone and proposes to seek further direction from the Department of Planning, Industry and Environment on how this may be achieved. It should also be noted that rural worker's dwellings shall remain prohibited in the B2 zone.

**(d) Consolidate the provisions contained in Part 3 Exempt and complying development**

The intent is to consolidate the Part 3 planning provisions under the existing Dubbo and Wellington LEPs to form Part 3 under the proposed Consolidated LEP. The consolidation of Part 3 will result in no significant impacts as a result of the Planning Proposal.

**(e) Consolidate the provisions contained in Part 4 Principle development standards**

The intent is to consolidate clauses with similar objectives and maintain existing concessional lot arrangements for the former Wellington LGA. Further discussion and justification is provided in **Appendix 2**.

The consolidation of Part 4 is not anticipated to result in any significant impacts to the Planning Proposal.

**(f) Consolidate and rationalise the provisions contained in Part 5 Miscellaneous provisions**

The intent is to conduct a consolidation and rationalisation of the Part 5 planning provisions under the existing Dubbo and Wellington LEPs to form Part 5 under the new LEP. The consolidation and rationalisation of Part 5 is not anticipated to result in any significant impacts as a result of the Planning Proposal.

An overview of the key changes to Clause 5.4 are as follows:

- (1) Bed and breakfast accommodation – adopt 5 bedrooms
- (2) Home business – adopt 30m<sup>2</sup>
- (3) Home industries – adopt 50m<sup>2</sup>
- (4) Industrial retail outlets – adopt 20%
- (5) Farm stay accommodation – adopt 15 bedrooms
- (6) Neighbourhood shops – adopt 150m<sup>2</sup>
- (7) Neighbourhood supermarkets – adopt 1000m<sup>2</sup>
- (8) Roadside stalls – adopt 25m<sup>2</sup>
- (9) Secondary dwellings – adopt 65% of total floor area
- (10) Artisan food and drink industry exclusion – adopt 20%

Further explanation and justification of the proposed amendments is providing in **Appendix 2**.

**(g) Adopt the provisions contained in Part 6 Urban Release Areas**

Only the Dubbo LEP contains provisions relating to Urban Release Areas. Provided that Urban Release Areas only relate to the Dubbo LEP, there are no impacts as a result of the Planning Proposal.

**(h) Consolidate and rationalise the provisions contained in Part 6 (Wellington) and Part 7 (Dubbo) Additional local provisions**

It is intended to consolidate and rationalise the planning provisions under the existing Dubbo and Wellington LEPs to form Part 7 under the new LEP. As a result of the Wellington LEP not containing provisions relating to Urban Release Areas, Part 6 Additional local provisions is renumbered to Part 7.

The Planning Proposal intends to include the following additional local provisions clauses as follows:

- Earthworks;
- Erection of rural worker's dwellings on land in Zone RU1 and RU4;
- Airspace operations;
- Development in areas subject to aircraft noise;
- Dwelling houses in Zone RU4 Primary Production Small Lots;
- Commercial premises in Zone B4 Mixed Use;
- Shops in B1 Neighbourhood Centre;
- Restricted premises;
- Rural and nature-based tourist facilities; and
- Karst topography subsidence risk.

In addition, the following site specific additional local provisions clauses are proposed to be included as follows:

- Retail premises on certain land at Boundary Road, Dubbo;
- Dwelling houses on certain land at Warrie Road, Dubbo; and
- Dwelling houses or home occupations at Camp Road, Dubbo.

The Planning Proposal seeks to remove additional local provisions clauses where they may be assessed through the application of the Development Control Plan. The Planning Proposal seeks to remove the following additional local provisions:

- Stormwater management; and
- Essential services.

In instances where both plans share a clause with similar objectives, the Dubbo LEP version of the clause has been adopted. The exception to this scenario is biodiversity and the Wellington version of the clause has been adopted.

The Planning Proposal is not anticipated to have any significant impact as a result of the proposed amendments.

- (i) Amend Schedule 1 Additional permitted uses provisions to include existing Dubbo LEP provisions and additional provisions from the existing Wellington LEP.**

The overall intent of the Planning Proposal is to consolidate and rationalise the provisions of the existing Dubbo LEP and Wellington LEP into a single LEP. To minimise the potential

impacts of the proposed amendments, it is intended to introduce a number of additional permitted uses to maintain land use permissibility over specific development sites.

The proposed additional permitted uses are as follows:

**7 Use of certain land at 20 Mitchell Street, Wellington**

- (1) This clause applies to Lot 21, DP 3831 at 20 Mitchell Street, Wellington identified as "7" on the Additional Permitted Uses Map.*
- (2) Development for the purpose of a recreation facility (indoor) is permitted with development consent.*

**8 Use of certain land at 14-16 Lee Street, Wellington**

- (1) This clause applies to Lot 3, DP 214773 at 14-16 Lee Street, Wellington identified as "8" on the Additional Permitted Uses Map.*
- (2) Development for the purpose of a retail premise is permitted with development consent.*

**9 Use of certain land at 44 – 48 Curtis Street, Wellington**

- (1) This clause applies to Lot 2, DP 773253 at 44 – 48 Curtis Street, Wellington identified as "9" on the Additional Permitted Uses Map.*
- (2) Development for the purpose of a caravan park is permitted with development consent.*

**10 Use of certain land at 1946 Twelve Mile Road, Wellington, 104 Gladstone Road, Wellington and 808 Mine Road, Wellington**

- (1) This clause applies to Lot 4 DP 133162, Lot 6 DP 750760 and Lot 46 DP 1110608 identified as "10" on the Additional Permitted Uses Map.*
- (2) Development for the purpose of a Livestock Processing Facility (Poultry Abattoir) is permitted with development consent.*

In addition, the Planning Proposal seeks to maintain the permissibility of residential accommodation in the B2 Local Centre zone in the former Wellington LGA. It is anticipated that an additional permitted use or similar provision under the consolidated LEP will be adopted to maintain land use permissibility. Council will seek further guidance from the Department of Planning, Industry and Environment and Parliamentary Counsel's Office for the drafting of this clause.

- (j) Adopt Schedule 2 Exempt development provisions from existing Dubbo and Wellington LEPs**

The intent is to undertake a consolidation of the Schedule 2 planning provisions under the existing Dubbo and Wellington LEPs to form Schedule 2 under the new LEP. The consolidation of Schedule 2 will cause no significant impacts as a result of the Planning Proposal.

**(k) Adopt Schedule 3 Complying development provisions from existing Dubbo and Wellington LEPs**

The intent is to undertake a consolidation of the Schedule 3 planning provisions under the existing Dubbo and Wellington LEPs to form Schedule 3 under the new LEP. The consolidation of Schedule 3 will cause no significant impact as a result the Planning Proposal.

**(l) Adopt Schedule 4 Classification and reclassification of public land**

The intent is to consolidate the Schedule 4 planning provisions under the existing Dubbo and Wellington LEPs to form Schedule 4 under the new LEP. The consolidation of Schedule 4 will result in no significant impacts as a result of the Planning Proposal.

**(m) Consolidate Schedule 5 Environmental Heritage tables**

The intent is to undertake consolidation of the Schedule 5 planning provisions under the existing Dubbo and Wellington LEPs to form Schedule 5 under the new LEP. The consolidation of Schedule 5 will result in no significant impacts as a result of the Planning Proposal.

**(n) LEP mapping**

The Planning Proposal intends to consolidate both suites of LEP maps to effectively capture the proposed planning controls across the Dubbo Region. Additional permitted use mapping will need to be prepared to incorporate those proposed by the Planning Proposal.

The Planning Proposal seeks to adopt the Terrestrial Biodiversity mapping that is currently applied to the former Wellington LGA. This would result in the consolidation of both the moderate and high levels of biodiversity under Dubbo's current mapping regime and adopt the DPIE Biodiversity and Conservation Division's biodiversity dataset.

In addition, other proposed changes involve minor alterations to the Natural Resource – Water and Groundwater Vulnerability mapping. Sensitive Areas will include 'wetland' and 'riparian land' (includes merge of Wellington's 'riparian land' and Dubbo's 'streambank erosion', 'gully erosion' & 'riparian vegetation'. Also, moderately high and high levels of groundwater vulnerability will be defined simply as groundwater vulnerability.

The Heritage mapping is proposed to be renumbered and consolidated with consideration given to updating property details as part of the plan drafting process. The overall final

mapping for the new LEP may be subject to change when the new plan is drafted. This process will be undertaken by the Department of Planning, Industry and Environment in partnership with the NSW Parliamentary Counsels Office.

### **PART 3 JUSTIFICATION**

#### **A Need for the Planning Proposal**

##### **1. Is the Planning Proposal the result of any strategic study or report?**

The Planning Proposal has been prepared in accordance with the Department of Planning and Environment's document 'Guidance for merged councils on planning functions, May 2016'. This Planning Proposal will provide a continuity of planning controls across the LGA and will ensure residents and the development industry have access to an integrated document that will guide the sustainable development of the LGA.

##### **2. Is the Planning Proposal the best means of achieving the objectives or intended outcomes or is there a better way?**

It is considered that the subject Planning Proposal is the only means of delivering a new Consolidated LEP for the Dubbo Regional LGA, this will include the consolidation and rationalisation of existing planning provisions contained within the current Dubbo LEP 2011 and Wellington LEP 2012.

#### **B Relationship to Strategic Planning Framework**

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

###### Central West and Orana Regional Plan 2036

The Central West and Orana Regional Plan 2036 has been prepared by the Department of Planning and Environment.

The Plan contains the following goals:

- Goal 1: The most diverse regional economy in NSW;
- Goal 2: A stronger, healthier environment and diverse heritage;
- Goal 3: Quality freight, transport and infrastructure networks; and
- Goal 4: Dynamic, vibrant and healthy communities.

The Planning Proposal is considered to give effect to the Goals of the Central West and Orana Regional Plan 2036.



The Directions of the Regional Plan have been used to justify and support the preparation of the new consolidated LEP. Further discussion is provided in **Appendix 1** and **Appendix 2** of this Planning Proposal.

**4. Is the Planning Proposal consistent with a local strategy or other local strategic plan?**

2040 Community Strategic Plan

The 2040 Community Strategic Plan was adopted by the Dubbo Regional Council on 25 June 2018. The vision for the Dubbo Region in 2040 is:

*"In 2040 we will celebrate our quality of life, the opportunities available for us to grow as a community, our improved natural environment, and being recognised as the inland capital of regional NSW."*

The Plan supports the community's visions across a number of different themes as follows:

*"Provide for housing choice and housing affordability to meet the needs of our community"*

*Achieve ongoing economic prosperity through a diverse employment base and a visitor economy that makes use of our tourism assets*

*Key infrastructure and services are provided to further enhance the quality of life of our community and to maintain economic growth*

*A united and cohesive Council that provides leadership to our community*

*We have access to a range of community, cultural and open space facilities and areas*

*We value our unique environment and ensure it's protected for future generations"*

The Planning Proposal is considered to give effect to the 2040 Community Strategic Plan.

Dubbo Local Strategic Planning Statement

The Local Strategic Planning Statement for the Dubbo Regional Local Government Area was adopted by Council on 22 June 2020. The Dubbo Local Strategic Planning Statement (LSPS) plans for the economic, social and environmental land use needs of the community over the next 20 years.

The LSPS aims to accomplish the following Planning Priorities:

- Planning Priority 1: Plan for the delivery of infrastructure to support growth
- Planning Priority 2: Promote and provide digital infrastructure
- Planning Priority 3: Promote renewable energy generation

- Planning Priority 4: Reinforce the town centres of Wellington and Dubbo
- Planning Priority 5: Protect and enhance our agricultural industries and agribusiness
- Planning Priority 6: Continue to support the Dubbo Special Health and Education Precinct
- Planning Priority 7: Continue to support and grow our tourism industry
- Planning Priority 8: Ensure supply of employment generating land
- Planning Priority 9: Provide diversity and housing choice to cater for the needs of the community
- Planning Priority 10: Improve the affordability of housing
- Planning Priority 11: Provide for growth in villages
- Planning Priority 12: Create sustainable and well-designed neighbourhoods
- Planning Priority 13: Manage R5 zoned land
- Planning Priority 14: Create high quality open space
- Planning Priority 15: Protect areas of high environmental value and significance
- Planning Priority 16: Recognise, protect and celebrate heritage
- Planning Priority 17: Acknowledge and embrace Aboriginal culture
- Planning Priority 18: Develop resilience to climate change
- Planning Priority 19: Create an energy, water and waste efficient city
- Planning Priority 20: Protect and enhance rural lands

The intent of the Planning Proposal is to consolidate the existing provisions of the Dubbo and Wellington LEPs. The Planning Proposal is therefore considered not to be contradictory to the future planning priorities of the LSPS.

#### Dubbo Urban Areas Development Strategy

The Dubbo Urban Areas Development Strategy forms the basis of the land use zonings and planning controls provided in the Dubbo Local Environmental Plan 2011.

The Dubbo Urban Areas Development Strategy consists of a number of components as provided below:

- A) Residential Areas Development Strategy;
- B) Commercial Areas Development Strategy;
- C) Industrial Areas Development Strategy;
- D) Institutional Areas Development Strategy;
- E) Recreational Areas Development Strategy; and
- D) Future Directions and Structure Plan.

It should be noted that the Commercial Areas Development Strategy, Industrial Areas Development Strategy and Institutional Areas Development Strategy have been recently superseded by the Dubbo Employment Lands Strategy as discussed further in this Planning Proposal.

It is considered that the Planning Proposal will give effect to the overall objectives and intent of the Dubbo Residential Areas Development Strategy. It is also considered that the Planning Proposal will give effect to the other applicable components of the Dubbo Urban Areas Development Strategy.

#### Dubbo Rural Areas Development Strategy

The Dubbo Rural Areas Development Strategy 1995-2015 forms the basis of the rural land use zonings and planning controls provided in the Dubbo Local Environmental Plan 2011.

It is considered that the Planning Proposal will give effect to the overall objectives and intent of the Dubbo Rural Areas Development Strategy. The proposed consolidation seeks to maintain the existing subdivision controls across the former Dubbo LGA. It has also been recognised that a number of the existing controls are shared by both former LEPs creating an opportunity for consolidation.

#### Dubbo Employment Lands Strategy

The Dubbo Employment Lands Strategy 2019 aims to ensure the City of Dubbo has an appropriate level of commercial, industrial, institutional and tourist zoned land in the future.

Wellington's B2 Local Centre zone currently serves as the town's primary commercial core and allows a large variety of different land uses. The Planning Proposal proposes to support this role by removing permissibility of a number of industrial land uses from the zone in line with the B2 zoning provisions currently adopted in Dubbo. Additionally, the Planning Proposal aims to maintain existing permissibility of residential development in the town's centre however will consider its contribution as part of future strategic planning.

The Employment Lands Strategy only applies to the former Dubbo LGA however the proposed changes to land use permissibility in Wellington's B2 Local Centre zone are not considered to be inconsistent with the Strategy.

The Planning Proposal is considered to generally give effect to the Dubbo Employment Lands Strategy.

#### Wellington Council Settlement Strategy 2012

The Wellington Council Settlement Strategy was adopted by the former Wellington Council in May 2012 and has previously informed the development of the LGAs main settlements.

The overarching Principles for the Strategy are as follows:

1. Promoting land use efficiency
2. Supporting employment and economic development
3. Caring for the natural environment and heritage
4. Providing an appropriate level of facilities and services
5. Integrating transport and infrastructure provision with land uses;

Although a large number of the proposed amendments seek to adopt existing Dubbo LEP provisions, the Planning Proposal is not considered to be inconsistent with the overarching principles of the Wellington Council Settlement Strategy.

**5. Is the Planning Proposal consistent with applicable State Environmental Planning Policies?**

The following table provides consideration of the applicable State Environmental Planning Policies:

State Environmental Planning Policy	Comment
<b>SEPP No 21 – Caravan Parks</b>	
<p>The aim of this Policy is to encourage:</p> <ul style="list-style-type: none"> <li>(a) the orderly and economic use and development of land used or intended to be used as a caravan park catering exclusively or predominantly for short-term residents (such as tourists) or for long-term residents, or catering for both, and</li> <li>(b) the proper management and development of land so used, for the purpose of promoting the social and economic welfare of the community, and</li> <li>(c) the provision of community facilities for land so used, and</li> <li>(d) the protection of the environment of, and in the vicinity of, land so used.</li> </ul>	<p>The Planning Proposal intends to prohibit caravan parks in the R1 General Residential zone in the former Wellington LGA.</p> <p>An additional permitted use will be provided for the land at 44 Curtis Street, Wellington to retain the development’s existing approval rights to operate a caravan park.</p> <p>In addition, caravan parks will become permitted with consent in Wellington’s RU1 zone as a result of the Planning Proposal.</p> <p>The Planning Proposal is considered to be inconsistent with SEPP No 21. This inconsistency is considered to be of minor significance.</p>
<b>SEPP No 33 – Hazardous and Offensive Development</b>	
<p>This Policy aims:</p> <ul style="list-style-type: none"> <li>(a) to amend the definitions of hazardous and offensive industries where used in environmental planning instruments, and</li> <li>(b) to render ineffective a provision of any environmental planning instrument that prohibits development for the purpose of a storage facility on the grounds that the facility is hazardous</li> </ul>	<p>The Planning Proposal does not intend to amend provisions relating to hazardous or offensive industries.</p> <p>The Planning Proposal is considered to be consistent with SEPP No 33.</p>

<p>or offensive if it is not a hazardous or offensive storage establishment as defined in this Policy, and</p> <ul style="list-style-type: none"> <li>(c) to require development consent for hazardous or offensive development proposed to be carried out in the Western Division, and</li> <li>(d) to ensure that in determining whether a development is a hazardous or offensive industry, any measures proposed to be employed to reduce the impact of the development are taken into account, and</li> <li>(e) to ensure that in considering any application to carry out potential hazardous or offensive development, the consent authority has sufficient information to assess whether the development is hazardous or offensive and to impose conditions to reduce or minimise any adverse impact, and</li> <li>(f) to require the advertising of applications to carry out any such development.</li> </ul>	
<p><b>SEPP No 36 – Manufactured Home Estates</b></p>	
<p>The aims of this Policy are:</p> <ul style="list-style-type: none"> <li>(a) to facilitate the establishment of manufactured home estates as a contemporary form of medium density residential development that provides an alternative to traditional housing arrangements, and</li> <li>(b) to provide immediate development opportunities for manufactured home estates on the commencement of this Policy, and</li> <li>(c) to encourage the provision of affordable housing in well-designed estates, and</li> <li>(d) to ensure that manufactured home estates are situated only in suitable locations and not on land having important resources or having</li> </ul>	<p>The Planning Proposal intends to prohibit caravan park development in the R1 General Residential zone located in the former Wellington LGA.</p> <p>SEPP No 36 permits manufactured home estates wherever caravan parks are permitted. As a result of the Planning Proposal manufactured home estates will become prohibited on land located in Wellingtons R1 zone.</p> <p>The Planning Proposal is considered to be inconsistent with the aims of SEPP No 36. The inconsistency is considered to be of minor significance.</p>

<p>landscape, scenic or ecologic qualities that should be preserved, and</p> <ul style="list-style-type: none"> <li>(e) to ensure that manufactured home estates are adequately serviced and have access to essential community facilities and services, and</li> <li>(f) to protect the environment surrounding manufactured home estates, and</li> <li>(g) to provide measures which will facilitate security of tenure for residents of manufactured home estates</li> </ul>	
<b>SEPP No 55 – Remediation of Land</b>	
<p><b>Object of this Policy</b></p> <ul style="list-style-type: none"> <li>(1) The object of this Policy is to provide for a State-wide planning approach to the remediation of contaminated land.</li> <li>(2) In particular, this Policy aims to promote the remediation of contaminated land for the purpose of reducing the risk of harm to human health or any other aspect of the environment: <ul style="list-style-type: none"> <li>(a) By specifying when consent is required, and when it is not required, for remediation work, and</li> <li>(b) By specifying certain considerations that are relevant in rezoning land in determining development applications in general and development applications for consent to carry out a remediation work in particular, and</li> <li>(c) By requiring that a remediation work meet certain standards and notification requirements.</li> </ul> </li> </ul>	<p>The Planning Proposal does not intend to alter or amend a planning provision that would result in an inconsistency with SEPP No 55.</p> <p>The Planning Proposal is considered to be consistent with SEPP No 55.</p>
<b>SEPP No 64 – Advertising and Signage</b>	

<p>(1) This Policy aims:</p> <p>(a) to ensure that signage (including advertising):</p> <p>(i) is compatible with the desired amenity and visual character of an area, and</p> <p>(ii) provide effective communication in suitable locations, and</p> <p>(iii) is of high quality design and finish, and</p> <p>(b) to regulate signage (but not content) under Part 4 of the Act, and</p> <p>(c) to provide time-limited consents for the display of certain advertisements in transport corridors, and</p> <p>(d) to ensure that public benefits may be derived from advertising in and adjacent to transport corridors.</p> <p>(2) This Policy does not regulate the content of signage and does not require consent for a change in the content of signage.</p>	<p>The Planning Proposal intends to prohibit advertising structures in the former Wellington LGA within the following zones:</p> <p>RU5 Village B2 Local Centre B6 Enterprise Corridor IN2 Light Industrial SP3 Tourist RE1 Public Recreation RE2 Private Recreation</p> <p>The amendment is intended to provide consistency with the Dubbo Local Environmental Plan 2011.</p> <p>The Planning Proposal is considered to be generally consistent with the aims of SEPP No 64.</p>
<p><b>SEPP No 65 – Design Quality of Residential Apartment Development</b></p>	
<p>This Policy aims to improve the design quality of residential apartment development in New South Wales.</p>	<p>The Planning Proposal is considered to be generally consistent with the aims of SEPP No 65.</p>
<p><b>SEPP (Affordable Rental Housing) 2009</b></p>	
<p>The aims of this Policy are as follows:</p> <p>(a) To provide a consistent planning regime for the provision of affordable rental housing,</p> <p>(b) To facilitate the effective delivery of new affordable rental housing by providing incentives by way of expanding zoning permissibility, floor</p>	<p>The Planning Proposal seeks to undertake a number of amendments to the land use table. The amendments that are considered relevant to this SEPP include the following:</p> <ul style="list-style-type: none"> <li>▪ Permit with consent, boarding houses, group homes and rural worker’s dwellings in Wellington’s RU1 and RU4 zones,</li> </ul>

<p>space ratio bonuses and non-discretionary development standards,</p> <p>(c) To facilitate the retention and mitigate the loss of existing affordable rental housing,</p> <p>(d) To employ a balanced approach between obligations for retaining and mitigating the loss of existing affordable rental housing, and incentives for the development of new affordable rental housing,</p> <p>(e) To facilitate an expanded role for not-for-profit-providers of affordable rental housing,</p> <p>(f) To support local business centres by providing affordable rental housing for workers close to places of work,</p> <p>(g) To facilitate the development of housing for the homeless and other disadvantaged people who may require support services, including group homes and supportive accommodation.</p>	<ul style="list-style-type: none"> <li>• Prohibit, attached dwellings, Boarding houses, dual occupancies, dwelling houses, group homes, hostels, multi dwelling housing, residential flat buildings, secondary dwellings, and semi-detached dwellings in Wellington’s B2 zone,</li> <li>• Prohibit, group homes and hostels in Wellington’s B6 zone,</li> <li>• Prohibit, dual occupancies in Wellington’s RU1 and R5 zones,</li> <li>• Prohibit, hostels, multi-dwelling housing and residential flat buildings in Wellington’s RU5 zone, and</li> </ul> <p>The shift in land use provisions is intended to achieve greater land use compatibility across the LGA and provide opportunity for affordable housing where considered appropriate.</p> <p>The Planning Proposal is considered to be broadly consistent with the aims of SEPP (Affordable Rental Housing) 2009.</p>
<p><b>SEPP (Educational Establishments and Child Care Facilities) 2017</b></p>	
<p>The aim of this Policy is to facilitate the effective delivery of educational establishments and early education and care facilities across the State.</p>	<p>The Planning Proposal intends to make educational establishments permissible with consent in Wellington’s RU1 Primary Production zone, IN2 Light Industrial zone and RE2 Private Recreation zone.</p> <p>The Planning Proposal is considered to be consistent with SEPP (Education Establishments and Child Care Facilities).</p>
<p><b>SEPP (Housing for Seniors or People with a Disability) 2004</b></p>	



<p>This Policy aims to encourage the provision of housing (including residential care facilities) that will -</p> <ul style="list-style-type: none"> <li>(a) Increase the supply and diversity of residences that meet the needs of seniors or people with a disability, and</li> <li>(b) Make efficient use of existing infrastructure and services, and</li> <li>(c) Be of good design.</li> </ul>	<p>The Planning Proposal is considered to be generally consistent with SEPP (Housing for Seniors or People with a Disability) 2004.</p>
<p><b>SEPP (Infrastructure) 2007</b></p>	
<p>The aim of this Policy is to facilitate the effective delivery of infrastructure across the State.</p>	<p>The Planning Proposal seeks to align land use permissibility with the zones as prescribed under the provisions of the SEPP.</p> <p>Where the SEPP does not prescribe a zone, the land use permissibility will align to provide consistency between the DLEP 2011 and WLEP 2012.</p> <p>The Planning Proposal is considered to be consistent with the SEPP (Infrastructure) 2007.</p>
<p><b>SEPP (Mining, Petroleum Production and Extractive Industries) 2007</b></p>	
<p>The aims of this Policy are, in recognition of the importance to New South Wales of mining, petroleum production and extractive industries.</p>	<p>The Planning Proposal seeks to prohibit both extractive industries and open cut mining on land within the E3 Environmental Management zone.</p> <p>The LEP objectives which relate to the E3 zone typically relate to the protection of the natural environment and ecological communities.</p>

	<p>Extractive industries and open cut mining in the E3 zone could result in potential land use conflicts.</p> <p>The Planning Proposal is considered to be inconsistent with the SEPP (Mining, Petroleum Production and Extractive Industries) 2007.</p> <p>The inconsistency is considered to be of minor significance.</p>
<p><b>SEPP (Primary Production and Rural Development) 2019</b></p>	
<p>The aims of this Policy are as follows:</p> <ul style="list-style-type: none"> <li>(a) To facilitate the orderly economic use and development of lands for primary production,</li> <li>(b) To reduce land use conflict and sterilisation of rural land by balancing primary production, residential development the protection of native vegetation, biodiversity and water resources,</li> <li>(c) To identify State significant agricultural land for the purposes of ensuring the ongoing viability of agriculture on that land, having regard to social, economic and environmental considerations,</li> <li>(d) To simplify the regulatory process for smaller-scale low risk artificial waterbodies, and routine maintenance of artificial water supply or drainage, in irrigation areas and districts, and for routine and emergency work in irrigation areas and districts,</li> <li>(e) To encourage sustainable agriculture, including sustainable aquaculture,</li> </ul>	<p>The Planning Proposal seeks to undertake a number of amendments to land use permissibility and clauses which impact on the rural zones within the former Wellington LGA.</p> <p>The amendments are aimed at providing further opportunities for agricultural activities in rural areas by restricting fragmentation of rural lands. The amendments also extend to facilitate certain agricultural land uses in the SP3 Tourist and E3 Environmental zones.</p> <p>The Planning Proposal is considered to be consistent with SEPP (Primary Production and Rural Development) 2019.</p>

<p>(f) To require consideration of the effects of all proposed development in the State on oyster aquaculture,</p> <p>(g) To identify aquaculture that is to be treated as designated development using a well-defined and concise development assessment regime based on environment risks associated with site and operational factors.</p>	
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**6. Is the Planning Proposal consistent with any applicable Section 9.1 Ministerial Direction?**

The following table provides consideration of the applicable Section 9.1 Ministerial Directions for consideration in the Planning Proposal:

Direction	Requirement	Consistency
<b>1. Employment and Resources</b>		
1.1 Business and Industrial Zones	This Direction applies as the Planning Proposal will affect land within an existing or proposed business and industrial zone (including the alteration of any existing business or industrial zone boundary).	<p>The Planning Proposal seeks to prohibit a number of industrial and residential land uses within the B2 zone. It is proposed that residential uses in the Wellington B2 zone will remain through the introduction of additional permitted uses.</p> <p>The Planning Proposal seeks to facilitate economic development and growth within the B2 zone that is consistent with the zone's objectives.</p> <p>In addition, the Planning Proposal seeks to reduce the floor space area for Home businesses and Home industries and adjust the floor space allowances for</p>

		<p>industrial retail outlets and artisan food and drink industries in the former Wellington LGA.</p> <p>It is considered that the Planning Proposal is inconsistent with this Direction.</p> <p>The inconsistency is considered to be of minor significance.</p>
<p>1.2 Rural Zones</p>	<p>This Direction applies as the Planning Proposal will affect land within an existing or proposed rural zone (including the alteration of any existing rural zone boundary).</p>	<p>The Planning Proposal seeks to prohibit a number of rural industries in the RU1 zone.</p> <p>The Planning Proposal seeks to undertaken a number of minor amendments to the subdivision clauses with the intent of maintaining former LGA specific provisions.</p> <p>A new clause 7.6 is proposed to be introduced to the former Wellington LGA to accommodate rural workers dwellings.</p> <p>A new clause 7.10 is proposed to be introduced to the former Wellington LGA to manage development of dwelling houses in the RU4 zone.</p> <p>A new clause 7.14 is proposed to be introduced to the former Wellington LGA to manage development of rural and nature-based tourist facilities in zones RU1, RU2 and R5.</p>

		The Planning Proposal is considered to be consistent with this Direction.
1.3 Mining, Petroleum and Extractive Industries	This Direction applies as the Planning Proposal will have the effect of prohibiting the mining of coal or other minerals, production of petroleum, or winning or obtaining of extractive materials.	<p>The Planning Proposal seeks to prohibit open cut mining in the E3 zone in the former Wellington LGA. The amendment is consistent with the existing DLEP.</p> <p>The Planning Proposal is considered to be inconsistent with this Direction.</p> <p>The inconsistency is considered to be of minor significance.</p>
1.4 Oyster Aquaculture	N/A	N/A
1.5 Rural Lands	This Direction applies as the Planning Proposal will affect land within an existing rural or environment protection zone (including the alteration of any existing rural or environmental protection zone boundary).	<p>The Planning Proposal seeks to prohibit a number of rural industries in the RU1 zone.</p> <p>The Planning Proposal seeks to undertake a number of minor amendments to the subdivision clauses with the intent of maintaining former LGA specific provisions.</p> <p>A new clause 7.6 is proposed to be introduced to the former Wellington LGA to accommodate rural workers dwellings.</p> <p>A new clause 7.10 is proposed to be introduced to the former Wellington LGA to manage development of dwelling houses in the RU4 zone.</p>

		<p>A new clause 7.14 is proposed to be introduced to the former Wellington LGA to manage development of rural and nature-based tourist facilities in zones RU1, RU2 and R5.</p> <p>The Planning Proposal is considered to be consistent with this Direction.</p>
<b>2. Environment and Heritage</b>		
2.1 Environment and Protection Zones	This Direction applies when a Planning Proposal is prepared.	<p>The Planning Proposal will not result in any significant impact to land within an environmental protection zone.</p> <p>The Planning Proposal is considered to be consistent with this Direction.</p>
2.2 Coastal Management	N/A	N/A
2.3 Heritage Conservation	This Direction applies when a Planning Proposal is prepared.	<p>The Planning Proposal will not result in any impacts to items or places of heritage significance.</p> <p>The Planning Proposal is considered to be consistent with this Direction.</p>
2.4 Recreation Vehicle Areas	This Direction applies when a Planning Proposal is prepared.	<p>The Planning Proposal will not alter or result in any changes to recreational vehicle access.</p> <p>The Planning Proposal is considered to be consistent with this Direction.</p>
2.5 Application of E2 and E3 Zones and Environmental	N/A	N/A

Overlays in Far North Coast LEPs		
<b>3. Housing, Infrastructure and Urban Development</b>		
3.1 Residential Zones	<p>This Direction applies as the Planning Proposal will affect land within an existing or proposed residential zone (including the alteration of any existing residential zone boundary) and any other zone in which significant residential development is permitted or proposed to be permitted.</p>	<p>The Planning Proposal seeks to undertake a number of amendments to land use tables.</p> <p>The proposed amendments generally relate to the restriction of residential development in commercial and rural zones.</p> <p>The Planning Proposal seeks to facilitate the continued permissibility of residential accommodation in the B2 zone through an additional permitted use under the new LEP. This provision would exclude rural worker's dwellings.</p> <p>The proposed amendments will support greater land use compatibility and are considered to be consistent with this Direction.</p>
3.2 Caravan Parks and Manufactured Home Estates	<p>This Direction applies when a Planning Proposal is prepared.</p>	<p>The Planning Proposal seeks to prohibit caravan parks in zone R1 in the former Wellington LGA.</p> <p>Property at 44 Curtis Street, Wellington contains an existing approval for the purposes of a caravan park.</p> <p>To ensure permissibility of this land use is maintained, the</p>

		<p>Planning Proposal seeks to allow additional permitted use provisions under Schedule 1 of the LEP.</p> <p>The Planning Proposal is considered to be inconsistent with this Direction.</p> <p>The inconsistency is considered to be of minor significance.</p>
3.3 Home Occupations	This Direction applies when a Planning Proposal is prepared.	<p>The Planning Proposal will ensure home occupations remain permissible without development consent within a dwelling house.</p> <p>The Planning Proposal is considered to be consistent with this Direction.</p>
3.4 Integrating Land Use and Transport	This Direction applies as the Planning Proposal will create, alter or remove a zone or a provision relating to urban land, including land zoned for residential, business, industrial, village or tourist purposes.	<p>The Planning Proposal seeks to undertake a number of amendments to the land use table.</p> <p>The intent of the Planning Proposal is to provide a consistent approach to land use permissibility across the LGA. This includes changes to land use permissibility to best service the role and objectives of each zone.</p> <p>The Planning Proposal is considered to be consistent with this Direction.</p>
3.5 Development Near Regulated Airports and Defence Airfields	This Direction applies as the Planning Proposal will create, alter or remove a zone or a provision relating to land in	The Planning Proposal seeks to include Clause 7.7 Airspace operations and Clause 7.8 Development in areas subject to aircraft noise under the new LEP.



	the vicinity of a licensed aerodrome.	The Planning Proposal is considered to be consistent with this Direction.
3.6 Shooting Ranges	This Direction applies as the Planning Proposal will affect, create, alter or remove a zone or a provision relating to land adjacent to and/or adjoining an existing shooting range.	The Planning Proposal will not compromise the use of any existing shooting range.  The Planning Proposal is considered to be consistent with this Direction.
3.7 Reduction in non-hosted short term rental accommodation period	N/A	N/A
<b>4. Hazard and Risk</b>		
4.1 Acid Sulfate Soils	N/A	N/A
4.2 Mine Subsidence and Unstable Land	N/A	N/A
4.3 Flood Prone Land	This Direction applies as the Planning Proposal will create, remove or alter a zone or a provision that affects flood prone land.	The Planning Proposal seeks to undertake a number of changes to the provisions contained in the land use table.  The Planning Proposal seeks to permit additional development within flood affected land and is considered to be inconsistent with this Direction.  The inconsistencies between the amendment and this Direction are considered to be of minor significance.
4.4 Planning for Bushfire Protection	This Direction applies as the Planning Proposal will affect, or is in the proximity to land	The Planning Proposal seeks to undertake a number of changes

	mapped as bushfire prone land.	to the provisions contained in the land use table.  As a result, changes to land use permissibility may be affected by areas mapped as bushfire prone land.  The Planning Proposal is considered to be inconsistent with this Direction. The inconsistency is considered to be of minor significance.
<b>5. Regional Planning</b>		
5.1 Implementation of Regional Strategies	N/A	N/A
5.2 Sydney Drinking Water Catchments	N/A	N/A
5.3 Farmland of State and Regional Significance on the NSW Far North Coast	N/A	N/A
5.4 Commercial and Retail Development along the Pacific Highway, North Coast	N/A	N/A
5.9 North West Rail Link Corridor Strategy	N/A	N/A
5.10 Implementation of Regional Plans	This Direction applies when a Planning Proposal is prepared.	The Planning Proposal has been undertaken with a strong focus on the Goals and Directions of the Central West and Orana Regional Plan.  The Planning Proposal is considered to be consistent with the Central West and Orana Regional Plan.

5.11 Development of Aboriginal Land Council land	N/A	N/A
<b>6. Local Plan Making</b>		
6.1 Approval and Referral Requirements	This Direction applies when a Planning Proposal is prepared.	The Planning Proposal does not include any provisions that require additional approval a referral requirements.  The Planning Proposal is considered to be consistent with this Direction.
6.2 Reserving Land for Public Purposes	This Direction applies when a Planning Proposal is prepared.	It is considered that the Planning Proposal will not provide any impacts to public land.  The Planning Proposal is considered to be consistent with this Direction.
6.3 Site Specific Provisions	This Direction applies as the Planning Proposal will allow a particular development to be carried out.	The intent of the Planning Proposal is to prepare a combined LEP that provides consistency between the former Wellington and Dubbo LGAs.  Rezoning of land is not proposed under this Planning Proposal however, additional permitted uses may be utilised in some circumstances in order to maintain land use permissibility.  The Planning Proposal is considered to be consistent with this Direction.
<b>7. Metropolitan Planning</b>		

7.1 Implementation of A Plan for Growing Sydney	N/A	N/A
7.2 Implementation of Greater Macarthur Land Release Investigation	N/A	N/A
7.3 Parramatta Road Corridor Urban Transformation Strategy	N/A	N/A
7.4 Implementation of North West Priority Growth Area Land Use and Infrastructure Implementation Plan	N/A	N/A
7.5 Implementation of Greater Parramatta Priority Growth Area Interim Land Use Strategy and Infrastructure Implementation Plan	N/A	N/A
7.6 Implementation of Wilton Priority Growth Area Interim Land Use and Infrastructure Implementation Plan	N/A	N/A
7.7 Implementation of Glenfield to MacArthur Urban Renewal Corridor	N/A	N/A
7.8 Implementation of Western Sydney Aerotropolis Interim Land Use and Infrastructure Implementation Plan	N/A	N/A

7.9 Implementation of Bayside West Precincts 2036 Plan	N/A	N/A
7.10 Implementation of Planning Principles for the Cooks Cove Precinct	N/A	N/A

**C Environmental, social and economic impact**

**7. Is there any likelihood that critical habitat or threatened species, populations or ecological communities or their habitats will be adversely affected?**

It is considered that the Planning Proposal will not adversely affect critical habitat, threatened species, populations or ecological communities or their habitats.

**8. Are there any environmental impacts and how will they be mitigated?**

The Planning Proposal will not result in any negative environmental effects.

**9. Has the Planning Proposal adequately addressed any social and economic impact?**

The Planning Proposal is not expected to result in any significant negative economic or social impacts.

**D State and Commonwealth interests**

**10. Is there adequate public infrastructure for the Planning Proposal?**

Access to public infrastructure has been considered in the Planning Proposal and it is considered that the Planning Proposal will not create additional demand for public infrastructure.

**11. What are the views of State and Commonwealth public authorities consulted in accordance with the Gateway Determination?**

State and Commonwealth public authorities will be consulted in accordance with the Gateway Determination and will be given at least 21 days to comment on the Planning Proposal.

**PART 4 MAPPING**

The Planning Proposal intends to consolidate both suites of LEP maps to effectively capture the proposed planning controls across the Dubbo Region. Additional permitted use mapping will need to be prepared to incorporate those proposed by the Planning Proposal.

It should also be noted that the Planning Proposal seeks to adopt the Terrestrial Biodiversity mapping that currently applies to the former Wellington LGA. This would result in the consolidation of both the moderate and high levels of biodiversity under Dubbo's current mapping regime and adopt the DPIE Biodiversity and Conservation Division's biodiversity dataset.

#### **PART 5 COMMUNITY CONSULTATION**

Council will place the Planning Proposal on public exhibition for a period of not less than 28 days and undertake consultation with the community as directed. Council will also undertake consultation with State public agencies as required by any Gateway Determination from the Department of Planning, Industry and Environment.

**PART 6 PROJECT TIMELINE**

The following project timeline is intended to be a guide only and may be subject to changes in response to the public consultation process and/or community submissions.

<b>Step</b>	<b>Task Name</b>	<b>Completion Date</b>
1	Completion of the Amended Planning Proposal and submission to the DPIE.	End of August 2020
2	Completion of DPIE preliminary assessment.	Mid to late October 2020
3	Consideration of Amended Planning Proposal at Council's meeting.	26 October 2020
4	Public exhibition of Planning Proposal.	4 November 2020 to 2 December 2020
5	Consideration of submissions at Council's meeting.	22 February 2021
6	Mapping to be completed and included in Council's request for drafting package to be sent to DPIE.	26 February 2021
7	Draft Amendment completed.	19 March 2021
8	Amendment notified on NSW legislation website.	26 March 2021

### **Zone Objectives and Land Use Permissibility Assessment**

Principle 1: Consistent approach to zone objectives across similarly zoned lands

Principle 2: Consistent approach to land use permissibility across similarly zoned lands

Principle 3: Retain appropriate development standards

Principle 4: Retain all existing zones within the DLEP and WLEP

Principle 5: Retain existing additional permitted uses

Principle 6: Retain existing permissible land uses through additional permitted uses

Principle 7: Review and update clauses to address current planning issues

#### **Abbreviations**

DLEP – Dubbo Local Environmental Plan 2011

WLEP – Wellington Local Environmental Plan 2012

LGA – Local Government Area

SEPP – State Environmental Planning Policy

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**RU1 Primary Production**

**Principle 1: Consistent approach to zone objectives across similarly zoned lands**

The DLEP and WLEP contain objectives additional to the mandatory objectives provided in the Standard Instrument. The single LEP for the Dubbo Regional LGA is required to have a consistent and consolidated set of objectives incorporating the existing DLEP and WLEP objectives.

Inconsistent, duplicated and repetitive additional objectives are to be consolidated into a single set.

DLEP Additional Zone Objectives	WLEP Additional Zone Objectives	Recommended Additional Objectives	Justification
<ul style="list-style-type: none"> <li>To enable uses of an appropriate scale to facilitate the economic sustainability of primary production.</li> <li>To enable function centres, restaurants and appropriate forms of tourist and visitor accommodation to be developed in conjunction with agricultural uses.</li> </ul>	<ul style="list-style-type: none"> <li>To provide for a range of tourism-related uses that support the agricultural industry or are compatible with agricultural uses.</li> </ul>	Replace the additional objectives with: <ul style="list-style-type: none"> <li>To enable uses of an appropriate scale to facilitate the economic sustainability of primary production</li> <li>To provide for a range of tourism-related uses that support the agricultural industry or are compatible with agricultural uses.</li> </ul>	The additional objectives of the DLEP and WLEP are similar, particularly with respect to allowing tourism-related uses that supports agricultural related uses. The recommended additional objectives maintain the overall intent of the zone.

**Principle 2: Consistent approach to land use permissibility across similarly zoned lands**

The DLEP and WLEP land use tables are inconsistent with each other. The single LEP is required to have a consistent land use table for each similar zone across the Dubbo Regional LGA.

Land Use	DLEP	WLEP	Recommendation	Justification	Alignment with Regional Plan
Agriculture (group term)	C	X	Make permissible with consent.	This is a minor change to make the group term permissible with consent. Each of the subset terms are consistent between the two LEPs and therefore, no land use changes would occur as a result of this change.	Direction 1 Direction 2
Dual occupancy (group term)	X	C	Make prohibited.	Dual occupancies are considered to be inconsistent with the objectives of the RU1 zone as they have potential to cause fragmentation. Rural workers dwellings and secondary dwellings (discussed below) are considered more appropriate uses in the	Direction 1 Direction 12 Direction 28

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				RU1 Primary Production zone as they are considered on the individual merits and lower impact development.	
Dual occupancies (attached)	X	C	Make prohibited	Dual occupancies are considered to be consistent with the objectives of the RU1 zone as they have potential to cause fragmentation.	Direction 1
Dual occupancies (detached)	X	C	Make prohibited	Dual occupancies are considered to be inconsistent with the objectives of the RU1 zone as they have potential to cause fragmentation.	Direction 1
Group home (group term)	C	X	Make permissible with consent	State Environmental Planning Policy (Affordable Rental Housing) 2009) permits group homes with consent. Group homes should therefore be made permissible with consent to provide consistency across the planning framework.	Direction 25
Permanent group homes	C	X	Make permissible with consent	State Environmental Planning Policy (Affordable Rental Housing) 2009) permits group homes with consent. Permanent group homes should therefore be made permissible with consent to provide consistency across the planning framework.	Direction 25
Transitional group homes	C	X	Make permissible with consent	State Environmental Planning Policy (Affordable Rental Housing) 2009) permits group homes with consent. Transitional group homes should therefore be made permissible with consent to provide consistency across the planning framework.	Direction 25
Rural workers dwelling	C	X	Make permissible with consent.	Rural workers dwellings enable an additional dwelling that can be used for employees of agricultural or rural industry related uses. Rural workers dwellings allow flexibility for rural uses where an additional dwelling is required. It is considered that permitting rural workers dwellings across the LGA is consistent with the objectives of the zone.	Direction 25 Direction 27
Tourist and visitor accommodation (group term)	C	X	Make permissible with consent.	This is a minor change to make the group term permissible with consent. Each of the subset terms are consistent between the two LEPs and therefore, no land use changes would occur as a result of this change.	Direction 4
Backpackers' accommodation	C	X	Make permissible with consent.	Backpackers' accommodation is considered to be consistent with objectives of the RU1 zone as it provides for a range of tourism-related uses that are compatible with agricultural related uses. Additionally, it is consistent with the Central West and Orana Regional Plan (Direction 27).	Direction 4 Direction 27
Caravan park	C	X	Make permissible with consent	Caravan parks are considered to be consistent with the objectives of the RU1 zone as they provide increased opportunity for tourist and visitor accommodation within the rural setting (Direction 27).	Direction 4 Direction 27
Home occupation (sex services)	X	C	Make prohibited	Home occupations (sex services) are considered to be inconsistent with the objectives of the RU1 zone.	Direction 12
Restaurant or cafe	C	X	Make permissible with consent	Restaurants and cafes allow value-adding and diversification of agricultural related uses promoting tourism outside of the urban areas and into the rural areas. It is considered appropriate as it consistent with the objectives of the RU1 zone as well as the Central West and Orana Regional Plan (Directions 2 & 4).	Direction 2 Direction 4

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Landscaping material supply	X	C	Make prohibited	The permissibility of landscaping materials supplies is inconsistent with the objectives of the zone. Landscaping material supplies is a form of retail premises and is best suited to the commercial or industrial zones rather than the rural zones. Additionally, there do not appear to be any approved landscaping materials supplies uses operating from a rural zone across the LGA.	Direction 12
Function centre	C	X	Make permissible with consent	Function centres have the potential to value-add to both tourist and agricultural uses and assist in delivering the tourist-related objectives of both the Dubbo LEP 2011 and Wellington LEP 2012.	Direction 4
Health consulting rooms	C	X	Make permissible with consent	Health consulting rooms are undertaken within a dwelling house and as such would not result in the fragmentation of rural lands. The recommendation is consistent with Direction 5 'improve access to health and aged care services' under the Central West and Orana Regional Plan 2036.	Direction 5
Respite day care centres	C	X	Make permissible with consent	The recommendation is consistent with Direction 5 'Improve access to health and aged care services' under the Central West and Orana Regional Plan 2036.	Direction 5
Educational establishments (group term)	C	X	Make permissible with consent	The recommendation is consistent with Direction 6 'Expand education and training opportunities' under the Central West and Orana Regional Plan 2036.	Direction 6
Schools	C	X	Make permissible with consent	The recommendation is consistent with Direction 6 'Expand education and training opportunities' under the Central West and Orana Regional Plan 2036.	Direction 6
Community facilities	X	C	Make permissible with consent	Community facilities are considered to be consistent with the objectives of the RU1 zone. The recommendation is consistent with Direction 12 'Plan for greater land use compatibility'.	Direction 12
Places of public worship	C	X	Make permissible with consent	Places of public worship are not considered to be inconsistent with the objectives of the RU1 zone.	Direction 29
Rural Industry (group term)	X	C	Make prohibited	Rural Industry (group term) are considered to be inconsistent with the objectives of the RU1 zone. The recommendation is consistent with Direction 1 'Protect the region's diverse and productive agricultural land'.	Direction 1
Livestock processing industries	X	C	Make prohibited	Livestock processing industries are considered to be inconsistent with the objectives of the RU1 zone. This land use may be more appropriately located in a heavy industrial zone. As this form of development requires access to infrastructure such as secured water supply and road access.	Direction 12
Sawmill or log processing industries	X	C	Make prohibited	Sawmill or log processing industries are a subset of rural industry and are considered to be inconsistent with the objectives of the RU1 zone. This land use may be more appropriately located in an industrial zone (see attached note).	Direction 12

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Stock & sale yards	X	C	Make prohibited	Stock & sale yards are a subset of rural industry and are considered to be inconsistent with the objectives of the RU1 zone. This land use may be more appropriately located in an industrial zone (see attached note).	Direction 12
Highway service centres	C	X	Make permissible with consent	Under the provisions of the State Environmental Planning Policy (Infrastructure) 2007, highway service centres are permitted adjacent to a road corridor for a freeway, main road or tollway. Major road infrastructure typically traverses through and adjoins areas of RU1 zoned land and is considered appropriate to develop for the purposes of highway service centres.	Direction 19
Roads	O	C	Make permissible without consent	Clause 94 (1) under the SEPP (Infrastructure) 2007 permits development for the purpose of a road or road infrastructure facilities to be carried out by or on behalf of a public authority without consent on any land. The amendment is proposed to provide consistency between the two (2) LEPs.	Direction 19
Charter and tourism boating facilities	C	X	Make permissible with consent	A large portion of the Macquarie and Bell Rivers are adjoining land zoned RU1. Charter and tourism boating facilities are considered to be consistent with the objectives of the RU1 zone.	Direction 4
Mooring pens	C	X	Make permissible with consent	A large portion of the Macquarie and Bell Rivers are adjoining land zoned RU1. Mooring pens are considered to be consistent with the objectives of the RU1 zone.	Direction 4
Moorings	C	X	Make permissible with consent	A large portion of the Macquarie and Bell Rivers are adjoining land zoned RU1. Moorings are considered to be consistent with the objectives of the RU1 zone.	Direction 4
Wharf or boating facilities	C	X	Make permissible with consent	A large portion of the Macquarie and Bell Rivers are adjoining land zoned RU1. Wharf or boating facilities are not considered inconsistent with the objectives of the RU1 zone.	Direction 4
Flood mitigation works (any person)	X	C	Make prohibited	Flood mitigation works should not be carried out by any person other than a public authority given it involves altering flood behaviour.	Direction 15
Signage (group term)	C	X	Make permissible with consent	This is a minor change that will make the group term permissible with consent. Each of the subset terms are consistent between the two LEPs and therefore, no land use changes would occur directly as a result of this change.	Direction 10



**RU4 Primary Production Small Lots**

**Principle 1: Consistent approach to zone objectives across similarly zoned lands**

The DLEP and WLEP contain objectives additional to the mandatory objectives provided in the Standard Instrument. The single LEP for the Dubbo Regional LGA is required to have a consistent and consolidated set of objectives incorporating the existing DLEP and WLEP objectives.

Inconsistent, duplicated and repetitive additional objectives are to be consolidated into a single set.

DLEP Additional Zone Objectives	WLEP Additional Zone Objectives	Recommended Additional Objectives	Justification
<ul style="list-style-type: none"> <li>▪ To encourage agriculture activities which meet sustainable natural resource management principles.</li> <li>▪ To ensure land with high potential agricultural productivity is protected from inappropriate use and is conserved for intensive plant agriculture activities.</li> <li>▪ To enable function centres, restaurants and appropriate forms of tourist and visitor accommodation to be developed in conjunction with agricultural uses.</li> </ul>	<ul style="list-style-type: none"> <li>▪ To ensure that any development for the purpose of intensive agriculture is capable of being sustained (environmentally, socially and economically) on the proposed lot.</li> </ul>	<p>Replace the additional objectives with:</p> <ul style="list-style-type: none"> <li>▪ To encourage agriculture activities which meet sustainable natural resource management principles.</li> <li>▪ To ensure land with high potential agricultural productivity is used and capable to be sustained for the purpose of intensive agriculture while being protected from inappropriate uses.</li> <li>▪ To enable function centres, restaurants and appropriate forms of tourist and visitor accommodation to be developed in conjunction with agricultural uses.</li> </ul>	<p>The WLEP only contains one additional zone objective which is similar in nature to that of the DLEP, relating to the sustainable development of intensive agriculture. The additional zone objectives will be combined.</p>

<b>Principle 2: Consistent approach to land use permissibility across similarly zoned lands</b>					
The DLEP and WLEP land use tables are inconsistent with each other. The single LEP is required to have a consistent land use table for each similar zone across the Dubbo Regional LGA.					
Land Use	DLEP	WLEP	Recommendation	Justification	Alignment with Regional Plan
Agriculture (group term)	C	X	Make permissible with consent.	This is a minor change to make the group term permissible with consent. Each of the subset terms are consistent between the two LEPs and therefore, no land use changes would occur directly as a result of this change.	Direction 1
Group homes (group term)	C	X	Make permissible with consent.	Group homes are permissible in RU4 zone pursuant to Clause 42 of the Affordable Housing SEPP.	Direction 25
Permanent group homes	C	X	Make permissible with consent.	Group homes are permissible in RU4 zone pursuant to Clause 42 of the Affordable Housing SEPP.	Direction 25
Transitional group homes	C	X	Make permissible with consent.	Group homes are permissible in RU4 zone pursuant to Clause 42 of the Affordable Housing SEPP.	Direction 25
Rural worker's dwelling	C	X	Make permissible with consent.	Rural worker's dwellings are considered to provide housing choice for both short term and long term rural workers. Rural worker's dwellings are considered to be consistent with the objectives of the RU4 zone.	Direction 27
Tourist and visitor accommodation (group term)	C	X	Make permissible with consent.	Tourist and visitor accommodation (group term) is consistent with the objectives of the RU4 Primary Production Small Lot zone.	Direction 4
Backpacker's accommodation	C	X	Make permissible with consent.	Backpacker's accommodation is consistent with the objectives of the RU4 Primary Production Small Lot zone.	Direction 4
Home occupation (sex services)	X	C	Make prohibited.	Home occupation (sex services) is not a compatible land use in the RU4 zone.	Direction 12
Restaurants or cafes	C	X	Make permissible with consent.	Restaurants or cafes are consistent with the objectives of the RU4 zone and the intent to facilitate restaurants in conjunction with agricultural uses.	Direction 4
Landscaping material supplies	X	C	Make prohibited.	Landscaping material supplies are a type of 'retail premise' and are considered to be inconsistent with the objectives of the RU4 zone. This is not considered to be a compatible land use or the best use of land within this zone. Given RU4 is typically used adjacent to rivers with high levels of agricultural output.	Direction 12
Function centres	C	X	Make permissible with consent.	Function centres are considered to be consistent with the objectives of the RU4 zone and their intent to facilitate function centres to be developed in conjunction with agricultural uses.	Direction 4

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Veterinary hospitals	C	X	Make permissible with consent.	Veterinary hospitals are considered to be consistent with the RU4 objectives.	Direction 12
Rural industries (group term)	X	C	Make prohibited.	Rural industries are considered to be inconsistent with the objectives of the RU4 zone. Rural industries are more appropriately located within heavy industrial zoned areas.	Direction 1 Direction 11 Direction 12
Airstrips	X	C	Make prohibited.	Airstrips, as a standalone development, are considered to be inconsistent with the objectives of the RU4 zone. Given RU4 is typically used adjacent to rivers with high levels of agricultural output.	Direction 12
Helipads	X	C	Make prohibited.	Helipads, as a standalone development, are considered to be inconsistent with the objectives of the RU4 zone. Given RU4 is typically used adjacent to rivers with high levels of agricultural output.	Direction 12
Truck depots	C	X	Make permissible with consent	Truck depots are considered to be consistent with the objectives of the RU4 zone.	Direction 12
Roads	O	C	Make permissible without consent.	Clause 94 (1) under the SEPP (Infrastructure) 2007 permits development for the purpose of a road or road infrastructure facilities to be carried out by or on behalf of a public authority without consent on any land. The amendment is proposed to provide consistency between the two (2) LEPs.	Direction 19
Water supply systems (group term)	X	C	Make prohibited.	This is a minor change to make the group term prohibited. No land use changes would occur directly as a result of this change.	Direction 12
Water storage facilities	X	C	Make prohibited.	Water storage facilities are considered to be inconsistent with the objectives of the RU4 zone. The RU4 zone is predominantly located in close proximity to the Macquarie and Bell Rivers. For this reason, development within this zone must be sympathetic to the adjoining environmental and water resources.	Direction 13 Direction 14
Charter and tourism boating facilities	C	X	Make permissible with consent.	A large portion of the RU4 zone adjoins the Macquarie and Bell Rivers. Charter and tourism boating facilities are considered to be consistent with the objectives of the RU4 zone. The proposal would further diversify the region's tourism market by providing additional access to the river system.	Direction 4
Jetties	C	X	Make permissible with consent	A large portion of the RU4 zone adjoins the Macquarie and Bell Rivers. Jetties are considered to be consistent with the objectives of the RU4 zone and provide further access to the river system in support of the region's tourism market.	Direction 4
Mooring pens	C	X	Make permissible with consent	A large portion of the RU4 zone adjoins the Macquarie and Bell Rivers. Mooring pens are considered to be consistent with the objectives of the RU4 zone and provide further access to the river system in support of the region's tourism market.	Direction 4

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Moorings	C	X	Make permissible with consent	A large portion of the RU4 zone adjoins the Macquarie and Bell Rivers. Moorings are considered to be consistent with the objectives of the RU4 zone and provide further access to the river systems in support of the region's tourism market.	Direction 4
Recreation facilities (outdoor)	C	X	Make permissible with consent	Recreation facilities (outdoor) are considered to be consistent with the objectives of the RU4 zone. This land use has the potential to support tourist development in the RU4 zone.	Direction 4
Wharf or boating facilities	C	X	Make permissible with consent	A large portion of the RU4 zone adjoins the Macquarie and Bell Rivers. Wharf or boating facilities are considered to be consistent with the objectives of the RU4 zone.	Direction 4
Flood mitigation works (any person)	X	C	Make prohibited	Flood mitigation works should not be carried out by any person other than a public authority given it involves altering flood behaviour.	Direction 13 Direction 14
Signage (group term)	C	X	Make permissible with consent	This is a minor change to make the group term permissible with consent. Each of the subset terms are consistent between the two LEPs and therefore, no land use changes would occur directly as a result of this change.	Direction 12

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**RU5 Village**

**Principle 1: Consistent approach to zone objectives across similarly zoned lands**

The DLEP and WLEP contain objectives additional to the mandatory objectives provided in the Standard Instrument. The single LEP for the Dubbo Regional LGA is required to have a consistent and consolidated set of objectives incorporating the existing DLEP and WLEP objectives.

Inconsistent, duplicated and repetitive additional objectives are to be consolidated into a single set.

DLEP Additional Zone Objectives	WLEP Additional Zone Objectives	Recommended Additional Objectives	Justification
<ul style="list-style-type: none"> <li>To encourage and provide opportunities for population and local employment growth commensurate with available services.</li> <li>To minimise the impact of non-residential uses and ensure these areas are in character and compatible with the surrounding residential development.</li> </ul>	<ul style="list-style-type: none"> <li>To ensure buildings and uses are compatible with the character of the village.</li> <li>To permit low scale service activities, meeting the recreational, cultural and commercial needs of the community.</li> </ul>	Replace the additional objectives with: <ul style="list-style-type: none"> <li>To encourage and provide opportunities for population and local employment growth commensurate with available services.</li> <li>To minimise the impact of non-residential uses and ensure these areas are compatible with the surrounding residential development and character of the village.</li> <li>To permit low scale service activities, meeting the recreational, cultural and commercial needs of the community.</li> </ul>	The additional objectives between the DLEP and WLEP are similar. The recommended additional objectives maintain the overall intent of the zone.

**Principle 2: Consistent approach to land use permissibility across similarly zoned lands**

The DLEP and WLEP land use tables are inconsistent with each other. The single LEP is required to have a consistent land use table for each similar zone across the Dubbo Regional LGA.

Land Use	DLEP	WLEP	Recommendation	Justification	Alignment with Regional Plan
Horticulture	C	X	Make permissible with consent.	Horticulture is considered to be consistent with the objectives of the RU5 zone. The minimum lot sizes in this area range from 1,000m <sup>2</sup> to 2,000m <sup>2</sup> , large enough to	Direction 1

				facilitate intensive plant agriculture activities such as the cultivation of fruits, vegetables or flowers.	
Hostels	X	C	Make prohibited	Hostels are considered to be inconsistent with the objectives of the RU5 zone. Hostels are generally higher density developments. This land use requires access to a variety of different services that are not readily available within the village zone and not generally consistent with the character of the villages.	Direction 28
Multi dwelling housing	X	C	Make prohibited	Multi dwelling housing is considered to be high density development and would benefit from being located in close proximity to the CBD and/ or adequate infrastructure. This development is also not considered to be consistent with character of the RU5 Village zone.	Direction 28
Residential flat buildings	X	C	Make prohibited	Residential flat buildings are considered to be a high density development and would benefit from being located in close proximity to the CBD and/ or adequate infrastructure. This development is also not considered to be consistent with character of the RU5 Village zone.	Direction 28
Camping grounds	C	X	Make permissible with consent	Camping grounds are considered to be consistent with the objectives of the RU5 zone. Camping grounds provide an additional alternative to tourist and visitor accommodation within a rural village setting.	Direction 4
Eco-tourist facilities	C	X	Make permissible with consent	A number of the villages are situated in close proximity to ecologically sensitive areas found along the Macquarie and Bell Rivers. These locations would provide opportunity for eco-tourist type development within the RU5 zone.	Direction 4
Home occupations (sex services)	X	C	Make prohibited	Home occupations (sex services) would conflict with other land uses within the RU5 zone.	Direction 12
Cellar door premises	C	X	Make prohibited	Viticulture is a prohibited land use within the RU5 Village zone and as a result a cellar door premises cannot operate in its absence.	Direction 12
Roadside stalls	C	X	Make permissible with consent	Roadside stalls are considered to be consistent with the objectives of the RU5 zone. Typically used for the sale of agricultural produce or hand crafted goods, this land use is considered to be consistent with other land uses within the zone.	Direction 2
Restricted premises	X	C	Make prohibited	Restricted premises are considered to be inconsistent with the objectives of the RU5 zone and would result in land use conflicts within the locale.	Direction 12
Sex services premises (brothels)	X	C	Make prohibited	Sex services premises (brothels) are considered to be inconsistent with the objectives of the RU5 zone. Generally, inconsistent with the character of villages.	Direction 12
High technology industries	X	C	Make prohibited	High technology industries are a type of industrial activity and are considered to be inconsistent with the objectives of RU5 zone. This type of development would be	Direction 12

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				better located in close proximity to appropriate services, including high speed broadband connections.	
Rural industries (group term)	X	C	Make prohibited	Rural industries typically impact on surrounding land uses by way of noise, odour and heavy vehicle traffic. This land use is considered to be inconsistent with the objectives of the RU5 zone.	Direction 12
Agricultural produce industries	X	C	Make prohibited	Agricultural produce industries typically impact on the surrounding land uses by way of noise, odour and heavy vehicle traffic. This land use is considered to be inconsistent with the objectives of the RU5 zone.	Direction 12
Livestock processing industries	X	C	Make prohibited	Livestock processing industries typically impact on the surrounding land uses by way of noise, odour and heavy vehicle traffic. This land use is considered to be inconsistent with the objectives of the RU5 zone.	Direction 12
Sawmill or log processing industries	X	C	Make prohibited	Sawmill or log processing industries typically impact on the surrounding land uses by way of noise and heavy vehicle traffic. This land use is considered to be inconsistent with the objectives of the RU5 zone.	Direction 12
Storage premises (group term)	X	C	Make prohibited	Storage premises would impact on the character of a local village and potentially significantly increase vehicle traffic in the area. This land use is considered to be unsuitable in the RU5 zone.	Direction 12
Self-storage units	X	C	Make prohibited	Self-storage units would impact on the character of a local village and potentially significantly increase vehicle traffic in the area. This land use is considered to be unsuitable in the RU5 zone.	Direction 12
Industrial training facilities	X	C	Make prohibited	Industrial training facilities typically impact on the surrounding land uses by way of noise, odour and heavy vehicle traffic. This land use is considered to be inconsistent with the objectives of the RU5 zone.	Direction 12
Warehouse or distribution centres (group term)	X	C	Make prohibited	Warehouse or distribution centres would impact on the character of the villages and potentially significantly increase vehicle traffic in the area. This land use is considered to be unsuitable in the RU5 zone.	Direction 12
Helipads	X	C	Make prohibited	Helipads are considered to be inconsistent with the objectives of the RU5 zone. This land use may result in additional noise impacts on surrounding developments.	Direction 12
Car parks	X	C	Make prohibited	Car parks are considered to be inconsistent with the objectives of the RU5 zone. Development within the RU5 and surrounding areas is not considered to be significant enough to warrant the demand for independent car parking facilities.	Direction 12
Freight transport facilities	X	C	Make prohibited	Freight transport facilities would impact on the character of a local village and potentially significantly increase vehicle traffic in the area. This land use is considered to be unsuitable in the RU5 zone.	Direction 12

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Passenger transport facilities	X	C	Make prohibited	Passenger transport facilities are considered to be inconsistent with the objectives of the RU5 zone. This land use is considered not to be sympathetic to the character of the villages.	Direction 12
Public administration buildings	X	C	Make prohibited	Public administration buildings are typically constructed in a central location to provide greater accessibility for the community. Given that RU5 zones are somewhat isolated from major services, it is considered to be an inappropriate location to permit this type of development.	Direction 12
Roads	O	C	Make permissible without consent	Clause 94 (1) under the SEPP (Infrastructure) 2007 permits development for the purpose of a road or road infrastructure facilities to be carried out by or on behalf of a public authority without consent on any land.	Direction 19
Sewerage systems (group term)	X	C	Make prohibited	This is a minor change to make the group term prohibited. Each of the subset terms are consistent between the two LEPs and therefore, no land use changes would occur directly as a result of this change.	Direction 12
Waste or resource management facilities (group term)	X	C	Make prohibited	This is a minor change to make the group term prohibited. Each of the subset terms are consistent between the two LEPs and therefore, no land use changes would occur directly as a result of this change.	Direction 12
Water storage facilities	X	C	Make prohibited	Water storage facilities are considered to be inconsistent with the objectives of the RU5 zone. Dams, weirs or reservoirs are not considered appropriate forms of development within the RU5 zone.	Direction 11
Boat building and repair facilities	X	C	Make prohibited	Boat building and repair facilities are considered to be inconsistent with the objectives of the RU5 zone. Although areas of the RU5 zone are located in close proximity to the river system, boats that typically utilise the river are of a recreational nature and therefore do not require the dedicated services of a boat building or repair facility.	Direction 12
Boat launching ramps	C	X	Make permissible with consent	Areas of the Macquarie and Bell Rivers are adjoining land zoned RU5. Boat launching ramps are considered to be consistent with the objectives of the RU5 zone and create opportunities to diversify the Region's tourism offer.	Direction 4
Boat sheds	C	X	Make permissible with consent	Areas of the Macquarie and Bell Rivers are adjoining land zoned RU5. Boat sheds are considered to be consistent with the objectives of the RU5 zone and provide additional security to boat owners on land adjoining the river.	Direction 4
Jetties	C	X	Make permissible with consent	Areas of the Macquarie and Bell Rivers are adjoining land zoned RU5. Jetties are considered to be consistent with the objectives of the RU5 zone. Jetties provide additional recreational and tourist opportunities along the river system.	Direction 4

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Mooring pens	C	X	Make permissible with consent	Areas of the Macquarie and Bell Rivers are adjoining land zoned RU5. Mooring pens are considered to be consistent with the objectives of the RU5 zone. These structures provide additional security and convenience to boat owners utilising the river.	Direction 4
Moorings	C	X	Make permissible with consent	Areas of the Macquarie and Bell Rivers are adjoining land zoned RU5. Moorings are considered to be consistent with the objectives of the RU5 zone. These structures provide additional security and convenience to boat owners utilising the river.	Direction 4
Wharf or boating facilities	C	X	Make permissible with consent	Areas of the Macquarie and Bell Rivers are adjoining land zoned RU5. Wharf or boating facilities are considered to be consistent with the objectives of the RU5 zone. These facilities provide additional opportunity for tourist activity alongside the river system.	Direction 4
Cemeteries	C	X	Make permissible with consent	Cemeteries are considered to be consistent with the objectives of the RU5 zone. Cemeteries typically comprise of areas of open greenspace and are consistent with the semi-rural character of the RU5 zone.	Direction 12
Flood mitigation works (any person)	X	C	Make prohibited	Flood mitigation works should not be carried out by any person other than a public authority given it involves altering flood behaviour.	Direction 14 Direction 15
Advertising structures	X	C	Make prohibited	Advertising structures are considered to be inconsistent with the objectives of the RU5 zone. These structures generally have impacts on the visual amenity of the locality.	Direction 12

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**R1 General Residential**

**Principle 1: Consistent approach to zone objectives across similarly zoned lands**

The DLEP and WLEP contain objectives additional to the mandatory objectives provided in the Standard Instrument. The single LEP for the Dubbo Regional LGA is required to have a consistent and consolidated set of objectives incorporating the existing DLEP and WLEP objectives.

Inconsistent, duplicated and repetitive additional objectives are to be consolidated into a single set.

DLEP Additional Zone Objectives	WLEP Additional Zone Objectives	Recommended Additional Objectives	Justification
<ul style="list-style-type: none"> <li>To ensure development is consistent with the character of the immediate locality.</li> </ul>	Nil	Adopt the DLEP additional objective with no changes.	N/A

**Principle 2: Consistent approach to land use permissibility across similarly zoned lands**

The DLEP and WLEP land use tables are inconsistent with each other. The single LEP is required to have a consistent land use table for each similar zone across the Dubbo Regional LGA.

Land Use	DLEP	WLEP	Recommendation	Justification	Alignment with Regional Plan
Camping grounds	X	C	Make prohibited	Camping grounds are considered to be inconsistent with the objectives of the R1 zone. The R1 zone is a primary residential zone where camping grounds are inconsistent with the character of residential areas.	Direction 12
Caravan parks	X	C	Make prohibited	Caravan parks are considered to be inconsistent with the objectives of the R1 zone. The R1 zone is a primary residential zone where caravan parks are inconsistent with the character of residential areas.	Direction 12
Home occupations (sex services)	X	C	Make prohibited	Home occupations (sex services) are considered to be inconsistent with the objectives of the R1 zone. This development type would more than likely result in land use conflicts within the residential area.	Direction 12
Restaurants or cafes	C	X	Make permissible with consent	Restaurants or cafes are considered to be consistent with the objectives of the R1 zone.	Direction 4 Direction 12
Take away food & drink premises	X	C	Make prohibited	Take away food and drink premises are considered to be inconsistent with the objectives of the R1 zone given the increased traffic in residential areas.	Direction 12

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Function centres	X	C	Make prohibited	Function centres are considered to be inconsistent with objectives of the R1 zone. Generally, function centres generate traffic and parking requirements as well as noise, usually into the night and therefore would impact on the amenity of a residential areas.	Direction 12
Roads	O	C	Make permissible without consent	Clause 94 (1) under the SEPP (Infrastructure) 2007 permits development for the purpose of a road or road infrastructure facilities to be carried out by or on behalf of a public authority without consent on any land.	Direction 19
Recreation facilities (indoor)	X	C	Make prohibited	Recreation facilities (indoor) are considered to be inconsistent with the objectives of the R1 zone. These facilities are better placed outside of residential zones to avoid land use conflicts.	Direction 12
Recreation facilities (outdoor)	X	C	Make prohibited	Recreation facilities (outdoor) are considered to be inconsistent with the objectives of the R1 zone. These facilities are better placed outside of residential zones to avoid land use conflicts.	Direction 12
Flood mitigation works (any person)	X	C	Make prohibited	Flood mitigation works should not be carried out by any person other than a public authority. These facilities are better placed outside of residential areas to avoid land use conflicts.	Direction 12
Signage (group term)	C	X	Make permissible with consent	This is a minor change to make the group term permissible with consent. Each of the subset terms are consistent between the two LEPs and therefore, no land use changes would occur directly as a result of this change.	N/A

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**R2 Low Density Residential**

**Principle 1: Consistent approach to zone objectives across similarly zoned lands**

The DLEP and WLEP contain objectives additional to the mandatory objectives provided in the Standard Instrument. The single LEP for the Dubbo Regional LGA is required to have a consistent and consolidated set of objectives incorporating the existing DLEP and WLEP objectives.

Inconsistent, duplicated and repetitive additional objectives are to be consolidated into a single set.

DLEP Additional Zone Objectives	WLEP Additional Zone Objectives	Recommended Additional Objectives	Justification
<ul style="list-style-type: none"> <li>To ensure development is consistent with the character of the immediate locality.</li> <li>To encourage low density housing within a landscaped setting on the fringe of the Dubbo urban area.</li> </ul>	Nil	Adopt the DLEP additional objectives with no changes.	N/A

**Principle 2: Consistent approach to land use permissibility across similarly zoned lands**

The DLEP and WLEP land use tables are inconsistent with each other. The single LEP is required to have a consistent land use table for each similar zone across the Dubbo Regional LGA.

Land Use	DLEP	WLEP	Recommendation	Justification	Alignment with Regional Plan
Home occupations (sex services)	X	C	Make prohibited	Home occupations (sex services) are considered to be inconsistent with the objectives of the R2 zone. This land use has the potential to create land use conflicts within a residential area.	Direction 12
Health consulting rooms	C	X	Make permissible with consent	Health consulting rooms are permissible with consent in the R2 zone pursuant to Clause 57 of the SEPP (Infrastructure) 2007.	Direction 5



Roads	O	C	Make permissible without consent	Clause 94 (1) under the SEPP (Infrastructure) 2007 permits development for the purpose of a road or road infrastructure facilities to be carried out by or on behalf of a public authority without consent on any land.	Direction 19
Recreation areas	C	X	Make permissible with consent	Recreation areas are considered to be consistent with the objectives of the R2 zone. Development of recreation areas within the R2 zone improves access to open greenspace and the resulting health benefits that it provides.	Direction 29
Recreation facilities (indoor)	X	C	Make prohibited	Recreation facilities (indoor) are considered to be inconsistent with the objectives of the R2 zone. These facilities are better placed outside of residential areas to avoid land use conflicts.	Direction 12
Recreation facilities (outdoor)	X	C	Make prohibited	Recreation facilities (outdoor) are considered to be inconsistent with the objectives of the R1 zone. These facilities are better placed outside of residential areas to avoid land use conflicts.	Direction 12
Flood mitigation works (any person)	X	C	Make prohibited	Flood mitigation works should not be carried out by any person other than a public authority. These facilities are better placed outside of residential areas to avoid land use conflicts.	Direction 13 Direction 14
Signage	C	X	Make permissible with consent	This is a minor change to make the group term permissible with consent. Each of the subset terms are consistent between the two LEPs and therefore, no land use changes would occur directly as a result of this change.	N/A

## R5 Large Lot Residential

### Principle 1: Consistent approach to zone objectives across similarly zoned lands

The DLEP and WLEP do not contain any objectives additional to the mandatory objectives provided in the Standard Instrument.

DLEP Additional Zone Objectives	WLEP Additional Zone Objectives	Recommended Additional Objectives	Justification
Nil	Nil	N/A	N/A

### Principle 2: Consistent approach to land use permissibility across similarly zoned lands

The DLEP and WLEP land use tables are inconsistent with each other. The single LEP is required to have a consistent land use table for each similar zone across the Dubbo Regional LGA.

Land Use	DLEP	WLEP	Recommendation	Justification	Alignment with Regional Plan
Extensive agriculture (group term)	O	X	Make permissible without consent	Extensive agriculture is considered to be consistent with the objectives of the R5 zone. This land is typically located in the peripheral urban areas of both Dubbo and Wellington usually adjoining existing rural lands. This activity is considered appropriate in the R5 zone given the larger, semi-rural nature of the land.	Direction 1
Beekeeping	O	X	Make permissible without consent	Beekeeping is considered to be consistent with the objectives of the R5 zone. This activity is considered to be low impact and sensitive to the surrounding land uses.	Direction 1
Dairies (pasture-based)	C	X	Make permissible with consent	Dairies (pasture-based) are considered to be consistent with the objectives of the R5 zone. The land is generally situated amongst other rural land and should be open to potential agricultural activity.	Direction 1
Horticulture	C	X	Make permissible with consent	Horticulture is considered to be consistent with the objectives of the R5 zone. Given the lot sizes this land use is able to be undertaken in a way that is sensitive to the character of the area.	Direction 1
Farm buildings	C	X	Make permissible with consent	Farm buildings are considered to be consistent with the objectives of the R5 zone. As a variety of different agricultural land uses are proposed to be permissible with and without consent within this zone, it is also considered appropriate to create provision for farm buildings in support of these activities.	Direction 2
Forestry	C	X	Make permissible with consent	Forestry is considered to be consistent with the objectives of the R5 zone. Forestry includes weed and pest control management activities.	Direction 13 Direction 15

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Forestry (any person)	C	X	Make permissible with consent	Forestry (any person) is considered to be consistent with the objectives of the R5 zone. Forestry includes weed and pest control management activities.	Direction 13 Direction 15
Residential accommodation (group term)	C	X	Make permissible with consent	Residential accommodation is considered to be consistent with the objectives of the R5 zone.	Direction 25
Dual occupancies (group term)	X	C	Make permissible with consent	Dual occupancies are considered to be consistent with the objectives of the R5 zone. Dual occupancies (detached) will remain prohibited however the open R5 zone will result in the group term being permissible.	Direction 28
Dual occupancies (attached)	X	C	Make permissible with consent	Dual occupancies (attached) are considered to be consistent with the objectives of the R5 zone. The intent of the R5 Large Lot Residential zone is to ensure that development is low density and does not hinder the orderly expansion of the urban area.	Direction 28
Secondary Dwellings	C	X	Make permissible with consent	Secondary dwellings are permissible with consent under the provisions of the SEPP (Affordable Rental Housing) 2009.	Direction 25
Tourist and Visitor Accommodation (group term)	C	X	Make permissible with consent	Tourist and Visitor Accommodation is consistent with the objectives of the R5 zone.	Direction 4
Backpackers accommodation	C	X	Make permissible with consent	Backpacker's accommodation is considered to be consistent with the objectives of the R5 zone. This form of tourist and visitor accommodation provides for affordable short-term and temporary housing options for seasonal workers.	Direction 4
Exhibition villages	C	X	Make permissible with consent	Exhibition homes are currently permissible under both LEPs. Allowing exhibition villages as permissible development in the R5 zone would enable the construction of multiple exhibition homes at once. These homes are generally sold as residential dwellings at the end of their life and remain consistent with the objectives of the R5 zone.	Direction 25
Home occupations (sex services)	X	C	Make prohibited	Home occupation sex services are considered to be inconsistent with the objectives of the R5 zone.	Direction 12
Plant nurseries	C	X	Make permissible with consent	Plant nurseries are considered to be consistent with the objectives of the R5 zone. Lot sizes within this zone are typically large enough to support the scale at which a plant nursery could operate.	Direction 2
Neighbourhood shops	C	X	Make permissible with consent	Neighbourhood shops are considered to be consistent with the objectives of the R5 zone.	Direction 12
Veterinary hospitals	C	X	Make permissible with consent	Veterinary hospitals are considered to be consistent with the objectives of the R5 zone. These developments provide additional support to village and agricultural land uses and improved access to animal health services.	Direction 12

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Respite day care centres	C	X	Make permissible with consent	Respite day care centres are considered to be consistent with the objectives of the R5 zone. These centres provide greater access to health care facilities.	Direction 5
Places of public worship	C	X	Make permissible with consent	Places of public worship are considered to be consistent with the objectives of the R5 zone. A place of public worship is a type of community facility that can fit within the existing character of a village.	Direction 12
Agricultural produce industries	C	X	Make permissible with consent	Agricultural produce industries are considered to be consistent with objectives with R5 zone.	Direction 2
Electricity generating works	C	X	Make permissible with consent	The SEPP (Infrastructure) 2007 permits a number of electricity generating developments subject to consent.	Direction 21
Roads	O	C	Make permissible without consent	Clause 94 (1) under the SEPP (Infrastructure) 2007 permits development for the purpose of a road or road infrastructure facilities to be carried out by or on behalf of a public authority without consent on any land.	Direction 19
Water storage facilities	X	C	Make prohibited	Water storage facilities are considered to be inconsistent with the objectives of the R5 zone. The zone typically comprises of privately owned lifestyle blocks that are not optimal for harbouring water storage infrastructure.	Direction 13 Direction 14
Boat launching ramps	C	X	Make permissible with consent	Boat launching ramps are considered to be consistent with the objectives of the R5 zone. A number of properties zoned R5 are located along the Macquarie and Bell Rivers and would benefit from improved access to the rivers system.	Direction 4
Jetties	C	X	Make permissible with consent	Jetties are considered to be consistent with the objectives of the R5 zone. A number of properties zoned R5 are located along the Macquarie and Bell Rivers and would benefit from improved access to the river system.	Direction 4
Mooring pens	C	X	Make permissible with consent	Mooring pens are considered to be consistent with the objectives of the R5 zone. A number of properties zoned R5 are located along the Macquarie and Bell Rivers. Mooring pens would provide opportunity for boat owners to secure their vessels.	Direction 4
Moorings	C	X	Make permissible with consent	Moorings are considered to be consistent with the objectives of the R5 zone. A number of properties zoned R5 are located along the Macquarie and Bell Rivers. Moorings would provide opportunity for boat owners to secure their vessels.	Direction 4
Recreation facilities (outdoor)	X	C	Make prohibited	Recreation facilities (outdoor) are considered to be inconsistent with the objectives of the R5 zone. This development type has the potential to disrupt the amenity of the local area.	Direction 12
Water recreation structures	C	X	Make permissible with consent	Water recreation structures are considered to be consistent with the objectives of the R5 zone. A number of properties zoned R5 are located along the Macquarie and Bell Rivers. These structures would support a diversified tourism industry through enabling access into and alongside the river.	Direction 4
Wharf or boating facilities	C	X	Make permissible with consent	Wharf or boating facilities are considered to be consistent with the objectives of the R5 zone. A number of properties zoned R5 are located along the Macquarie and	Direction 4

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				Bell Rivers and additional tourist activity could be generated from this development type.	
Flood mitigation works (any person)	X	C	Make prohibited	Flood mitigation works should not be carried out by any person other than a public authority. These facilities are better placed outside of residential areas to avoid land use conflicts.	Direction 13 Direction 14
Signage (group term)	C	X	Make permissible with consent	This is a minor change to make the group term permissible with consent. Each of the subset terms are consistent between the two LEPs and therefore, no land use changes would occur directly as a result of this change.	N/A

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**B2 Local Centre**

**Principle 1: Consistent approach to zone objectives across similarly zoned lands**

The DLEP and WLEP contain objectives additional to the mandatory objectives provided in the Standard Instrument. The single LEP for the Dubbo Regional LGA is required to have a consistent and consolidated set of objectives incorporating the existing DLEP and WLEP objectives.

Inconsistent, duplicated and repetitive additional objectives are to be consolidated into a single set.

DLEP Additional Zone Objectives	WLEP Additional Zone Objectives	Recommended Additional Objectives	Justification
<ul style="list-style-type: none"> <li>To ensure Orana Mall remains primarily a retail centre that allows for land use activities expected to fulfil a local centre role.</li> <li>To protect and recognise land within the zone as providing a second order retail focus in the commercial hierarchy of the City of Dubbo.</li> <li>To ensure that office premises only form a minor component of the land use activities within Orana Mall.</li> </ul>	Nil	Replace the additional objectives with: <ul style="list-style-type: none"> <li>To ensure Orana Mall remains primarily a retail centre that allows for land use activities expected to fulfil a local centre role.</li> <li>To protect and recognise Orana Mall as being a second order centre in the commercial centres hierarchy for Dubbo.</li> <li>To ensure that office premises only form a minor component of the land use activities within Orana Mall.</li> </ul>	Minor changes have been made to the existing objectives relating to Orana Mall as a result of the Dubbo Employment Lands Strategy being adopted.

**Principle 2: Consistent approach to land use permissibility across similarly zoned lands**

The DLEP and WLEP land use tables are inconsistent with each other. The single LEP is required to have a consistent land use table for each similar zone across the Dubbo Regional LGA.

Land Use	DLEP	WLEP	Recommendation	Justification	Alignment with Regional Plan
Residential Accommodation (group term)	X	C	Make prohibited	Residential accommodation is a group term. Further changes to land use permissibility will be facilitated through the following sub-terms.	Direction 10

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Attached dwellings	X	C	Make permissible with consent through APU	The strategic intent and application of attached dwellings are not considered to be inconsistent with the objectives of the B2 zone. Permissible with consent through APU provisions.	Direction 10
Dual occupancies (group term)	X	C	Make permissible with consent through APU	The strategic intent and application of dual occupancies (group term) are not considered to be inconsistent with the objectives of the B2 zone. Permissible with consent through APU provisions.	Direction 10
Dual occupancies (attached)	X	C	Make permissible with consent through APU	The strategic intent and application of dual occupancies (attached) are not considered to be inconsistent with the objectives of the B2 zone. Permissible with consent through APU provisions.	Direction 10
Dual occupancies (detached)	X	C	Make permissible with consent through APU	The strategic intent and application of dual occupancies (detached) are not considered to be inconsistent with the objectives of the B2 zone. Permissible with consent through APU provisions.	Direction 10
Dwelling houses	X	C	Make permissible with consent through APU	The strategic intent and application of dwelling houses are not considered to be inconsistent with the objectives of the B2 zone. Permissible with consent through APU provisions.	Direction 10
Group homes (group term)	X	C	Make permissible with consent through APU	The strategic intent and application of group homes (group term) are not considered to be inconsistent with the objectives of the B2 zone. Permissible with consent through APU provisions.	Direction 10
Permanent group homes	X	C	Make permissible with consent through APU	The strategic intent and application of permanent group homes are not considered to be inconsistent with the objectives of the B2 zone. Permissible with consent through APU provisions.	Direction 10
Transitional group homes	X	C	Make permissible with consent through APU	The strategic intent and application of transitional group homes are not considered to be inconsistent with the objectives of the B2 zone. Permissible with consent through APU provisions.	Direction 10
Hostels	X	C	Make permissible with consent through APU	The strategic intent and application of hostels are not considered to be inconsistent with the objectives of the B2 zone. Permissible with consent through APU provisions.	Direction 10
Multi dwelling housing	X	C	Make permissible with consent through APU	The strategic intent and application of multi dwelling housing are not considered to be inconsistent with the objectives of the B2 zone. Permissible with consent through APU provisions.	Direction 10
Residential flat buildings	X	C	Make permissible with consent through APU	The strategic intent and application of residential flat buildings are not considered to be inconsistent with the objectives of the B2 zone. Permissible with consent through APU provisions.	Direction 10
Secondary dwellings	X	C	Make permissible with consent through APU	The strategic intent and application of secondary dwellings are not considered to be inconsistent with the objectives of the B2 zone. Permissible with consent through APU provisions.	Direction 10

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Semi-detached dwellings	X	C	Make permissible with consent through APU	The strategic intent and application of semi-detached dwellings are not considered to be inconsistent with the objectives of the B2 zone. Permissible with consent through APU provisions.	Direction 10
Bed and breakfast accommodation	X	C	Make permissible with consent through APU	The B2 zone objectives of each former LGA are inconsistent. Permissible with consent through APU provisions.	Direction 10
Farm stay accommodation	X	C	Make prohibited	Farm stay accommodation is considered to be inconsistent with the objectives of the B2 zone.	Direction 10
Home occupations (sex services)	X	C	Make prohibited	Home occupations (sex services) are considered to be inconsistent with the objectives of the B2 zone. This form of development is likely to cause land use conflict within this zone.	Direction 12
Sex services premises (brothels)	X	C	Make prohibited	Sex services premises (brothels) are considered to be inconsistent with the objectives of the B2 zone. This form of development is considered to cause land use conflict within this zone.	Direction 12
Wholesale supplies	X	C	Make prohibited	Wholesale supplies are considered to be inconsistent with the objectives of the B2 zone. The focus is to primarily facilitate retail, business, entertainment and community uses.	Direction 12
Research stations	X	C	Make prohibited	Research stations are considered to be inconsistent with the objectives of the B2 zone. The B2 zone is not identified under the SEPP (Infrastructure) as a prescribed zone to facilitate research stations. These stations are typically established within the rural zones to offer research based support to agricultural practices.	Direction 12
High technology industries	X	C	Make prohibited	High technology industries are considered to be inconsistent with the objectives of the B2 zone. High technology industries fall under the group term, light industry. The IN2 light industrial zone would be better suited to accommodate this type of development.	Direction 12
Industrial training facilities	X	C	Make prohibited	Industrial training facilities are considered to be inconsistent with the objectives of the B2 zone. These facilities are categorised as industrial land uses and as such would be better placed within an industrial zone outside of a local centre.	Direction 12
Vehicle repair stations	X	C	Make prohibited	Vehicle repair stations are considered to be inconsistent with the objectives of the B2 zone. Similar to other industrial land uses, this development type would be better positioned within an industrial zone outside of the local centre.	Direction 12
Warehouse or distribution centres (group term)	X	C	Make prohibited	Warehouse or distribution centres are considered to be inconsistent with the objectives of the B2 zone. In consideration of the typical size and scale of these developments, they would operate more efficiently within an industrial zone or enterprise corridor.	Direction 12

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Public administration buildings	X	C	Make permissible with consent	Public administration buildings are considered to be consistent with the objectives of the B2 zone.	Direction 12
Roads	O	C	Make permissible without consent	Clause 94 (1) under the SEPP (Infrastructure) 2007 permits development for the purpose of a road or road infrastructure facilities to be carried out by or on behalf of a public authority without consent on any land.	Direction 19
Sewerage systems (group term)	X	C	Make prohibited	This is a minor change to make the group term prohibited. Each of the subset terms are consistent between the two LEPs and therefore, no land use changes would occur directly as a result of this change.	Direction 12
Waste or resource management facilities (group term)	X	C	Make prohibited	This is a minor change to make the group term permissible with consent. Each of the subset terms are consistent between the two LEPs and therefore, no land use changes would occur directly as a result of this change.	Direction 12
Mortuaries	X	C	Make prohibited	Mortuaries are considered to be inconsistent with the objectives of the B2 zone. The B2 zone is typically introduced to accommodate commercial land uses including localised services to the community. Mortuaries are not considered to be appropriate development in the B2 zone.	Direction 12
Flood mitigation works (any person)	X	C	Make prohibited	Flood mitigation works should not be carried out by any person other than a public authority. These facilities are better placed outside of commercial area to avoid land use conflicts.	Direction 13 Direction 15
Advertising structures	X	C	Make prohibited	Advertising structures are considered to be inconsistent with the objectives of the B2 zone and detract from the visual amenity of the area.	Direction 29

**B6 Enterprise Corridor**

**Principle 1: Consistent approach to zone objectives across similarly zoned lands**

The DLEP and WLEP contain objectives additional to the mandatory objectives provided in the Standard Instrument. The single LEP for the Dubbo Regional LGA is required to have a consistent and consolidated set of objectives incorporating the existing DLEP and WLEP objectives.

Inconsistent, duplicated and repetitive additional objectives are to be consolidated into a single set.

DLEP Additional Zone Objectives	WLEP Additional Zone Objectives	Recommended Additional Objectives	Justification
<ul style="list-style-type: none"> <li>To facilitate a mix of business and retail development on the Mitchell, Newell and Golden Highways that services the needs of the travelling public.</li> </ul>	<ul style="list-style-type: none"> <li>To provide for residential uses, but only as part of a mixed use development.</li> <li>To enable a mix of business and warehouse uses, and bulky goods premises that require a large floor area, in locations that are close to, and that support the viability of centres.</li> </ul>	<p>Remove existing WLEP and DLEP additional objectives and replace with the following:</p> <ul style="list-style-type: none"> <li>To facilitate a mix of business and retail development along major roads, in locations that are close to, and that support the viability of, centres.</li> </ul>	<p>Existing locations of B6 zoning throughout the LGA are not considered to be suitable for residential development. Group homes and hostels should typically be located within residential or rural zones where land use conflicts are avoided and adequate servicing can be provided.</p> <p>It is therefore proposed to remove the additional objective from the WLEP that relates to permissibility of residential uses within the B6 zone.</p> <p>It is proposed to combine the remaining additional objective from both the DLEP and WLEP as it has a similar intent</p>

**Principle 2: Consistent approach to land use permissibility across similarly zoned lands**

The DLEP and WLEP land use tables are inconsistent with each other. The single LEP is required to have a consistent land use table for each similar zone across the Dubbo Regional LGA.

Land Use	DLEP	WLEP	Recommendation	Justification	Alignment with Regional Plan
Group homes (group term)	X	C	Make prohibited	Group homes are considered to be inconsistent with the objectives of the B6 zone. To avoid land use conflicts and provide better amenity to the residents, this development type is better suited in proximity to other residential development.	Direction 12
Permanent group homes	X	C	Make prohibited	Permanent group homes are considered to be inconsistent with the objectives of the B6 zone. To avoid land use conflicts and provide better amenity to the residents, this development type is better suited in proximity to other residential development.	Direction 12
Transitional group homes	X	C	Make prohibited	Transitional group homes are considered to be inconsistent with the objectives of the B6 zone. To avoid land use conflicts and provide better amenity to the residents, this development type is better suited in proximity to other residential development.	Direction 12
Hostels	X	C	Make prohibited	Hostels are considered to be inconsistent with the objectives of the B6 zone. To avoid land use conflicts and provide better amenity for residents, this development type is better suited in proximity to other residential development.	Direction 12
Bed & breakfast accommodation	X	C	Make prohibited	Bed and breakfast accommodation relies upon the use of an existing dwelling. Dwelling houses are prohibited under the provisions of the existing DLEP and WLEP.	Direction 12
Home occupations (sex services)	X	C	Make prohibited	Home occupations (sex services) are considered to be inconsistent with objectives of the B6 zone.	Direction 12
Commercial premises (group term)	X	C	Make prohibited	Commercial premises is a group term and changes to this term will not result in any significant impacts. Additional amendments will be undertaken in respect of the sub terms.	N/A
Office premises	X	C	Make prohibited	Permitting office premises development adjoining a major road network surrenders the opportunity for other uses that utilise the proximity of these networks. Permitting offices in the B6 zone would undermine the commercial centres hierarchy contained within the Dubbo Employment Lands Strategy.	Direction 12
Retail premises (group term)	X	C	Make prohibited	Retail premises is a group term and any changes to the permissibility of this group term is considered to be of minor significance. Additional amendments will be made to the sub terms.	Direction 12
Food and drink premises	X	C	Make prohibited	Food and drink premises as a group term is considered to be inconsistent with the objectives of the B6 zone. Restaurants or cafes and take away food and drink premises will remain permissible with consent in the B6 zone.	Direction 12
Pubs	X	C	Make prohibited	Pubs are considered to be inconsistent with the objectives of the B6 zone. Existing Pub is located at 3 Mitchell Hwy, Wellington. Further investigation is needed to ascertain whether an additional permitted use is required on the land.	Direction 12

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Small bars	X	C	Make prohibited	Small bars are considered to be inconsistent with the objectives of the B6 zone. More appropriate locations would include commercial centres or where synergies exist with recreational facilities.	Direction 12
Kiosks	X	C	Make prohibited	Kiosks are considered to be inconsistent with the objectives of the B6 zone. A more appropriate location would include the commercial centres.	Direction 12
Markets	X	C	Make prohibited	Markets are considered to be inconsistent with the objectives of the B6 zone. More appropriate locations would include commercial centres (i.e. B2 Local Centre zone) and tourist zone (i.e. SP3 Tourist zone).	Direction 12
Neighbourhood shops	C	X	Make permissible with consent	Neighbourhood shops are considered to be consistent with the objectives of the B6 zone. These shops provide for added convenience to meet the day to day needs of people who work in the local area as well as passing motorists. A floor space limit of 150m <sup>2</sup> is required by the LEP.	Direction 10
Timber yards	C	X	Make permissible with consent	Timber yards are considered to be consistent with the objectives of the B6 zone. The proximity of the B6 zone to major road networks facilitates convenient access for trucks and other heavy vehicles.	Direction 10
Amusement centres	C	X	Make permissible with consent	Amusement centres are not considered to be inconsistent with the objectives of the B6 zone. These centres provide for additional synergies between other permissible land uses.	Direction 12
Industrial training facilities	X	C	Make prohibited	Industrial training facilities are considered to be inconsistent with the objectives of the B6 zone. These facilities do not typically require frequent access by passenger vehicles or heavy vehicle traffic.	Direction 12
Helipads	X	C	Make prohibited	Helipads are not considered to be consistent with the objectives of the B6 zone. This development may however be achieved as ancillary development in support to other permitted land uses.	Direction 12
Freight transport facilities	C	X	Make permissible with consent	Freight transport facilities are considered to be consistent with the objectives of the B6 zone. B6 zoned land is strategically located close to main roads and offers direct access to the State's road network. Freight transport facilities will capitalise on land within the B6 zone.	Direction 10 Direction 12 Direction 18
Roads	O	C	Make permissible without consent	Clause 94 (1) under the SEPP (Infrastructure) 2007 permits development for the purpose of a road or road infrastructure facilities to be carried out by or on behalf of a public authority without consent on any land.	Direction 19
Sewerage systems (group term)	X	C	Make prohibited	This is a minor change to make the group term prohibited. Each of the subset terms are consistent between the two LEPs and therefore, no land use changes would occur directly as a result of this change.	Direction 12
Waste or resource management	X	C	Make prohibited	This is a minor change to make the group term prohibited. Changes are to be made to the subset terms.	Direction 12

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facilities (group term)					
Waste or resource transfer stations	X	C	Make permissible with consent	The State Environmental Planning Policy (Infrastructure) 2007 permits with consent, development for the purposes of a waste or resource transfer station	N/A
Boat building and repair facilities	X	C	Make prohibited	Boat building and repair facilities are not considered to be consistent with the objectives of the B6 zone. These facilities do not require direct access to major road networks.	Direction 12
Recreation facilities (indoor)	X	C	Make prohibited	Recreational facilities (indoor) contain a wide variety of recreational uses including squash courts, swimming pools, gymnasium, bowling alleys and the like. As B6 business enterprise zones are located adjacent to main road networks and as recreational facilities have the potential to generate significant levels of parking and traffic, they are not ideally suited in the B6 zone. The permissibility of such use in the B6 zone would have unintended impacts on Dubbo's strategically planned B6 precincts considered within the Employment Lands Strategy.	Direction 12
Mortuaries	X	C	Make prohibited	Mortuaries are not considered to be consistent with the objectives of the B6 zone. This development does not require direct access to major road networks.	Direction 12
Flood mitigation works (any person)	X	C	Make prohibited	Flood mitigation works should not be carried out by any person other than a public authority. These facilities are better placed outside of residential areas to avoid land use conflicts.	Direction 13 Direction 15
Advertising structures	X	C	Make prohibited	Advertising structures are not considered to be consistent with the objectives of the B6 zone and negatively impact on the visual aesthetic of the area.	Direction 12

**IN2 Light Industrial**

**Principle 1: Consistent approach to zone objectives across similarly zoned lands**

The DLEP and WLEP contain objectives additional to the mandatory objectives provided in the Standard Instrument. The single LEP for the Dubbo Regional LGA is required to have a consistent and consolidated set of objectives incorporating the existing DLEP and WLEP objectives.

Inconsistent, duplicated and repetitive additional objectives are to be consolidated into a single set.

DLEP Additional Zone Objectives	WLEP Additional Zone Objectives	Recommended Additional Objectives	Justification
<ul style="list-style-type: none"> <li>To recognise the Depot Road and McKenzie Street industrial area as providing start up and transport related development opportunities.</li> </ul>	Nil	Adopt the DLEP additional objectives with no changes.	N/A

**Principle 2: Consistent approach to land use permissibility across similarly zoned lands**

The DLEP and WLEP land use tables are inconsistent with each other. The single LEP is required to have a consistent land use table for each similar zone across the Dubbo Regional LGA.

Land Use	DLEP	WLEP	Recommendation	Justification	Alignment with Regional Plan
Home occupations	X	C	Make prohibited	Home occupations are considered to be inconsistent with the objectives of the IN2 zone. Dwellings are prohibited in the IN2 zone and are required for a home occupation to operate.	Direction 12
Home businesses	X	C	Make prohibited	Home businesses are considered to be inconsistent with the objectives of the IN2 zone. Dwellings are prohibited in the IN2 zone and are required for a home business to operate.	Direction 12
Home occupations (sex services)	X	C	Make prohibited	Home occupations (sex services) are considered to be inconsistent with the objectives of the IN2 zone. Dwellings are prohibited in the IN2 zone and are required for a home occupation (sex services) to operate.	Direction 12



Sex services premises (brothels)	X	C	Make prohibited	Sex services brothels are considered to be inconsistent with the objectives of the IN2 zone. Sex services premises are considered to cause land use conflict with other developments within the area.	Direction 12
Health consulting rooms	C	X	Make permissible with consent	Although dwelling houses are not permitted within the IN2 zone, a number of existing dwellings remain occupied in north Dubbo industrial precinct. This development is considered to be consistent with the objectives of the IN2 zone and can be facilitated by existing dwellings.	Direction 5
Medical centres	C	X	Make permissible with consent	Medical centres are considered to be consistent with the objectives of the IN2 zone. Creating provision for these centres within the IN2 zone would increase worker's access to medical resources in employment lands areas.	Direction 5
Educational establishments (group term)	C	X	Make permissible with consent	Educational establishments are a group term and any changes to this group term are considered to be of minor significance.	Direction 6
Schools	C	X	Make permissible with consent	Schools are considered to be consistent with the objectives of the IN2 zone. Permissibility of this land use would expand education and training opportunities within the local area.	Direction 6
Research stations	X	C	Make prohibited	Research stations are considered to be inconsistent with the objectives of the IN2 zone. This land use is typically used for the purposes of agriculture, environmental, fisheries, forestry, minerals or soil conservation research, these uses are not undertaken within the IN2 zone.	Direction 12
Industries	X	C	Make prohibited	The term industry is considered to be a group term and therefore any changes to its permissibility would have minimal impact. Industries are also considered to be consistent with the objectives of the IN2 zone.	Direction 12 Direction 10
Liquid fuel depots	C	X	Make permissible with consent	Liquid fuel depots are considered to be consistent with the objectives of the IN2 zone. This land use is categorised as industrial and is consistent with the local area.	Direction 12
Helipads	X	C	Make prohibited	Helipads are considered to be inconsistent with the objectives of the IN2 zone and could potentially create land use conflict within the area.	Direction 12
Car parks	C	X	Make permissible with consent	Car parks are considered to be consistent with the objectives of the IN2 zone. The characteristics and location of the IN2 zone are considered to be appropriate to facilitate a car park development often required to service light industrial development and other permissible land uses.	Direction 10
Highway service centres	C	X	Make permissible with consent	Highway service centres are considered to be consistent with the objectives of the IN2 zone. These centres support the refuelling and servicing needs of local and passing vehicles.	Direction 10

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Roads	O	C	Make permissible without consent	Clause 94 (1) under the SEPP (Infrastructure) 2007 permits development for the purpose of a road or road infrastructure facilities to be carried out by or on behalf of a public authority without consent on any land.	Direction 19
Sewerage systems (group term)	X	C	Make prohibited	Sewerage systems is a group term and any changes to this term would be of minor significance. Amendments are proposed for the associated sub-terms.	Direction 12
Water recycling facilities	X	C	Make prohibited	Water recycling facilities are considered to be inconsistent with the objectives of the IN2 zone. The IN2 zone is typically reserved for industrial land uses that do not cause adverse impacts on other land uses.	Direction 12
Waste or resource management facilities (group term)	X	C	Make prohibited	Waste resource management facilities is a group term. No impacts will occur as a result of this amendment.	Direction 12
Recreation facilities (major)	X	C	Make prohibited	Recreation facilities (major) are considered to be inconsistent with the objectives of the IN2 zone. These facilities are better suited to a tourist or recreation zone.	Direction 12
Recreation facilities (outdoor)	X	C	Make prohibited	Recreation facilities (outdoor) are considered to be inconsistent with the objectives of the IN2 zone. These facilities are better suited to a tourist or recreation zone.	Direction 12
Flood mitigation works (any person)	X	C	Make prohibited	Flood mitigation works should not be carried out by any person other than a public authority. These facilities are better placed outside of residential areas to avoid land use conflicts.	Direction 13 Direction 15
Advertising Structures	X	C	Make prohibited	Advertising structures are considered to be inconsistent with the objectives of the IN2 zone as they impact the visual amenity of the area.	Direction 12

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**SP3 Tourist**

**Principle 1: Consistent approach to zone objectives across similarly zoned lands**

The DLEP and WLEP contain objectives additional to the mandatory objectives provided in the Standard Instrument. The single LEP for the Dubbo Regional LGA is required to have a consistent and consolidated set of objectives incorporating the existing DLEP and WLEP objectives.

Inconsistent, duplicated and repetitive additional objectives are to be consolidated into a single set.

DLEP Additional Zone Objectives	WLEP Additional Zone Objectives	Recommended Additional Objectives	Justification
<ul style="list-style-type: none"> <li>• To recognise the importance of the Taronga Western Plains Zoo as a key tourist facility within the area of the City of Dubbo.</li> <li>• To facilitate tourist-orientated development along major transport corridors and at key nodes throughout the City of Dubbo.</li> <li>• To ensure that further development in the Cobra Street and Whylandra Street precincts will not interfere with established uses on adjoining residentially zoned land.</li> <li>• To ensure that development in the Camp Road precinct will not interfere with the continued operation of the Taronga Western Plains Zoo.</li> </ul>	<ul style="list-style-type: none"> <li>• To protect and enhance the natural and environmental qualities that attract tourists and visitors to the area.</li> </ul>	<p>Adopt both the DLEP and WLEP additional objectives with minor changes to DLEP objectives.</p> <ul style="list-style-type: none"> <li>• To recognise the importance of the Taronga Western Plains Zoo as a key tourist facility within the area.</li> <li>• To facilitate tourist-orientated development along major transport corridors and at key nodes.</li> <li>• To ensure that further development in the Cobra Street and Whylandra Street precincts will not interfere with established uses on adjoining residentially zoned land.</li> <li>• To ensure that development in the Camp Road precinct will not interfere with the continued operation of the Taronga Western Plains Zoo.</li> <li>• To protect and enhance the natural and environmental qualities that attract tourists and visitors to the area.</li> </ul>	<p>To provide objectives which provide strategic direction for both Dubbo and Wellington.</p>

<b>Principle 2: Consistent approach to land use permissibility across similarly zoned lands</b>					
The DLEP and WLEP land use tables are inconsistent with each other. The single LEP is required to have a consistent land use table for each similar zone across the Dubbo Regional LGA.					
Land Use	DLEP	WLEP	Recommendation	Justification	Alignment with Regional Plan
Extensive agriculture (group term)	O	X	Make permissible without consent	A number of SP3 lots within the LGA remain large enough to support extensive agricultural activities and would not result in land use conflicts with surrounding properties.	Direction 1
Beekeeping	O	X	Make permissible without consent	A number of SP3 lots within the LGA remain large enough to support Beekeeping activities and would not result in land use conflicts.	Direction 1
Dairies (pasture-based)	O	X	Make prohibited	A number of SP3 lots within the LGA remain large enough to support Dairies (pasture-based) and would result in land use conflicts.	Direction 1
Viticulture	C	X	Make permissible with consent	Viticulture is considered to be consistent with the objectives of the SP3 zone. Synergies often exist between viticulture activities and cellar door premises.	Direction 12
Animal boarding or training establishment	C	X	Make permissible with consent	A number of SP3 lots within the LGA remain large enough to facilitate animal boarding or training establishments.	Direction 12
Farm buildings	C	X	Make permissible with consent	Where agricultural activities are permissible it is deemed appropriate to facilitate development of farm buildings.	Direction 2
Shop top housing	C	X	Make permissible with consent	Shop top housing is considered to be consistent with the objectives of the SP3 zone. This form of housing would support active street frontages with additional accommodation above.	Direction 10
Bed and breakfast accommodation	X	C	Make prohibited	Bed and breakfast accommodation is considered to be inconsistent with the objectives of the SP3 zone. Bed and Breakfast accommodation relies upon the provision of an existing dwelling. Dwelling houses are prohibited in this zone.	Direction 12
Home businesses	X	C	Make prohibited	Home businesses are considered to be inconsistent with the objectives of the SP3 zone. Home businesses rely upon the provision of an existing dwelling in which to operate. Dwelling houses are prohibited in this zone.	Direction 12
Cellar door premises	C	X	Make permissible with consent	Cellar door premises are considered to be consistent with the objectives of the SP3 zone. This development typically supports tourist activity within this zone.	Direction 4
Kiosks	X	C	Make prohibited	Kiosks are considered to be inconsistent with the objectives of the SP3 zone. This land use activity is generally undertaken to provide convenience food and drink, newspapers and films. This activity would be better utilised in a commercial zone where a high level of pedestrian traffic exists.	Direction 12

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Markets	C	X	Make permissible with consent	Markets are considered to be consistent with the objectives of the SP3 zone. This land use activity would facilitate the sale of local goods and services to the tourism market.	Direction 4
Roadside stalls	C	X	Make permissible with consent	Roadside stalls are considered to be consistent with the objectives of the SP3 zone. This land use activity would provide additional opportunity for local land holders to sell agricultural produce or hand crafted goods to the passing tourist trade.	Direction 4
Neighbourhood shops	X	C	Make prohibited	Neighbourhood shops are considered to be inconsistent with objectives of the SP3 zone. This type of shop development is aimed at providing localised convenience shopping to residential areas and is not considered appropriate in the SP3 zone.	Direction 12
Amusement centres	C	X	Make permissible with consent	Amusement centres are considered to be consistent with objectives of the SP3 zone. Amusement centres provide additional tourist activity within the zone.	Direction 4
Entertainment facilities	C	X	Make permissible with consent	Entertainment facilities are considered to be consistent with the objectives of the SP3 zone. This development type typically includes theatres and cinemas which play a vital role in promoting tourist activity.	Direction 4
Registered clubs	C	X	Make permissible with consent	Registered clubs are considered to be consistent with the objectives of the SP3 zone. A number of these clubs are currently operating within the Whylandra Street tourist zone.	Direction 4
Service stations	C	X	Make permissible with consent	Service stations are considered to be consistent with the objectives of the SP3 zone. A large portion of the SP3 zone is located adjoining major road networks including the Newell and Mitchell highways.	Direction 19
Veterinary hospitals	C	X	Make permissible with consent	Veterinary hospitals are considered to be consistent with the objectives of the SP3 zone. The tourist zone is located in close proximity to major road networks making it accessible to those requiring the services of a veterinary hospital.	Direction 12
Health consulting rooms	C	X	Make permissible with consent	Although dwellings houses are not permissible within the SP3 zone, there are a number of existing dwellings located within the zone that have the potential to host health consulting rooms. This would improve access to the health services within the LGA.	Direction 5
Medical centres	C	X	Make permissible with consent	Medical centres are considered to be consistent with the objectives of the SP3 zone. The SP3 zone provides opportunities of accessible land close to major roads and within central urban locations.	Direction 5
Respite day care centres	C	X	Make permissible with consent	Respite day care centres are considered to be consistent with the objectives of the SP3 zone. The SP3 zone provides opportunities of accessible land close to major roads and within central urban locations.	Direction 5
Community facilities	C	X	Make permissible with consent	Community facilities are considered to be consistent with the objectives of the SP3 zone. This land use creates opportunity to promote and diversify tourist activity within the zone.	Direction 4

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Places of public worship	C	X	Make permissible with consent	Places of public worship are considered to be consistent with the objectives of the SP3 zone. This development is not anticipated to result in land use conflicts within this zone.	Direction 12
Heliports	X	C	Make prohibited	Heliports are considered to be inconsistent with the objectives of the SP3 zone. It is anticipated that this development would result in land use conflicts.	Direction 12
Heliports (any person)	X	C	Make prohibited	Heliports are considered to be inconsistent with the objectives of the SP3 zone. It is anticipated that this development would result in land use conflicts.	Direction 12
Airstrips	C	X	Make permissible with consent	Airstrips are considered to be consistent with the objectives of the SP3 zone. It is anticipated that this development would result in land use conflicts.	Direction 4
Car parks	X	C	Make prohibited	Car parks are considered to be inconsistent with the objectives of the SP3 zone. This development type, as a standalone development, detracts from the tourist potential of the zone.	Direction 12
Emergency services facilities	X	C	Make prohibited	Emergency services facilities are considered to be inconsistent with the objectives of the SP3 zone. The SEPP (Infrastructure) does not include SP3 as a prescribed zone for this type of development.	Direction 12
Passenger transport facilities	C	X	Make permissible with consent	Passenger transport facilities are considered to be consistent with the objectives of the SP3 zone. These facilities provide improved access to public transport for tourists and visitors.	Direction 20
Highway service centres	C	X	Make permissible with consent	Highway service centres are considered to be consistent with the objectives of the SP3 zone. A large portion of the SP3 zone is situated alongside major road corridors including the Mitchell and Newell highways.	Direction 19
Roads	O	C	Make permissible without consent	Clause 94 (1) under the SEPP (Infrastructure) 2007 permits development for the purpose of a road or road infrastructure facilities to be carried out by or on behalf of a public authority without consent on any land.	Direction 19
Water supply systems (group term)	X	C	Make prohibited	Water supply systems is a group term and any changes to this term is of minor significance. It is proposed to undertake changes to two of the following sub terms.	Direction 12
Water storage facilities	X	C	Make prohibited	Water storage facilities are considered to be inconsistent with the objectives of the SP3 zone and are therefore considered to be incompatible with other land uses within the zone.	Direction 12
Water treatment facilities	X	C	Make prohibited	Water treatment facilities are considered to be inconsistent with the objectives of the SP3 zone and are therefore considered to be incompatible with other land uses within the zone.	Direction 12
Boat launching ramps	C	X	Make permissible with consent	Boat launching ramps are considered to be consistent with the objectives of the SP3 zone. These developments support the tourist function and activity within the zone.	Direction 4

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Boat sheds	C	X	Make permissible with consent	Boat sheds are considered to be consistent with objectives of the SP3 zone. These developments supports the tourist function and activity within the zone.	Direction 4
Charter and tourism boating facilities	C	X	Make permissible with consent	Charter and tourism boating facilities represents itself as a tourist activity and is considered to be consistent with the objectives of the SP3 zone.	Direction 4
Jetties	C	X	Make permissible with consent	Jetties are considered to be consistent with the objectives of the SP3 zone. There are a number of areas zoned SP3 in proximity to the Macquarie River which provide opportunity for this type of development.	Direction 4
Mooring pens	C	X	Make permissible with consent	Mooring pens are considered to be consistent with the objectives of the SP3 zone. There are a number of areas zoned SP3 in proximity to the Macquarie River which provide opportunity for this type of development.	Direction 4
Moorings	C	X	Make permissible with consent	Moorings are considered to be consistent with the objectives of the SP3 zone. There are a number of areas zoned SP3 in proximity to the Macquarie River which provide opportunity for this type of development.	Direction 4
Recreation facilities (indoor)	C	X	Make permissible with consent	Recreation facilities (indoor) are considered to be consistent with the objectives of the SP3 zone. These facilities provide for direct tourist related activity within the zone.	Direction 4
Recreational facilities (major)	C	X	Makes permissible with consent	Recreation facilities (major) are considered to be consistent with the objectives of the SP3 zone. These facilities provide for direct tourist related activity within the zone.	Direction 4
Recreation facilities (outdoor)	C	X	Make permissible with consent	Recreation facilities (outdoor) are considered to be consistent with the objectives of the SP3 zone. These facilities provide for direct tourist related activity within the zone.	Direction 4
Water recreation structures	C	X	Make permissible with consent	Water recreation structures are considered to be consistent with the objectives of the SP3 zone. This development would enhance the useability of the river system and further diversify the region's tourist offer.	Direction 4
Wharf or boating facilities	C	X	Make permissible with consent	Wharf or boating facilities are considered to be consistent with the objectives of the SP3 zone. This development would create additional tourist opportunities for the region and enable better use of our natural resources.	Direction 4
Flood mitigation works (any person)	X	C	Make prohibited	Flood mitigation works should not be carried out by any person other than a public authority. These facilities are better placed outside of residential areas to avoid land use conflicts.	Direction 13 Direction 15
Advertising structures	X	C	Make prohibited	Advertising structures are considered to be inconsistent with the objectives of the SP3 zone and detract from the visual amenity of the area.	Direction 12

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**RE1 Public Recreation**

**Principle 1: Consistent approach to zone objectives across similarly zoned lands**

The DLEP contains objectives additional to the mandatory objectives provided in the Standard Instrument. The single LEP for the Dubbo Regional LGA is required to have a consistent and consolidated set of objectives incorporating the existing DLEP and WLEP objectives.

Inconsistent, duplicated and repetitive additional objectives are to be consolidated into a single set.

DLEP Additional Zone Objectives	WLEP Additional Zone Objectives	Recommended Additional Objectives	Justification
<ul style="list-style-type: none"> <li>To provide for facilities and amenities to enhance the use of public open space.</li> </ul>	Nil	Adopt DLEP additional objective with no changes.	N/A

**Principle 2: Consistent approach to land use permissibility across similarly zoned lands**

The DLEP and WLEP land use tables are inconsistent with each other. The single LEP is required to have a consistent land use table for each similar zone across the Dubbo Regional LGA.

Land Use	DLEP	WLEP	Recommendation	Justification	Alignment with Regional Plan
Eco-tourist facilities	C	X	Make permissible with consent	Eco-tourist facilities are considered to be consistent with the objectives of the RE1 zone. This zone provides opportunities to create synergies between ecologically sensitive areas and eco-tourist facilities.	Direction 4
Restaurants or cafes	C	X	Make permissible with consent	Restaurants or cafes are considered to be consistent with the objectives of the RE1 zone. This land use activity attracts people to and enhances the appeal of open space areas.	Direction 4
Car parks	X	C	Make prohibited	Car parks are considered to be inconsistent with the objectives of the RE1 zone. Development that typically impacts the natural, environmental aesthetics of the surrounding locality is not appropriate for this zone.	Direction 12
Emergency services facilities	X	C	Make prohibited	Emergency services facilities are considered to be inconsistent with the objectives of the RE1 zone. The SEPP (Infrastructure) does not identify the RE1 as a prescribed zone for this land use. A large portion of the RE1 land is impacted by flooding and would not be appropriate for this land use.	Direction 15

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Roads	O	C	Make permissible without consent	Clause 94 (1) under the SEPP (Infrastructure) 2007 permits development for the purpose of a road or road infrastructure facilities to be carried out by or on behalf of a public authority without consent on any land.	Direction 19
Water Storage Facilities	X	C	Make prohibited	Water storage facilities are considered to be inconsistent with the objectives of the RE1 zone and are therefore considered to be incompatible with other land uses within the zone.	Direction 12
Boat sheds	C	X	Make permissible with consent	Boat sheds are considered to be consistent with the objectives of the RE1 zone. A large portion of land zoned RE1 is located along the Macquarie River and provides opportunity for development that supports recreational boating.	Direction 11
Charter & tourism boating facilities	C	X	Make permissible with consent	Charter & tourism boating facilities are considered to be consistent with the objectives of the RE1 zone. A large portion of land zoned RE1 is located along the Macquarie River and provides opportunity for development that supports recreational boating.	Direction 11
Mooring pens	C	X	Make permissible with consent	Mooring pens are considered to be consistent with the objectives of the RE1 zone. A large portion of land zoned RE1 is located along the Macquarie River and has the potential to facilitate recreational boating.	Direction 11
Moorings	C	X	Make permissible with consent	Moorings are considered to be consistent with the objectives of the RE1 zone. A large portion of land zoned RE1 is located along the Macquarie River and has the potential to facilitate recreational boating.	Direction 11
Wharf or boating facilities	C	X	Make permissible with consent	Wharf or boating facilities are considered to be consistent with the objectives of the RE1 zone. A large portion of land zoned RE1 is located along the Macquarie River and has the potential to facilitate recreational boating.	Direction 11
Cemeteries	C	X	Make permissible with consent	Cemeteries are considered to be consistent with the objectives of the RE1 zone. The open space and natural characteristics provide opportunity for suitable areas to develop.	Direction 12
Advertising structures	X	C	Make prohibited	Advertising structures are considered to be inconsistent with the objectives of the RE1 zone and detract from the visual amenity of the area.	Direction 12



## RE2 Private Recreation

### Principle 1: Consistent approach to zone objectives across similarly zoned lands

The DLEP and WLEP do not contain any objectives additional to the mandatory objectives provided in the Standard Instrument.

DLEP Additional Zone Objectives	WLEP Additional Zone Objectives	Recommended Additional Objectives	Justification
Nil	Nil	No amendments are required.	N/A

### Principle 2: Consistent approach to land use permissibility across similarly zoned lands

The DLEP and WLEP land use tables are inconsistent with each other. The single LEP is required to have a consistent land use table for each similar zone across the Dubbo Regional LGA.

Land Use	DLEP	WLEP	Recommendation	Justification	Alignment with Regional Plan
Aquaculture (group term)	X	C	Make prohibited	Aquaculture is considered to be inconsistent with the objectives of the RE2 zone. This land use does not facilitate recreational activity.	Direction 12
Tourist and visitor accommodation (group term)	C	X	Make permissible with consent	Tourist and visitor accommodation is considered to be consistent with the objectives of the RE2 zone. This land use provides accommodation opportunities in support of recreational activity.	Direction 4
Backpackers' accommodation	C	X	Make permissible with consent	Backpackers' accommodation is considered to be consistent with the objectives of the RE2 zone. This land use provides accommodation opportunities in support of recreational activity.	Direction 4
Hotel or motel accommodation	C	X	Make permissible with consent	Hotel or motel accommodation is considered to be consistent with the objectives of the RE2 zone. This land use provides accommodation opportunities in support of recreational activities.	Direction 4
Serviced apartments	C	X	Make permissible with consent	Serviced apartments are considered to be consistent with the objectives of the RE2 zone. This land use provides accommodation opportunities in support of recreational activities.	Direction 25

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Food and drink premises	C	X	Make permissible with consent	Food and drink premises are considered to be consistent with the objectives of the RE2 zone. This land use provides additional food and drink services in support of recreational activities.	Direction 12
Take away food and drink premises	C	X	Make permissible with consent	Takeaway food and drink premises are considered to be consistent with the objectives of the RE2 zone. This land use provides additional food and drink services in support of recreational activities.	Direction 12
Small bars	C	X	Make permissible with consent	Small bars are considered to be consistent with the objectives of the RE2 zone. This land use provides additional support of recreational activities.	Direction 12
Amusement centres	C	X	Make permissible with consent	Amusement centres are considered to be consistent with the objectives of the RE2 zone. This land use activity provides additional provision for recreational activity within the zone.	Direction 12
Entertainment facilities	C	X	Make permissible with consent	Entertainment facilities are considered to be consistent with the objectives of the RE2 zone. This land use activity provides additional provision for recreational activity within the zone.	Direction 12
Function centres	C	X	Make permissible with consent	Function centres are considered to be consistent with the objectives of the RE2 zone. This land use activity provides additional provision for recreational activity within this zone.	Direction 12
Veterinary hospitals	C	X	Make permissible with consent	Veterinary hospitals do not contravene the objectives of the RE2 zone.	Direction 12
Educational establishments (group term)	C	X	Make permissible with consent	Educational establishments is a group term and therefore any changes to this term are considered to have minimal impact. An amendment is propose for the sub term schools.	Direction 6 Direction 12
Schools	C	X	Make permissible with consent	Schools do not contravene the objectives of the RE2 zone. Schools create additional opportunities for land use synergies between education and recreational activity.	Direction 6 Direction 12
Places of public worship	C	X	Make permissible with consent	Places of public worship do not contravene the objectives of the RE2 zone.	Direction 12
Research stations	X	C	Make prohibited	Research stations are considered to be inconsistent with the objectives of the RE2 zone. Research stations typically do not provide opportunity for recreational activities.	Direction 12
Helipads	X	C	Make prohibited	Helipads are considered to be inconsistent with the objectives of the RE2 zone. This land use is not considered to be compatible with other land uses within the zone.	Direction 12
Car parks	X	C	Make prohibited	Car parks as an isolated development are considered to be inconsistent with the objectives of this zone. Car parks may be considered as ancillary to other permissible forms of development in the zone.	Direction 12
Emergency services facilities	X	C	Make prohibited	Emergency services facilities are considered to be inconsistent with the objectives of the RE2 zone.	Direction 12

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Roads	O	C	Make permissible without consent	Clause 94 (1) under the SEPP (Infrastructure) 2007 permits development for the purpose of a road or road infrastructure facilities to be carried out by or on behalf of a public authority without consent on any land.	Direction 19
Water supply systems	X	C	Make prohibited	Water supply systems are considered to be inconsistent with the objectives of the RE2 zone. The SEPP (Infrastructure) 2007 does not list the RE2 zone as a prescribed zone for this form of development.	Direction 14
Water storage facilities	X	C	Make prohibited	Water storage facilities are considered to be inconsistent with the objectives of the RE2 zone. The SEPP (Infrastructure) 2007 does not list the RE2 zone as a prescribed zone for this form of development.	Direction 14
Water treatment facilities	X	C	Make prohibited	Water treatment facilities are considered to be inconsistent with the objectives of the RE2 zone. The SEPP (Infrastructure) 2007 does not list the RE2 zone as a prescribed zone for this form of development.	Direction 14
Mooring pens	C	X	Make permissible with consent	Mooring pens are considered to be consistent with the objectives of the RE2 zone. There are a number of areas zoned RE2 in proximity to the Macquarie River which provide opportunity for this type of development.	Direction 4
Wharf or boating facilities	C	X	Make permissible with consent	Wharf or boating facilities are considered to be consistent with the objectives of the RE2 zone. There are existing properties located in close proximity to the Macquarie River that would facilitate this form of development.	Direction 11
Cemeteries	C	X	Make permissible with consent	Cemeteries are considered to be consistent with the objectives of the RE2 zone and are sensitive to the natural environment.	Direction 11
Crematoria	C	X	Make permissible with consent	Crematoria are not considered to contravene the objectives of the RE2 zone. Land within this zone may contain areas of open space that are sensitive to existing natural environmental assets. This land would provide opportunity to facilitate memorial services in connection with a crematorium.	Direction 12
Flood mitigation works (any person)	X	C	Make prohibited	Flood mitigation works should not be carried out by any person other than a public authority. These facilities are better placed outside of residential areas to avoid land use conflicts.	Direction 13 Direction 15
Advertising structures	X	C	Make prohibited	Advertising structures are considered to be inconsistent with the objectives of the RE2 zone and detract from the visual amenity of the area.	Direction 12

### E1 National Parks and Nature Reserves

#### Principle 1: Consistent approach to zone objectives across similarly zoned lands

The DLEP and WLEP do not contain any objectives additional to the mandatory objectives provided in the Standard Instrument.

DLEP Additional Zone Objectives	WLEP Additional Zone Objectives	Recommended Additional Objectives	Justification
Nil	Nil	No amendments are required.	N/A

#### Principle 2: Consistent approach to land use permissibility across similarly zoned lands

The DLEP and WLEP land use tables are inconsistent with each other. The single LEP is required to have a consistent land use table for each similar zone across the Dubbo Regional LGA.

Land Use	DLEP	WLEP	Recommendation	Justification	Alignment with Regional Plan
Roads	O	X	Make permissible without consent	Clause 94 (1) under the SEPP (Infrastructure) 2007 permits development for the purpose of a road or road infrastructure facilities to be carried out by or on behalf of a public authority without consent on any land.	Direction 19

**E3 Environmental Management**

**Principle 1: Consistent approach to zone objectives across similarly zoned lands**

The DLEP and WLEP contains objectives additional to the mandatory objectives provided in the Standard Instrument. The single LEP for the Dubbo Regional LGA is required to have a consistent and consolidated set of objectives incorporating the existing DLEP and WLEP objectives.

Inconsistent, duplicated and repetitive additional objectives are to be consolidated into a single set.

DLEP Additional Zone Objectives	WLEP Additional Zone Objectives	Recommended Additional Objectives	Justification
<ul style="list-style-type: none"> <li>• To ensure development is compatible with the flood hazard of the Macquarie and Talbragar Rivers.</li> <li>• To ensure development does not create outbreaks of saline lands or exacerbate the existence of existing saline lands.</li> </ul>	<ul style="list-style-type: none"> <li>• To identify land along the Macquarie and Bell Rivers in proximity to the Town of Wellington suitable for low impact development that addresses the flood prone nature of this land.</li> <li>• To allow for a range of low impact recreational activities and ancillary land uses in the Burrendong State Park that protect and enhance the environmental and scenic qualities of the park and water quality of Lake Burrendong.</li> <li>• To recognise the environmental, scenic and landscape significance of certain lands in proximity to the Town of Geurie.</li> </ul>	<p>Adopt a combination of the DLEP and WLEP additional objectives.</p> <ul style="list-style-type: none"> <li>• To ensure development is compatible with the flood hazard of the Macquarie, Talbragar and Bell Rivers.</li> <li>• To ensure development does not create outbreaks of saline lands or exacerbate the existence of existing saline lands.</li> <li>• To identify land along the Macquarie, Talbragar and Bell Rivers in proximity to the towns and cities which is suitable for low impact development that addresses the flood prone nature of this land.</li> <li>• To allow for a range of low impact recreational activities and ancillary land uses in the Burrendong State Park that protect and enhance the environmental and scenic qualities of the park and water quality of Lake Burrendong.</li> <li>• To recognise the environmental, scenic and landscape significance of certain lands in proximity to the Town of Geurie</li> </ul>	<p>The DLEP and WLEP objectives have a similar intent between to protect flood prone and environmentally sensitive land from inappropriate development, minor amendments to align the objectives.</p>

**Principle 2: Consistent approach to land use permissibility across similarly zoned lands**

The DLEP and WLEP land use tables are inconsistent with each other. The single LEP is required to have a consistent land use table for each similar zone across the Dubbo Regional LGA.

Land Use	DLEP	WLEP	Recommendation	Justification	Alignment with Regional Plan
Extensive agriculture (group term)	O	C	Make permissible without consent	Land within the E3 zone is typically flood affected or reserved to protect environmental lands. Extensive agriculture is a low impact activity that would not contravene the objectives of the E3 zone.	Direction 1
Beekeeping	O	X	Make permissible without consent	Beekeeping is a low impact activity that would not contravene the objectives of the E3 zone.	Direction 1
Dairies (pasture-based)	O	X	Make permissible	Dairies are a low impact activity that would not contravene the objectives of the E3 zone.	Direction 1
Turf farming	C	X	Make permissible with consent	Turf farms are considered to be consistent with the objectives of the E3 zone. Turf farms are considered to be resilient to flooding impacts associated with land in close proximity to the river system.	Direction 1
Farm buildings	C	X	Make permissible with consent	Farm buildings not considered to contravene the objectives of the E3 zone. These buildings play a support role in undertaking agricultural activities.	Direction 12
Extractive industries	X	C	Make prohibited	Extractive industries are considered to be inconsistent with the objectives of the E3 zone. This activity has the potential to cause significant environmental impacts in flood prone and environmentally sensitive areas.	Direction 13
Open cut mining	X	C	Make prohibited	Open cut mining is considered to be inconsistent with the objectives of the E3 zone. This activity has the potential to cause significant environmental impacts in flood prone and environmentally sensitive areas.	Direction 13
Bed & breakfast accommodation	X	C	Make prohibited	Bed and breakfast accommodation is considered to be inconsistent with the objectives of the E3 zone. The typical flooding and environmental constraints of the E3 zone restrict this form of development.	Direction 12
Camping grounds	C	X	Make permissible with consent	Camping grounds are considered to be consistent with the objectives of the E3 zone. Camping grounds are typically sensitive to surrounding environmental constraints.	Direction 4
Information and education facilities	X	C	Make prohibited	Information and education facilities are considered to be inconsistent with the objectives of the E3 zone. This form of development would further intensify development within areas of potential flood risk.	Direction 13

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Research stations	X	C	Make permissible with consent	Research stations are considered to be consistent with the objectives of the E3 zone. This form of development would provide additional research opportunities in close proximity to the river system and other environmental areas.	Direction 13
Helipads	X	C	Make prohibited	Helipads are considered to be inconsistent with the objectives of the E3 zone. Enabling this form of development would create unnecessary impacts to the surrounding natural environment.	Direction 13
Car parks	X	C	Make prohibited	Car parks are considered to be inconsistent with the objectives of the E3 zone. Standalone car park facilities are not considered appropriate within the E3 zone as they typically result in the clearing of land and increased vehicle traffic movements throughout the area.	Direction 13
Emergency services facilities	X	C	Make prohibited	Emergency Service facilities are considered to be inconsistent with the objectives of the E3 zone. A large portion of the E3 zone is located within flood affected land.	Direction 13 Direction 15
Roads	O	C	Make permissible without consent	Clause 94 (1) under the SEPP (Infrastructure) 2007 permits development for the purpose of a road or road infrastructure facilities to be carried out by or on behalf of a public authority without consent on any land.	Direction 19
Water supply systems (group term)	X	C	Make prohibited	Water supply systems are considered to be inconsistent with the objectives of the E3 zone. The SEPP (Infrastructure) 2007 does not list the E3 zone as a prescribed zone for this form of development.	Direction 13
Water storage facilities	X	C	Make prohibited	Water storage facilities are considered to be inconsistent with the objectives of the E3 zone. The SEPP (Infrastructure) 2007 does not list the E3 zone as a prescribed zone for this form of development.	Direction 13
Water treatment facilities	X	C	Make prohibited	Water treatment facilities are considered to be inconsistent with the objectives of the E3 zone. The SEPP (Infrastructure) 2007 does not list the E3 zone as a prescribed zone for this form of development.	Direction 13
Recreation facilities (outdoor)	X	C	Make prohibited	Recreation facilities (outdoor) are considered to be inconsistent with the objectives of the E3 zone. These facilities are better suited to a tourist or recreation zone.	Direction 12
Wharf or boating facilities	C	X	Make permissible with consent	Wharf or boating facilities are considered to be consistent with the objectives of the E3 zone. These facilities are considered to support recreational activity within this zone that is sensitive to the surrounding environment.	Direction 12
Environmental protection works	O	C	Make permissible without consent	Environmental protection works are considered to be consistent with the objectives of the E3 zone. The objectives of the zone include the protection of special ecological, scientific, cultural or aesthetic values.	Direction 13
Flood mitigation works (any person)	X	C	Make prohibited	Flood mitigation works should not be carried out by any person other than a public authority. These facilities are better placed outside of residential areas to avoid land use conflicts.	Direction 13

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Signage (group term)	C	X	Make permissible with consent	Signage is a group term and changes to the permissibility of this term will have no impact to the permissibility of the subset terms.	Direction 12
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**Clause Assessment**

The following chapter is an assessment of those clauses within the DLEP and WLEP which contain differences. Those clauses of the DLEP or WLEP which do not conflict or are the same, are not discussed below.

**Principle 7: Review and update clauses to address current planning issues**

Part 1 Preliminary	
Clause 1.2 Aims of Plan	
Recommended Clause 1.2	Justification
<p><b>Aims of Plan</b></p> <p>(1) This Plan aims to make local and environmental planning provisions for land in the Dubbo Regional Local Government Area in accordance with the relevant standard environmental planning instrument under section 33A of the Act.</p> <p>(2) The particular aims of this Plan are as follows:</p> <p>(a) To ensure the Dubbo Central Business District is:</p> <p>(i) Centralised within the City of Dubbo by shifting the residential development emphasis to West Dubbo; and</p> <p>(ii) Maintained as the primary commercial centre for the greater region.</p> <p>(b) To encourage development that complements and enhances the unique character and amenity of Wellington, and the villages across the local government area,</p> <p>(c) To provide high quality open space to meet a wide range of active and passive recreation needs of our community,</p>	<p>The aims, which will inform the planning of the Dubbo Region, must best capture the direction of both existing Local Environmental Plans.</p> <p>The proposed aims of the Dubbo Regional LEP shares similar themes from the existing DLEP and WLEP, including:</p> <ul style="list-style-type: none"> <li>• Provision for tourist opportunities</li> <li>• High quality open space</li> <li>• Protect environmental and cultural heritage</li> <li>• Facilitate cultural, research and medical institutions</li> <li>• Protection of industrial land</li> <li>• Protection of rural areas</li> <li>• Manage urban stormwater</li> <li>• Minimise flooding impacts</li> <li>• Ecologically sustainable development</li> <li>• Reduce private vehicle dependence</li> <li>• Facilitate housing choice</li> </ul>

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<ul style="list-style-type: none"> <li>(d) To ensure environmental and cultural heritage is adequately protected and conserved,</li> <li>(e) To ensure adequate provision is made for the development, establishment and enhancement of cultural, educational, research and medical institutions,</li> <li>(f) To ensure land zoned for industrial purposes is protected for development,</li> <li>(g) To protect, enhance and conserve agricultural land and recognise the contribution agriculture makes to the regional economy ensuring agricultural land planning maintains the production basis of the rural economy.</li> <li>(h) To ensure development and land management practices do not further exacerbate the impact of salinity or result in new salinity outbreaks,</li> <li>(i) To ensure urban stormwater is managed to maintain quality and not detrimentally impact on downstream development,</li> <li>(j) To ensure the floodplains of the Macquarie, Bell and Talbragar rivers are adequately protected from inappropriate development and to ensure the impact of flooding on people and the built and natural environment is minimised,</li> <li>(k) To implement the principles of ecologically sustainable development to ensure social, economic and environmental resources are available to present and future generations,</li> <li>(l) Actively promotes integration of land uses and transport to improve access and reduce dependence on private vehicles and travel demand,</li> <li>(m) Encourages a range of housing choices and densities in planned urban and rural locations that are compatible with the residential and rural environment, addresses population growth, and meets the diverse needs of the community,</li> <li>(n) The Dubbo Local Government Area is resilient to the impacts of climate change.</li> </ul>	<p>It is considered that the proposed new aims are broadly consistent with the goals and directions of the Central West and Orana Regional Plan 2036.</p> <p>It is also considered that the Planning Proposal is broadly consistent with Council's adopted land use strategies.</p>
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Part 2 Permitted or prohibited development	
Clause 2.1 Land use zones	
Recommended Clause 2.1	Justification
<p>The land use zones under this Plan are as follows:</p> <p><b>Rural Zones</b></p> <ul style="list-style-type: none"> <li>RU1 Primary Production</li> <li>RU2 Rural Landscape</li> <li>RU3 Forestry</li> <li>RU4 Primary Production Small Lots</li> <li>RU5 Village</li> </ul> <p><b>Residential Zones</b></p> <ul style="list-style-type: none"> <li>R1 General Residential</li> <li>R2 Low Density Residential</li> <li>R5 Large Lot Residential</li> </ul> <p><b>Business Zones</b></p> <ul style="list-style-type: none"> <li>B1 Neighbourhood Centre</li> <li>B2 Local Centre</li> <li>B3 Commercial Core</li> <li>B4 Mixed Use</li> <li>B5 Business Development</li> <li>B6 Enterprise Corridor</li> <li>B7 Business Park</li> </ul> <p><b>Industrial Zones</b></p> <ul style="list-style-type: none"> <li>IN2 Light Industrial</li> <li>IN3 Heavy Industrial</li> </ul>	<p>The DLEP and WLEP contain different zones. As all existing zones will remain unchanged with the consolidated LEP, Clause 2.1 will be updated to reflect all existing zones.</p> <p><b>NOTE:</b> The Land Use Table with respect to permissible and prohibited uses as well as objectives have been addressed under separate cover.</p>

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<p><b>Special Purpose Zones</b></p> <p>SP2 Infrastructure SP3 Tourist</p> <p><b>Recreation Zones</b></p> <p>RE1 Public Recreation RE2 Private Recreation</p> <p><b>Environment Protection Zones</b></p> <p>E1 National Parks and Nature Reserves E2 Environmental Conservation E3 Environmental Management</p> <p><b>Waterway Zones</b></p> <p>W1 Natural Waterways W2 Recreational Waterways</p>	
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Part 4 Principle development standards	
Clause 4.1 Minimum subdivision lot size	
Recommended Clause 4.1	Justification
<p><b>Minimum subdivision lot size</b></p> <p>(1) The objectives of this clause are as follows:</p> <p>(a) to protect and enhance the production capacity of rural lands, by maintaining farm sizes and the status of productive lands,</p> <p>(b) to ensure residential allotments are of a suitable shape and size to provide a building envelope, private open space and suitable building setbacks for acoustic and visual privacy,</p>	<p>The WLEP contains additional provisions under Clause 4.1 which enables flexibility in subdivision sizes guided by the orderly expansion of sewer infrastructure.</p> <p>The areas in which the additional provision relates, are identified on the minimum lot size maps as "Area A" or "Area B".</p>

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<p>(c) to ensure industrial allotments are of a suitable size and shape to allow for separation from adjoining uses and to ensure appropriately sized vehicles can traverse to and from the land,</p> <p>(d) to ensure commercial allotments are of a suitable size and shape to provide for a range of commercial development without providing for the fragmentation of ownership into smaller lots,</p> <p>(e) to maximise the economic potential of, and provide for more intensive, small lot agricultural uses in areas able to access commercial quantities of irrigation water.</p> <p>(f) to minimise the cost to the community of:</p> <p style="margin-left: 20px;">(i) fragmented and isolated development of rural land, and</p> <p style="margin-left: 20px;">(ii) providing, extending and maintaining public amenities, infrastructure and services.</p> <p>(2) This clause applies to a subdivision of any land shown on the <i>Lot Size Map</i> that requires development consent and that is carried out after the commencement of this Plan.</p> <p>(3) The size of any lot resulting from a subdivision of land to which this clause applies is not to be less than the minimum size shown on the <i>Lot Size Map</i> in relation to that land.</p> <p>(4) This clause does not apply in relation to the subdivision of any land:</p> <p style="margin-left: 20px;">(a) by the registration of a strata plan or strata plan of subdivision under the <i>Strata Schemes Development Act 2015</i>, or</p> <p style="margin-left: 20px;">(b) by any kind of subdivision under the <i>Community Land Development Act 1989</i>.</p> <p>(4A) Despite subclause (3), the size of any lot resulting from the subdivision of land identified as "Area A" or "Area B" on the <i>Lot Size Map</i> and to be connected to a reticulated sewer must not be less than the area shown in Column 2 of the Table to this subclause opposite the relevant area.</p> <table border="1" style="width: 100%; margin-top: 10px;"> <thead> <tr> <th style="text-align: left;">Column 1</th> <th style="text-align: left;">Column 2</th> </tr> </thead> <tbody> <tr> <td>Area A</td> <td>4,000 square metres</td> </tr> <tr> <td>Area B</td> <td>2,000 square metres</td> </tr> </tbody> </table>	Column 1	Column 2	Area A	4,000 square metres	Area B	2,000 square metres	<p>Amendment 3 of the WLEP 2012 included the introduction of "(4B)" as a new component of the clause and is recommended for adoption into the new Plan.</p> <p>To avoid duplication, it is recommended that the DLEP 2011 Clause 4.1A Minimum subdivision lot size for Zone RU5, Zone R1 and Zone R2 not be included in the new LEP.</p> <p>Adoption of this clause would not contravene any existing provisions that relate to the Dubbo LGA and is consistent with the existing provisions of the WLEP.</p>
Column 1	Column 2						
Area A	4,000 square metres						
Area B	2,000 square metres						

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<p>(4B) Despite subclause (3), the size of any lot resulting from a subdivision of land in Zone RU5 Village, Zone R1 General Residential or Zone R2 Low Density Residential may be less than the minimum lot size shown on the Lot Size Map in relation to that land if –</p> <ul style="list-style-type: none"> <li>(a) The land is connected to a sewage reticulation system, and</li> <li>(b) Development consent has been granted in respect of the subdivision for the purpose of multi dwelling housing or a dual occupancy.</li> </ul>	
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<p><b>Clause 4.1AA Minimum subdivision lot size for community title schemes</b></p>	
<p><b>Recommended Clause 4.1AA</b></p>	<p><b>Justification</b></p>
<p>(1) The objectives of this clause are as follows:</p> <ul style="list-style-type: none"> <li>(a) to ensure that land to which this clause applies is not fragmented by subdivision that would create additional dwelling entitlements.</li> </ul> <p>(2) This clause applies to a subdivision (being a subdivision that requires development consent) under the Community Land Development Act 1989 of land in any of the following zones:</p> <ul style="list-style-type: none"> <li>(a) Zone RU1 Primary Production,</li> <li>(b) Zone RU2 Rural Landscape,</li> <li>(c) Zone RU4 Primary Production Small Lots,</li> <li>(c1) Zone RU5 Village,</li> <li>(c2) Zone R1 General Residential,</li> <li>(c3) Zone R2 Low Density Residential,</li> <li>(c4) Zone R5 Large Lot Residential,</li> <li>(d) Zone E3 Environmental Management,</li> </ul> <p>but does not apply to a subdivision by the registration of a strata plan.</p> <p>(3) The size of any lot resulting from a subdivision of land to which this clause applies (other than any lot comprising association property within the meaning of the Community Land Development Act 1989) is not to be less than the minimum size shown on the Lot Size Map in relation to that land.</p> <p>(4) This clause applies despite clause 4.1.</p>	<p>Clause 4.1AA is effectively the same between the two (2) LEPs with the exception that the DLEP contains additional Zone RU2 Rural Landscape.</p>

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Clause 4.2A Exceptions to minimum subdivision lot sizes for certain subdivisions.	
Recommended Clause 4.2A	Justification
<p>4.2D Exceptions to minimum subdivision lot sizes for certain rural subdivisions</p> <p>(1) The objectives of this clause are to permit the subdivision of land in rural areas to create lots of an appropriate size to meet the needs of current permissible uses other than for the purpose of residential accommodation or tourist and visitor accommodation.</p> <p>(2) This clause applies to land in the following rural zones –</p> <p>(a) Zone RU1 Primary Production,</p> <p>(b) Zone RU2 Rural Landscape,</p> <p>(c) Zone RU3 Forestry,</p> <p>(d) Zone RU4 Primary Production Small Lots.</p> <p>(3) Land to which this clause applies may, with development consent, be subdivided to create a lot of a size that is less than the minimum size shown on the Lot Size Map in relation to that land, if the consent authority satisfied that the use of the land after the subdivision will be the same use (other than residential accommodation or tourist and visitor accommodation) permitted under the existing development consent for the land.</p> <p>(4) Development consent must not be granted for the subdivision of land to which this clause applies unless the consent authority is satisfied that –</p> <p>(a) the subdivision will not adversely affect the use of the surrounding land for agriculture, and</p> <p>(b) the subdivision is necessary for the ongoing operation of the permissible use, and</p> <p>(c) the subdivision will not cause or increase rural land use conflict in the locality, and</p>	<p>Whilst the DLEP and WLEP approach to rural boundary adjustments are fundamentally the same, the intent allows boundary adjustments below the minimum lot size where existing land uses remain unchanged and no additional opportunities for new dwellings will be created.</p> <p>The Dubbo LEP Clause 4.2A requires that boundary adjustments (where the lot/s will be below the minimum lot size) must ensure land uses will be the same after the boundary adjustment occurs. The clause has achieved appropriate outcomes within the former Dubbo LGA since 2011 providing appropriate flexibility for rural landholders but also ensuring rural land is protected from inappropriate land uses on smaller lots.</p> <p>Similar provisions are provided under the Wellington LEP Clause 4.2B Boundary changes between lots in certain rural, residential and environmental protection zones.</p> <p>Amendment 3 of the Wellington LEP 2012 was notified on the NSW legislation website on 24 July 2020. The Amendment included a new clause 4.2D Exceptions to minimum subdivision lot sizes for certain rural subdivisions. The new Clause 4.2D is similar to both the existing DLEP clause 4.2A and WLEP Clause 4.2B, and is the most relevant version of the provision in accordance with Parliamentary Counsel’s drafting standards.</p>

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<p>(d) the subdivision is appropriate having regard to the natural and physical constraints affecting the land.</p>	<p>It is therefore recommended that clause 4.2D be adopted with further reference to Zone RU2 Rural Landscape and the existing DLEP clause 4.2A and WLEP clause 4.2B be deleted.</p>
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<p><b>Clause 4.2B Minimum subdivision lot size for strata subdivisions of residential or tourist and visitor accommodation in certain rural zones</b></p>	
<p><b>Recommended Clause 4.2B</b></p>	<p><b>Justification</b></p>
<p><b>Minimum subdivision lot size for strata subdivisions of residential or tourist and visitor accommodation in certain zones</b></p> <p>(1) The objective of this clause is to ensure that land to which this clause applies is not fragmented by subdivisions that would create additional dwelling entitlements.</p> <p>(2) This clause applies to land in the following zones that is used, or proposed to be used, for residential accommodation or tourist and visitor accommodation:</p> <p>(a) Zone RU1 Primary Production,                      (b) Zone RU2 Rural Landscape,                      (c) Zone RU4 Primary Production Small Lots,                      (d) Zone E3 Environmental Management.</p> <p>(3) Development consent must not be granted for the subdivision of a lot to which this clause applies for a strata plan that would create lots below the minimum size shown on the Lot Size Map for that lot.</p>	<p>It is recommended that Clause 4.2B is adopted from the DLEP. It is noted that this clause shares a similar intent to the existing WLEP Clause 4.2A Minimum subdivision lot size for strata plan schemes in certain rural and environmental zones.</p>

<p><b>Clause 4.2C Erection of dwelling houses on land in certain rural and environmental protection zones</b></p>	
<p><b>Recommended Clause 4.2C</b></p>	
<p><b>Erection of dwelling houses on land in certain rural and environmental protection zones</b></p>	<p>Clause 4.2C is fundamentally the same between the DLEP and WLEP with one prominent exception.</p>

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<p>(1) The objectives of this clause are as follows:</p> <ul style="list-style-type: none"> <li>(a) to minimise unplanned rural residential development,</li> <li>(b) to enable the replacement of lawfully erected dwelling houses in certain rural and environmental protection zones.</li> </ul> <p>(2) This clause applies to:</p> <ul style="list-style-type: none"> <li>(a) for the erection of a dwelling house—land in Zone RU1 Primary Production, Zone RU2 Rural Landscape, Zone RU4 Primary Production Small Lots or Zone E3 Environmental Management, or</li> <li>(b) for the erection of a dual occupancy – land in Zone RU1 Primary Production.</li> </ul> <p>(3) Development consent must not be granted for the erection of a dwelling house or a dual occupancy on land, and on which no dwelling house or dual occupancy has been erected, unless the land:</p> <ul style="list-style-type: none"> <li>(a) is a lot that is at least the minimum lot size shown on the <a href="#">Lot Size Map</a> in relation to that land, or</li> <li>(b) is a lot created under an environmental planning instrument before this Plan commenced and on which the erection of a dwelling house or dual occupancy was permissible immediately before that commencement, or</li> <li>(c) is a lot resulting from a subdivision for which development consent (or equivalent) was granted under an environmental planning instrument before this Plan commenced and on which the erection of a dwelling house or dual occupancy would have been permissible if the plan of subdivision had been registered before that commencement, or</li> <li>(d) is an existing holding, or</li> <li>(e) would have been a lot or a holding referred to in paragraph (a), (b), (c) or (d) had it not been affected by: <ul style="list-style-type: none"> <li>(i) a minor realignment of its boundaries that did not create an additional lot, or</li> <li>(ii) a subdivision creating or widening a public road or public reserve or for another public purpose.</li> </ul> </li> </ul> <p><b>Note.</b> A dwelling cannot be erected on a lot created under clause 9 of <i>State Environmental Planning Policy (Rural Lands) 2008</i> or clause 4.2.</p>	<p>The WLEP permits dwellings on land which was held as a holding at a defined date. Such provision is unable to be extended across to the former Dubbo City LGA given it would be inconsistent with the Dubbo Rural Areas Strategy.</p> <p>In contrast, existing holding provisions should not be removed from Wellington given it is not within the scope of this Planning Proposal to remove an existing provision of such significance with minimal strategic background work having been completed.</p> <p>Consequently, it is proposed to maintain the existing holding provisions within the former Wellington LGA.</p> <p>It is also recommended to include additional provision for land zoned RU2 Rural Landscape.</p>
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<p>(4) Development consent may be granted for the erection of a dwelling house or dual occupancy on land to which this clause applies if there is a lawfully erected dwelling house or dual occupancy on the land and the dwelling house or dual occupancy to be erected is intended only to replace the existing dwelling house or dual occupancy.</p> <p>(5) In this clause:  <b>existing holding</b> means land that:</p> <ul style="list-style-type: none"> <li>(a) was a holding on 26 June 1987,</li> <li>(b) was located within the former Wellington Local Government Area prior to 12 May 2016, and</li> <li>(c) is a holding at the time the application for development consent referred to in subclause (3) is lodged, whether or not there has been a change in the ownership of the holding since 26 June 1987, and includes any other land adjoining that land acquired by the owner since 26 June 1987.</li> </ul> <p><b>holding</b> means all adjoining land, even if separated by a road or railway, held by the same person or persons.</p> <p><b>Note.</b> The owner in whose ownership all the land is at the time the application is lodged need not be the same person as the owner in whose ownership all the land was on the stated date.</p>	
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Clause 4.6 Exceptions to development standards	
Recommended Clause 4.6	Justification
<p><b>Exceptions to development standards</b></p> <p>(1) The objectives of this clause are as follows:</p> <ul style="list-style-type: none"> <li>(a) To provide an appropriate degree of flexibility in applying certain development standards to particular development,</li> <li>(b) To achieve better outcomes for and from development by allowing flexibility in particular circumstances.</li> </ul>	<p>The existing WLEP does not contain urban release areas in which the DLEP Clause 4.6(8)(ca) relates to.</p> <p>It is recommended that Clause 4.6 be adopted from the DLEP, to ensure the Dubbo LEP 2011 maintains urban release provisions including reference to Clause 6.2 Public</p>

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<p>(2) Development consent may, subject to this clause, be granted for development even though the development would contravene a development standard imposed by this or any other environmental planning instrument. However, this clause does not apply to a development standard that is expressly excluded from the operation of this clause.</p> <p>(3) Development consent must not be granted for development that contravenes a development standard unless the consent authority has considered a written request from the applicant that seeks to justify the contravention of the development standard by demonstrating:</p> <ul style="list-style-type: none"> <li>(a) That compliance with the development standard is unreasonable or unnecessary in the circumstances of the case, and</li> <li>(b) That there are sufficient environmental planning grounds to justify contravening the development standard.</li> </ul> <p>(4) Development consent must not be granted for development that contravenes a development standard unless:</p> <ul style="list-style-type: none"> <li>(a) The consent authority is satisfied that: <ul style="list-style-type: none"> <li>(i) The applicant’s written request has adequately addressed the matters required to be demonstrated by subclause (3), and</li> <li>(ii) The proposed development will be in the public interest because it is consistent with the objectives of the particular standard and the objectives for development within the zone in which the development is proposed to be carried out, and</li> </ul> </li> <li>(b) The concurrence of the Secretary has been obtained.</li> </ul> <p>(5) In deciding whether to grant concurrence, the Secretary must consider:</p> <ul style="list-style-type: none"> <li>(a) Whether contravention of the development standard raises any matter of significance for State or regional environmental planning, and</li> <li>(b) The public benefit of maintaining the development standard, and</li> <li>(c) Any other matters required to be taken into consideration by the Secretary before granting concurrence.</li> </ul>	<p>utility infrastructure and Clause 6.3 Development control plan.</p> <p>It is considered that no impacts to the former Wellington LGA would occur as a result of the adoption of this clause.</p>
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<p>(6) Development consent must not be granted under this clause for a subdivision of land in RU1 Primary Productions, Zone RU2 Rural Landscape, Zone RU3 Forestry, Zone RU4 Primary Production Small Lot, Zone RU6 Transition, Zone R5 Large Lot Residential, Zone E2 Environmental Conservation, Zone E3 Environmental Management or Zone E4 Environmental Living if:</p> <p>(a) The subdivision will result in 2 or more lots of less than the minimum area specified for such lots by development standard, or</p> <p>(b) The subdivision will result in at least one lot that is less than 90% of the minimum area specified for such a lot by a development standard.</p> <p>(7) After determining a development application made pursuant to this clause, the consent authority must keep a record of its assessment of the factors required to be addressed in the applicant's written request referred to in subclause (3).</p> <p>(8) This clause does not allow development consent to be granted for development that would contravene any of the following:</p> <p>(a) A development standard for complying development,</p> <p>(b) A development standard that arises, under the regulations under the Act, in connection with a commitment set out in a BASIX certificate for a building to which <i>State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004</i> applies or for the land on which such a building is situated,</p> <p>(c) Clause 5.4,</p> <p>(ca) Clause 6.2 or 6.3.</p>	
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Part 5 Miscellaneous Provisions	
Clause 5.1 Relevant acquisition authority	
Recommended Clause 5.1	Justification

<p><b>Relevant acquisition authority</b></p> <p>(1) The objective of this clause is to identify, for the purposes of section 27 of the Act, the authority of the State that will be the relevant authority to acquire land reserved for certain public purposes if the land is required to be acquired under Division 3 of Part 2 of the <i>Land Acquisition (Just Terms Compensation) Act 1991</i> (<b>the owner-initiated acquisition provisions</b>).</p> <p><b>Note.</b> If the landholder will suffer hardship if there is any delay in the land being acquired by the relevant authority, section 23 of the <i>Land Acquisition (Just Terms Compensation) Act 1991</i> requires the authority to acquire the land.</p> <p>(2) The authority of the State that will be the relevant authority to acquire land, if the land is required to be acquired under the owner-initiated acquisition provisions, is the authority of the State specified below in relation to the land shown on the <b>Land Reservation Acquisition Map</b> (or, if an authority of the State is not specified in relation to land required to be so acquired, the authority designated or determined under those provisions).</p> <table border="0"> <thead> <tr> <th><b>Type of land shown on Map</b></th> <th><b>Authority of the State</b></th> </tr> </thead> <tbody> <tr> <td>Zone RE1 Public Recreation and marked "Local open space"</td> <td>Council</td> </tr> <tr> <td>Zone RE1 Public Recreation and marked "Regional open space"</td> <td>The corporation constituted under section 8 of the Act</td> </tr> <tr> <td>Zone SP2 Infrastructure and marked "Classified road"</td> <td>Roads and Maritime Services</td> </tr> <tr> <td>Zone E1 National Parks and Nature Reserves and marked "National Park"</td> <td>Minister administering the <i>National Parks and Wildlife Act 1974</i></td> </tr> <tr> <td>Zone R1 General Residential</td> <td>Roads and Maritime Services</td> </tr> <tr> <td>Zone E3 Environmental Management</td> <td>Roads and Maritime Services</td> </tr> </tbody> </table> <p>(3) Development on land acquired by an authority of the State under the owner-initiated acquisition provisions may, before it is used for the purpose for which it is reserved, be carried out, with development consent, for any purpose.</p>	<b>Type of land shown on Map</b>	<b>Authority of the State</b>	Zone RE1 Public Recreation and marked "Local open space"	Council	Zone RE1 Public Recreation and marked "Regional open space"	The corporation constituted under section 8 of the Act	Zone SP2 Infrastructure and marked "Classified road"	Roads and Maritime Services	Zone E1 National Parks and Nature Reserves and marked "National Park"	Minister administering the <i>National Parks and Wildlife Act 1974</i>	Zone R1 General Residential	Roads and Maritime Services	Zone E3 Environmental Management	Roads and Maritime Services	<p>The difference between Clause 5.1 (2) under the DLEP as opposed to the WLEP is that the DLEP includes additional provisions as follows:</p> <ul style="list-style-type: none"> <li>• Zone R1 General Residential Roads and Maritime Services</li> <li>• Zone E3 Environmental Management Roads and Maritime Services</li> </ul> <p>It is recommended that the proposed Dubbo Regional LEP adopt the additional provisions as included under the DLEP 2011 and the subsequent land reservation acquisition mapping.</p> <p>It is considered that the changes will have no impact on the former Wellington LGA.</p>
<b>Type of land shown on Map</b>	<b>Authority of the State</b>														
Zone RE1 Public Recreation and marked "Local open space"	Council														
Zone RE1 Public Recreation and marked "Regional open space"	The corporation constituted under section 8 of the Act														
Zone SP2 Infrastructure and marked "Classified road"	Roads and Maritime Services														
Zone E1 National Parks and Nature Reserves and marked "National Park"	Minister administering the <i>National Parks and Wildlife Act 1974</i>														
Zone R1 General Residential	Roads and Maritime Services														
Zone E3 Environmental Management	Roads and Maritime Services														

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Clause 5.1A Development on land intended to be acquired for public purposes.									
Recommended Clause 5.1A	Justification								
<p><b>Development on land intended to be acquired for public purposes</b></p> <p>(1) The objective of this clause is to limit development on certain land intended to be acquired for a public purpose.</p> <p>(2) This clause applies to land shown on the <i>Land Reservation Acquisition Map</i> and specified in Column 1 of the table to this clause and that has not been acquired by the relevant authority of the State specified for the land in clause 5.1.</p> <p>(3) Development consent must not be granted to any development on land to which this clause applies other than development for a purpose specified opposite that land in Column 2 of that table.</p> <table border="0"> <tr> <td><b>Column 1</b></td> <td><b>Column 2</b></td> </tr> <tr> <td><b>Land</b></td> <td><b>Development</b></td> </tr> <tr> <td>Zone R1 General Residential</td> <td>Carparks</td> </tr> <tr> <td>Zone E3 Environmental Management</td> <td>Carparks</td> </tr> </table>	<b>Column 1</b>	<b>Column 2</b>	<b>Land</b>	<b>Development</b>	Zone R1 General Residential	Carparks	Zone E3 Environmental Management	Carparks	<p>It is recognised that the former WLEP does not identify any land reservation acquisition areas.</p> <p>It is recommended that the Dubbo Regional LEP adopt Clause 5.1A to ensure that provisions are not altered for existing land reservation acquisition areas.</p>
<b>Column 1</b>	<b>Column 2</b>								
<b>Land</b>	<b>Development</b>								
Zone R1 General Residential	Carparks								
Zone E3 Environmental Management	Carparks								

Clause 5.3 Development near zone boundaries	
Recommended Clause 5.3	Justification

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<p><b>Development near zone boundaries</b></p> <p>(1) The objective of this clause is to provide flexibility where the investigation of a site and its surroundings reveals that a use allowed on the other side of a zone boundary enable a more logical and appropriate development of the site and be compatible with the planning objectives and land uses for the adjoining zone.</p> <p>(2) This clause applies to so much of any land that is within the relevant distance of a boundary between any 2 zones.</p> <p>(a) 20 metres from a boundary shared between any land and land within Zone B1 Neighbourhood Centre, Zone B2 Local Centre, Zone B3 Commercial Core, Zone B4 Mixed Use, Zone B5 Business Development, Zone B6 Enterprise Corridor and Zone B7 Business Park, or</p> <p>(b) 10 metres from any other boundary.</p> <p>(3) This clause does not apply to:</p> <p>(a) Land in zone RE1 Public Recreation, Zone E1 National Parks and Nature Reserves, Zone E2 Environmental Conservation, Zone E3 Environmental Management or Zone W1 Natural Waterways, or</p> <p>(ab) Zone SP3 Tourist, or</p> <p>(b) Land within the coastal zone, or</p> <p>(c) Land proposed to be developed for the purpose of sex services or restricted premises.</p> <p>(4) Despite the provisions of this Plan relating to the purposes for which development may be carried out, development consent may be granted to development of land to which this clause applies for any purpose that may be carried out in the adjoining zone, but only if the consent authority is satisfied that:</p> <p>(a) The development is not inconsistent with the objectives for development in both zones, and</p> <p>(b) The carrying out of the development is desirable due to compatible land use planning, infrastructure capacity and other planning principles relating to the efficient and timely development of land.</p>	<p>Under Clause 5.3 of the DLEP, a 10 metre distance applies to the following additional zones:</p> <ul style="list-style-type: none"> <li>• RU1 Primary Production,</li> <li>• RU4 Small Lot Primary Production,</li> <li>• RU5 Village, and</li> <li>• R5 Large Lot Residential.</li> </ul> <p>It is recommended that these zones are not included under Clause 5.3 (a1).</p> <p>It is considered that this change would provide greater opportunity to achieve the development goals and directions of the Central West and Orana Regional Plan.</p> <p>In addition, the WLEP has included the SP3 zone as a compatible zone in which to apply the 20 metres of flexibility for appropriate development types.</p> <p>The only land zoned SP3 in Wellington comprises of a number of lots in close proximity to the Wellington Caves. Development on these lots includes the associated buildings that facilitate entry into the caves, and a number of small scale tourist operations along Caves Road.</p> <p>The properties in which this provision relates includes Lot 1 DP 1243034, 101 Caves Road Apsley, zoned SP3 and Lot 333 DP 728718, 158 Caves Road Apsley, zoned RE2.</p> <p>The existing land use that is operating within the SP3 zone is part camping grounds and part recreational facility (outdoor). The land use that is operating within the RE2 zone is recreational facility (outdoor).</p>
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<p>(5) This clause does not prescribe a development standard that may be varied under this Plan.</p>	<p>Both land uses are permissible in both zones. It is proposed that the SP3 zone is not included as an applicable zone under Clause 5.3. The proposed amendment to the clause will not result in any direct impact to the former Wellington LGA.</p>
<p><b>Clause 5.4 Controls relating to miscellaneous permissible uses</b></p>	
<p><b>Recommended Clause 5.4</b></p>	<p><b>Justification</b></p>
<p><b>Controls relating to miscellaneous permissible uses</b></p> <p><b>(1) Bed and breakfast accommodation</b>                  If development for the purposes of bed and breakfast accommodation is permitted under this Plan, the accommodation that is provided to guests must consist of no more than 5 bedrooms.  <b>Note.</b> Any such development that provides for a certain number of guests or rooms may involve a change in the class of building under the <i>Building Code of Australia</i>.</p> <p><b>(2) Home businesses</b>                  If development for the purposes of a home business is permitted under this Plan, the carrying on of the business must not involve the use of more than 30 square metres of floor area.</p> <p><b>(3) Home industries</b>                  If development for the purposes of a home industry is permitted under this Plan, the carrying on of the home industry must not involve the use of more than 50 square metres of floor area.</p> <p><b>(4) Industrial retail outlets</b>                  If development for the purposes of an industrial retail outlet is permitted under this Plan, the retail floor area must not exceed:</p>	<p>Clause 5.4 contains multiple variations with numerical standards and maximum floor areas. An overview of those clauses which vary include:</p> <p>(1) Bed and Breakfast accommodation – adopt 5 bedrooms                  (2) Home business – adopt 30m<sup>2</sup>                  (3) Home industries – adopt 50m<sup>2</sup>                  (4) Industrial retail outlets – adopt 20%                  (5) Farm stay accommodation – adopt 15 bedrooms                  (7) Neighbourhood shops – 150m<sup>2</sup>                  (7AA) Neighbourhood supermarkets – adopt 1000m<sup>2</sup>                  (8) Roadside stalls – adopt 25m<sup>2</sup>                  (9)(b) Secondary dwellings – adopt 65% of total floor area                  (10)(a) Artisan food and drink industry – adopt 20%</p> <p><u>Home businesses and Home industries</u></p> <ul style="list-style-type: none"> <li>• DLEP permits home businesses and home industries as having maximum floor areas of 30m<sup>2</sup> and 50m<sup>2</sup> respectively.</li> <li>• WLEP permits home businesses and home industries as having maximum floor areas of 80m<sup>2</sup> and 80m<sup>2</sup> respectively.</li> </ul>

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<p>(a) 20% of the gross floor area of the industry or rural industry located on the same land as the retail outlet, or</p> <p>(b) 400 square metres, Whichever is the lesser.</p> <p><b>(5) Farm stay accommodation</b> If development for the purposes of farm stay accommodation is permitted under this Plan, the accommodation that is provided to guests must consist of no more than 15 bedrooms.</p> <p><b>(6) Kiosks</b> If development for the purposes of a kiosk is permitted under this Plan, the retail floor area must not exceed 40 square metres.</p> <p><b>(7) Neighbourhood shops</b> If development for the purposes of a neighbourhood shop is permitted under this Plan, the gross floor area must not exceed 150 square metres.</p> <p><b>(7AA) Neighbourhood supermarkets</b> If development for the purposes of neighbourhood supermarket is permitted under this Plan, the gross floor area must not exceed 1,000 square metres.</p> <p><b>(8) Roadside stalls</b> If development for the purposes of a roadside stall is permitted under this Plan, the gross floor area must not exceed 25 square metres.</p> <p><b>(9) Secondary dwellings</b> If development for the purposes of secondary dwelling is permitted under this Plan, the total floor area of the dwelling (excluding any area used for parking) must not exceed whichever of the following is greater:</p> <p>(a) 60 square metres, (b) 65% of the total floor area of the principal dwelling.</p>	<p>It is recommended to adopt 30m<sup>2</sup> and 50m<sup>2</sup> for home business and home industry floor areas respectively, as it ensures a functioning activity centre hierarchy as outlined within the Dubbo Employment Lands Strategy as well as ensuring uses are maintained to a size so as not to interfere with the amenity of residential neighbourhoods.</p> <p><u>Industrial retail outlets</u></p> <ul style="list-style-type: none"> <li>DLEP permits a maximum floor area of 5% with WLEP permitting 30%.</li> </ul> <p>It is considered appropriate to prescribe a gross floor space limit of 20% to retain consistency with the Dubbo Employment Lands Strategy. A limit of this size will provide flexibility for the display and sale of larger goods in respect of the related industry.</p> <p>Guidance provided under planning circular PS 18-008 states that the provision for retail floor space for artisan food and drink industries under Clause 5.4 is to mimic the restrictions for industrial retail outlets. Therefore, changes to industrial retail outlet provisions must also apply to artisan food and drink industries.</p> <p><u>Farm stay accommodation</u></p> <ul style="list-style-type: none"> <li>DLEP permits a maximum of 15 bedrooms with WLEP permitting maximum of 12 bedrooms.</li> </ul>
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**(10) Artisan food and drink industry exclusion**

If development for the purposes of an artisan food and drink industry is permitted under this Plan in an industrial or rural zone, the floor area used for retail sales (not including any café or restaurant area) must not exceed:

- (a) 20% of the gross floor area of the industry, or
  - (b) 400 square metres,
- Whichever is lesser.

It is recommended to that a maximum of 15 bedrooms be adopted as it considered appropriate in maintaining amenity in a rural environment.

Neighbourhood shops

- DLEP permits a maximum floor area of 150m<sup>2</sup> with WLEP permitting 100m<sup>2</sup>.

This is minor variance in which it is recommended that 150m<sup>2</sup> be adopted.

Roadside stalls

- DLEP permits a maximum floor area of 20m<sup>2</sup> with WLEP permitting 25m<sup>2</sup>.

This is minor variance in which it is recommended that 25m<sup>2</sup> be adopted.

Secondary dwellings

In 2016, Amendment 10 of the DLEP was adopted to increase the sizing provisions under Clause 5.4 (9)(b) for secondary dwellings from 40% to 65%.

The amendment was proposed to facilitate the development of additional affordable and diversified housing options throughout the Dubbo LGA.

It is recommended that Clause 5.4 (9)(b) permit a secondary dwelling to be 65% of the total floor area of the principal dwelling.

Clause 5.14 Siding Spring Observatory – maintaining dark sky	
Recommended Clause 5.14	Justification
<p><b>Siding Spring Observatory—maintaining dark sky</b></p> <p>(1) The objective of this clause is to protect observing conditions at the Siding Spring Observatory by promoting lighting practices that minimise light pollution.</p> <p>(2) <b>Light emissions—general considerations for all development</b>                      Before granting development consent for development on land to which this Plan applies, the consent authority must consider whether the development is likely to adversely affect observing conditions at the Siding Spring Observatory, taking into account the following matters:</p> <ul style="list-style-type: none"> <li>(a) the amount and type of light to be emitted as a result of the development and the measures to be taken to minimise light pollution,</li> <li>(b) the impact of those light emissions cumulatively with other light emissions and whether the light emissions are likely to cause a critical level to be reached,</li> <li>(c) whether outside light fittings associated with the development are shielded light fittings,</li> <li>(d) the measures to be taken to minimise dust associated with the development,  <b>Note.</b> Dust tends to scatter light and increase light pollution.</li> <li>(e) the <i>Dark Sky Planning Guideline</i> published in the Gazette by the Secretary.</li> </ul> <p>(3) <b>Development on land within 18 kilometres of observatory</b> Development consent is required for all lit development on land less than 18 kilometres from the Siding Spring Observatory.</p> <p>(4) The consent authority must consult with the observatory director before granting development consent to lit development on land less than 18 kilometres from the Siding Spring Observatory.</p>	<p>The Dark Sky Planning Guidelines, as prepared by the Department of Planning and Environment, informs the development controls that apply to land within Coonamble, Dubbo, Gilgandra and Warrumbungle Local Government Areas. The Guideline also captures significant development within a 200km radius of the Siding Spring Observatory.</p> <p>It was mandated that the dark sky planning provisions apply to the former Dubbo LGA. Consequently, Clause 5.14 is required to be included and will now apply to the entire Dubbo Regional LGA.</p> <p>It is recommended that Clause 5.14 be included, with no changes, under the Dubbo Regional Local Environmental Plan.</p>

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- (5) The consent authority must not (except with the concurrence of the Secretary) grant development consent to development on land less than 18 kilometres from the Siding Spring Observatory if the consent authority considers that the development is likely to result in any one or more of the following:
- (a) an outside light fitting other than a shielded light fitting,
  - (b) an outside light fitting emitting light of more than:
    - (i) if the development is on land less than 12 kilometres from the Siding Spring Observatory—900 lumens, or
    - (ii) in any other case—1,800 lumens,
  - (c) more than 4 shielded outside light fittings,
  - (d) light of more than 7,200 lumens being emitted.
- (6) The consent authority must not grant development consent to lit development on land less than 18 kilometres from the Siding Spring Observatory unless the consent authority is satisfied that the development will incorporate designs that minimise light pollution and measures that will prevent the escape of light at night through skylights, windows or other openings.
- (7) Development on land 18 kilometres or more from observatory**  
The consent authority must not (except with the concurrence of the Secretary) grant development consent to development on land that is 18 kilometres or more from the Siding Spring Observatory if the consent authority considers that the development is likely to result in the emission of light of 1,000,000 lumens or more.
- (8) The consent authority must consult with the observatory director before granting development consent to development for the purposes of a dwelling house, secondary dwelling or dual occupancy on land that is 18 kilometres or more from the Siding Spring Observatory if the consent authority considers that the development is likely to result in a dwelling having:
- (a) an outside light fitting other than a shielded light fitting, or
  - (b) more than 7 shielded outside light fittings or more than 5 such light fittings that are not automatic light fittings.

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<p>(9) [Not adopted]</p> <p>(10) <b>Granting concurrence</b>          The Secretary must take the following into account in deciding whether to grant concurrence under this clause:</p> <ul style="list-style-type: none"> <li>(a) any comments made by the observatory director in relation to the development,</li> <li>(b) the effect the development would have on observing conditions at the Siding Spring Observatory,</li> <li>(c) the quantity of artificial light in the night sky measured through a telescope at the Siding Spring Observatory on or about the date the development application is made and the relationship of that level to the critical level,</li> <li>(d) whether any public interest in permitting the development outweighs the public interest in preserving the observing conditions at the Siding Spring Observatory.</li> </ul> <p>(11) A reference in this clause to light emitted as a result of development for the purposes of a building or work includes light emitted from any other building or work that is to be used as part of or in connection with that building or work.</p> <p>(12) A requirement in this clause to consult with the observatory director in respect of development is a requirement to give written notice of the development to the observatory director and to take into account any comments received from the observatory director within 21 days after the notice is given.</p> <p>(13) Clause 4.6 does not allow development consent to be granted for development that would contravene this clause.</p> <p>(14) In this clause:  <i>automatic light fitting</i> means a light fitting that is activated by a sensor and switches off automatically after a period of time.  <i>critical level</i> means the level at which the quantity of artificial light in the night sky measured through a telescope at the Siding Spring Observatory is greater than:</p>	
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<p>(a) if the telescope is inclined at 30 degrees from the horizon—10% of the surface brightness of the night sky attributable to natural light sources, at the time of the solar cycle when the sky is at its darkest, or</p> <p>(b) if the telescope is inclined at 90 degrees from the horizon—3% of the surface brightness of the night sky attributable to natural light sources, at the time of the solar cycle when the sky is at its darkest.</p> <p><b>horizontal plane</b>, in relation to a light fitting, means the horizontal plane passing through the centre of the light source (for example, the bulb) of the light fitting.</p> <p><b>light pollution</b> means brightening of the night sky caused by artificial light.</p> <p><b>lit development</b> means development that is likely to result in the emission of light.</p> <p><b>observatory director</b> means the Director of the Research School of Astronomy and Astrophysics at the Australian National University.</p> <p><b>outside light fitting</b> means a light fitting that is attached or fixed outside, including on the exterior, of a building.</p> <p>shielded light fitting means a light fitting that does not permit light to shine above the horizontal plane.</p> <p><b>Siding Spring Observatory</b> means the land owned by the Australian National University at Siding Spring and the buildings and equipment situated on that land.</p> <p>(15) This clause (other than subclause (9)) is a compulsory provision for the purposes of clause 4A of the <i>Standard Instrument (Local Environmental Plans) Order 2006</i>.</p>	
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<p><b>Part 6 Additional Local Provisions</b></p>
<p>Part 6 of the DLEP relates to Urban Release Areas. The WLEP does not contain provision of Urban Release Areas with Part 6 of the WLEP relating to Additional Local Provisions, being Part 7 of the DLEP.</p>
<p>Part 6 of the Consolidated LEP will be designated as Urban Release Areas with Additional Local Provisions becoming Part 7, addressed further below.</p>
<p><b>DLEP: Clause 6.1 Arrangements for designated State public infrastructure</b></p>

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WLEP: N/A	
Recommended Clause 6.1	Justification
<p><b>Arrangements for designated State public infrastructure</b></p> <p>(1) The objective of this clause is to require satisfactory arrangements to be made for the provision of designated State public infrastructure before the subdivision of land in an urban release area to satisfy needs that arise from development on the land, but only if the land is developed intensively for urban purposes.</p> <p>(2) Development consent must not be granted for the subdivision of land in an urban release area unless the Director-General has certified in writing to the consent authority that satisfactory arrangements have been made to contribute to the provision of designated State public infrastructure in relation to that land.</p> <p>(3) Subclause (2) does not apply to:</p> <ul style="list-style-type: none"> <li>(a) Any lot identified in the certificate as a residue lot, or</li> <li>(b) any lot to be created by a subdivision on land that was the subject of a previous development consent granted in accordance with this clause, or</li> <li>(c) any lot that is proposed in the development application to be reserved or dedicated for public open space, public roads, public utility undertakings, educational facilities or any other public purpose, or</li> <li>(d) a subdivision for the purpose only of rectifying an encroachment on any existing lot.</li> </ul> <p>(4) This clause does not apply to land in an urban release area if all or any part of the land is in a special contributions area (as defined by section 93C of the Act).</p>	<p>The WLEP does not contain provisions relating to Urban Release Areas.</p> <p>It is recommended that Part 6 Urban release areas as contained under the existing DLEP be included in the Dubbo Regional Local Environmental Plan.</p> <p>The Planning Proposal is considered to be consistent with Direction 21 Coordinate utility infrastructure investment under the Central West and Orana Regional Plan.</p>
<p><b>DLEP: Clause 6.2 Public utility infrastructure</b></p> <p>WLEP: N/A</p>	

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Recommended Clause 6.2	Justification
<p><b>Public utility infrastructure</b></p> <p>(1) Development consent must not be granted for development on land in an urban release area unless the Council is satisfied that any public utility infrastructure that is essential for the proposed development is available to that adequate arrangements have been made to make that infrastructure available when it is required.</p> <p>(2) This clause does not apply to development for the purpose of providing, extending, augmenting, maintaining or repairing any public utility infrastructure.</p>	<p>Urban release areas have been mapped under the provisions of the DLEP. Inclusion of any clause as contained under Part 6 of the DLEP is considered to have no impact on the former Wellington LGA.</p> <p>It is recommended that Part 6 Urban release areas as contained under the existing DLEP be included in the Dubbo Regional Local Environmental Plan.</p> <p>The Planning Proposal is considered to be consistent with Direction 21 Coordinate utility infrastructure investment under the Central West and Orana Regional Plan.</p>

<p><b>DLEP: Clause 6.3 Development control plan</b></p> <p><b>WLEP: N/A</b></p>	
Recommended Clause 6.3	Justification
<p><b>Development Control Plan</b></p> <p>(1) The objective of this clause is to ensure that development on land in an urban release area occurs in a logical and cost-effective manner, in accordance with a staging plan and only after a development control plan that includes specific controls has been prepared for the land.</p> <p>(2) Development consent must not be granted for development on land in an urban release area unless a development control plan that provides for the matters specified in subclause (3) has been prepared for the land.</p> <p>(3) The development control plan must provide for all of the following:</p>	<p>Urban release areas have been mapped under the provisions of the DLEP. Inclusion of any clause as contained under Part 6 of the DLEP is considered to have no impact on the former Wellington LGA.</p> <p>It is recommended that Part 6 Urban release areas as contained under the existing DLEP be included in the Dubbo Regional Local Environmental Plan.</p> <p>The Planning Proposal is considered to be consistent with Direction 22 Manage growth and change in regional cities</p>

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<ul style="list-style-type: none"> <li>(a) A staging plan for the timely and efficient release of urban land, making provision for necessary infrastructure and sequencing,</li> <li>(b) An overall transport movement hierarchy showing the major circulation routed and connections to achieve a simple and safe movement system for private vehicles, public transport, pedestrians and cyclists,</li> <li>(c) An overall landscaping strategy for the protection and enhancement of riparian area and remnant vegetation, including prominent locations, and detailed landscaping requirements for both the public and private domain,</li> <li>(d) A network of passive and active recreational areas,</li> <li>(e) Stormwater and water quality management controls.</li> <li>(f) Amelioration of natural and environmental hazards, the safe occupation of, and the evacuation from any land so affected,</li> <li>(g) Detailed urban design controls for significant development sites,</li> <li>(h) Measures to encourage higher density living around transport, open space and service nodes,</li> <li>(i) Measures to accommodate and control appropriate neighbourhood commercial and retail uses,</li> <li>(j) Suitably located public facilities and services, including provision for appropriate traffic management facilities and parking.</li> </ul> <p>(4) Subclause (2) does not apply to any of the following development:</p> <ul style="list-style-type: none"> <li>(a) A subdivision for the purpose of a realignment of boundaries that does not create additional lots,</li> <li>(b) A subdivision of land in any of the lots proposed to be created is to be reserved or dedicated for public open space, public roads or any other public or environmental purpose,</li> <li>(c) A subdivision of land in a zone in which the erection of structure is prohibited,</li> <li>(d) Proposed development on land that is of minor nature only, if the consent authority is of the opinion that the carrying out of the proposed development would be consistent with the objectives of the zone in which the land is situated.</li> </ul>	<p>and strategic and local centres under the Central West and Orana Regional Plan.</p>
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<p><b>DLEP: Clause 6.4 Relationship between Part and remainder of Plan</b>  <b>WLEP: N/A</b></p>	
<p><b>Recommended Clause 6.4</b></p>	<p><b>Justification</b></p>
<p><b>Relationship between Part and remainder of the Plan</b></p> <p>A provision of this Part prevails over any other provision of this Plan to the extent of any inconsistency.</p>	<p>Urban release areas have been mapped under the provisions of the DLEP. Inclusion of any clause as contained under Part 6 of the DLEP is considered to have no impact on the former Wellington LGA.</p> <p>It is recommended that Part 6 Urban release areas as contained under the existing DLEP be included in the Dubbo Regional Local Environmental Plan.</p> <p>The Planning Proposal is considered to be consistent with Direction 21 Coordinate utility infrastructure investment under the Central West and Orana Regional Plan.</p>

<p><b>Part 7 Additional Local Provisions</b></p>	
<p><b>DLEP: Clause 7.1 Flood planning</b>  <b>WLEP: Clause 6.1 Flood planning</b></p>	
<p><b>Recommended Clause 7.1 Flood Planning</b></p>	<p><b>Justification</b></p>
<p><b>Flood planning</b></p>	

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<p>(1) The objectives of this clause are as follows:</p> <ul style="list-style-type: none"> <li>(a) to minimise the flood risk to life and property associated with the use of land,</li> <li>(b) to allow development on land that is compatible with the land's flood hazard, taking into account projected changes as a result of climate change,</li> <li>(c) to avoid significant adverse impact on flood behaviour and the environment.</li> </ul> <p>(2) This clause applies to:</p> <ul style="list-style-type: none"> <li>(a) land that is shown as "Flood planning area" on the Flood Planning Map, and</li> <li>(b) other land at or below the flood planning level.</li> </ul> <p>(3) Development consent must not be granted to development on land to which this clause applies unless the consent authority is satisfied that the development:</p> <ul style="list-style-type: none"> <li>(a) is compatible with the flood hazard of the land, and</li> <li>(b) will not significantly adversely affect flood behaviour resulting in detrimental increases in the potential flood affectation of other development or properties, and</li> <li>(c) incorporates appropriate measures to manage risk to life from flood, and</li> <li>(d) will not significantly adversely affect the environment or cause avoidable erosion, siltation, destruction of riparian vegetation or a reduction in the stability of river banks or watercourses, and</li> <li>(e) is not likely to result in unsustainable social and economic costs to the community as a consequence of flooding.</li> </ul> <p>(4) A word or expression used in this clause has the same meaning as it has in the Floodplain Development Manual (ISBN 0 7347 5476 0), published in 2005 by the NSW Government, unless it is otherwise defined in this clause.</p> <p>(5) In this clause:  <b><i>flood planning level</i></b> means the level of a 1:100 ARI (average recurrent interval) flood event plus 0.5 metre freeboard.</p>	<p>The Flood planning clause is effectively the same between the DLEP and WLEP, however the clauses contain some minor topographical differences. It is recommended that the WLEP version of the clause be adopted following a recent amendment to the Plan in July 2020.</p>
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<p><b>DLEP:</b> Clause 7.2 Natural resource – biodiversity</p> <p><b>WLEP:</b> Clause 6.3 Terrestrial biodiversity</p>
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Recommended Clause 7.2 Terrestrial biodiversity	Justification
<p><b>Terrestrial biodiversity</b></p> <p>(1) The objectives of this clause is to maintain terrestrial biodiversity by:</p> <ul style="list-style-type: none"> <li>(a) Protecting native fauna and flora, and</li> <li>(b) Protecting the ecological processes necessary for their continued existence, and</li> <li>(c) Encouraging the conservation and recovery of native fauna and flora and their habitats.</li> </ul> <p>(2) This clause applies to land identified as “Biodiversity” on the <i>Terrestrial Biodiversity Map</i>.</p> <p>(3) Before determining a development application for development on land to which this clause applies, the consent authority must consider:</p> <ul style="list-style-type: none"> <li>(a) Whether the development is likely to have: <ul style="list-style-type: none"> <li>(i) any adverse impact on the condition, ecological value and significance of the fauna and flora on the land, and</li> <li>(ii) any adverse impact on the importance of the vegetation on the land to the habitat and survival of native fauna, and <ul style="list-style-type: none"> <li>(i) any potential to fragment, disturb or diminish the biodiversity structure, function and composition of the land, and</li> <li>(ii) any adverse impact on the habitat elements providing connectivity on the land, and</li> </ul> </li> </ul> </li> <li>(b) any appropriate measures proposed to avoid, minimise or mitigate the impacts of the development.</li> </ul> <p>(4) Development consent must not be granted to development on land to which this clause applies unless the consent authority is satisfied that:</p> <ul style="list-style-type: none"> <li>(a) The development is designed, sited and will be managed to avoid any significant adverse environmental impact, or</li> </ul>	<p>Biodiversity is currently assessed differently under the provisions of the DLEP and WLEP.</p> <p>The key differences relate to the LEP mapping as follows:</p> <ul style="list-style-type: none"> <li>• The DLEP Natural resource – biodiversity maps identify high and moderate levels of biodiversity, and</li> <li>• The WLEP Terrestrial biodiversity maps identify only one level of biodiversity.</li> </ul> <p>The purpose of this clause is to trigger the assessment of potential biodiversity impacts as a result of development. The area will be triggered by the biodiversity maps and assessed in the same manner whether or not the maps identify the location under a high or moderate classification. Additionally, with the adoption of the Biodiversity Conservation Act 2016, biodiversity assessment is covered under this legislation with respect to native vegetation assessment.</p> <p>It is recommended that Clause 6.3 Terrestrial biodiversity as contained in the WLEP be adopted under the provisions of Clause 7.2 of the Dubbo Regional Local Environmental Plan.</p> <p>The Planning Proposal is considered to be consistent with Direction 13 Protect and manage environmental assets under the Central West and Orana Regional Plan.</p>

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<p>(b) If that impact cannot be reasonably avoided by adopting feasible alternative – the development is designed, sited and will be managed to minimise that impact, or</p> <p>(c) If that impact cannot be minimised – the development will be managed to mitigate that impact.</p>	
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<p><b>DLEP: Clause 7.3 Earthworks</b></p> <p><b>WLEP: N/A</b></p>	
Recommended Clause 7.3 Earthworks	Justification
<p><b>Earthworks</b></p> <p>(1) The objectives of this clause are as follows:</p> <p>(a) To ensure that earthworks for which development consent is required will not have a detrimental impact on the environmental functions and processes, neighbouring uses, cultural or heritage items or features of the surrounding land,</p> <p>(b) To allow earthworks of a minor nature without requiring separate development consent.</p> <p>(2) Development consent is required for earthworks unless:</p> <p>(a) The work is exempt development under this Plan or another applicable environmental planning instrument, or</p> <p>(b) The work is ancillary to other development for which development consent has been given.</p> <p>(3) Before granting development consent for earthworks, the consent authority must consider the following matters:</p> <p>(a) The likely disruption of, or any detrimental effect on, existing drainage patterns and soil stability in the locality,</p>	<p>The WLEP has not adopted this provision.</p> <p>Adoption of this clause would ensure that the consent authority considers the impacts of earthworks on environmental functions and processes, neighbouring uses, cultural or heritage items or features of the surrounding land.</p> <p>It is recommended that Clause 7.3 Earthworks be adopted within the Dubbo Regional Local Environmental Plan.</p> <p>The Planning Proposal is considered to be consistent with the Direction 13 Protect and manage environmental assets under the Central West and Orana Regional Plan.</p>

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<p>(b) The effect of the proposed development on the likely future use or redevelopment of the land,</p> <p>(c) The quality of the fill or the soil to be excavated, or both,</p> <p>(d) The effect of the proposed development on the existing and likely amenity of adjoining properties,</p> <p>(e) The source of any fill material and the destination of any excavated material,</p> <p>(f) The likelihood of disturbing relics,</p> <p>(g) The proximity to and potential for adverse impact on any watercourse, drinking water catchment or environmentally sensitive area.</p> <p><b>Note.</b> The <i>National Parks and Wildlife Act 1974</i>, particularly section 86, deals with disturbing or excavating land and Aboriginal objects.</p>	
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<p><b>DLEP: Clause 7.4 Natural resource – riparian land and waterways</b></p> <p><b>WLEP: Clause 6.5 Riparian land and watercourses</b></p>	
<b>Recommended Clause 7.4</b>	<b>Justification</b>
<p>(1) The objectives of this clause are to protect or improve :</p> <p>(a) Water quality within waterways, and</p> <p>(b) Stability of the bed and banks of waterways, and</p> <p>(c) Aquatic and riparian habitats, and</p> <p>(d) Ecological processes within waterways and riparian areas, and threatened aquatic species, communities, populations and their habitats, and</p> <p>(e) Scenic and cultural heritage values of waterways and riparian areas.</p> <p>(2) This clause applies to land that is:</p> <p>(a) Identified on the <i>Natural Resource – Water Map</i>, or</p> <p>(b) Situated within 40 metres of the bank or shore (measured horizontally from the top of the bank or shore), of a waterway on land identified in subclause (a).</p>	<p>Both the DLEP and the WLEP have provision for riparian land and waterways. Both clauses are fundamentally the same with some minor differences. The key differences between the clauses are as follows:</p> <ul style="list-style-type: none"> <li>• The DLEP addresses scenic and cultural heritage values of waterways and riparian areas.</li> <li>• The WLEP states that that the consent authority must consider any future rehabilitation of the watercourse and riparian areas.</li> </ul> <p>The additional provision stated under the WLEP is captured under the DLEP Clause 7.4 (4)(iii) mitigates any adverse impact through the restoration of any existing disturbed area on the site.</p>

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<p>(3) Development consent must not be granted to development on land to which this clause applies, unless the consent authority has taken into consideration the following matters:</p> <p>(a) Identification of any potential adverse impact on any of the following :</p> <ul style="list-style-type: none"> <li>(i) water quality within the waterway,</li> <li>(ii) aquatic and riparian habitats and ecosystems,</li> <li>(iii) stability of the bed, shore and banks of the waterway,</li> <li>(iv) the free passage of the fish and other aquatic organism within or along the waterway,</li> <li>(v) habitats of any threatened species, population or ecological community,</li> </ul> <p>(b) The likelihood that a development will increase water extraction from the waterway for domestic or stock use and the potential impact of any extraction on the waterway,</p> <p>(c) A description of all proposed measures that may be undertaken to ameliorate any potential adverse impact.</p> <p>(4) Development consent must not be granted to development on land to which this clause applies, unless the consent authority is satisfied that development is consistent with the objectives of this clause and:</p> <p>(a) The development is designed, sited and managed to avoid any potential adverse environmental impact, or</p> <p>(b) If the potential adverse impact cannot be avoided, the development:</p> <ul style="list-style-type: none"> <li>(i) is designed and sited so as to have minimum adverse impact, and</li> <li>(ii) incorporates effective measures so as to have minimal adverse impact, and</li> <li>(iii) mitigates any adverse impact through the restoration of any existing disturbed area on the site.</li> </ul> <p>(5) In this clause:  <b>Natural Resource – Water Map</b> means the Dubbo Region Environmental Plan 2019 Natural Resource Map – Water Map.</p>	<p>It is recommended that Clause 7.4 as contained in the DLEP be adopted as part of the Dubbo Regional Local Environmental Plan.</p> <p>The Planning Proposal is considered to be consistent with the Direction 13 Protect and manage environmental assets under the Central West and Orana Regional Plan.</p>
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<p><b>DLEP: Clause 7.5 Groundwater vulnerability</b></p> <p><b>WLEP: Clause 6.4 Groundwater vulnerability</b></p>	
Recommended Clause 7.5	Justification
<p><b>Groundwater Vulnerability</b></p> <p>(1) The objective of this clause is to maintain the hydrological functions of key groundwater systems and to protect vulnerable groundwater resources from depletion and contamination as a result of inappropriate development.</p> <p>(2) This clause applies to the land identified as “Groundwater vulnerability” on the Natural Resource – Groundwater Vulnerability Map.</p> <p>(3) Before determining a development application for development on land to which this clause applies, the consent authority must consider:</p> <p>(a) Whether or not the development (including any on-site storage or disposal of solid or liquid waste chemicals) will cause any groundwater contamination or any adverse effect on groundwater dependent ecosystems, and</p> <p>(b) The cumulative impact (including the impact on nearby groundwater extraction for potable water supply or stock water supply) of the development and any other existing development on groundwater.</p> <p>(4) Development consent must not be granted to development on land to which this clause applies unless the consent authority is satisfied that:</p> <p>(a) The development is designed, sited and will be managed to avoid any significant adverse environmental impact, or</p> <p>(b) If that impact cannot be avoided by adopting feasible alternatives – the development is designed, sited and will be managed to minimise that impact, or</p> <p>(c) If that impact cannot be minimised – the development will be managed to mitigate that impact.</p> <p>(5) In this clause:</p>	<p>Clause 6.4 under the WLEP and Clause 7.5 under the DLEP both address the provisions of groundwater vulnerability.</p> <p>The only differences between the two clauses is the phrasing of the paragraphs. The intent behind both clauses is effectively the same.</p> <p>It is recommended that Clause 7.5 be adopted under the provisions of the Dubbo Regional Local Environmental Plan.</p>

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**Natural Resource – Groundwater Vulnerability Map** means the Dubbo Region Local Environmental Plan 2019 Natural Resource – Groundwater Vulnerability Map.

<p><b>DLEP: Clause 7.6 Erection of rural workers’ dwellings on land in Zone RU1 and RU4</b></p> <p><b>WLEP: N/A</b></p>	
Recommended Clause 7.6	Justification
<p><b>Erection of rural workers’ dwellings on land in Zones RU1 and RU4</b></p> <p>(1) The objectives of this clause are:</p> <ul style="list-style-type: none"> <li>(a) To ensure adequate provision for existing agricultural and rural industries that genuinely require accommodation for permanent on-site employees, and</li> <li>(b) To prevent development for a rural worker’s dwelling if agriculture or rural industry does not have the capacity to support the rural worker’s employment.</li> </ul> <p>(2) This clause applies to land in the following zones:</p> <ul style="list-style-type: none"> <li>(a) Zone RU1 Primary Production,</li> <li>(b) Zone RU4 Primary Production Small Lots.</li> </ul> <p>(3) Development consent must not be granted for the erection of a rural worker’s dwelling on land to which this clause applies unless the consent authority is satisfied that:</p> <ul style="list-style-type: none"> <li>(a) There is a demonstrated economic capacity of the agricultural or rural industry to support the on-going employment of rural workers, and</li> </ul>	<p>The WLEP does not contain this clause, likely as a result of not permitting rural workers dwellings on RU1 or RU4 land.</p> <p>The objective of this clause is to protect rural lands from fragmentation whilst ensuring flexibility is maintained to accommodate workers undertaking agricultural activities.</p> <p>The Planning Proposal is considered to be consistent with Direction 27 Deliver a range of accommodation options for seasonal, itinerant and mining workforces under the Central West and Orana Regional Plan.</p> <p>As it is recommended (under separate cover) to make rural workers dwellings permissible with consent in the RU1 and RU4 zones, it is recommended that Clause 7.6 be adopted under the provisions of the Dubbo Regional Local Environmental Plan.</p>

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<p>(b) The development is necessary considering the nature of the agricultural or rural industry land use lawfully occurring on the land or as a result of the remote or isolated location of the land, and</p> <p>(c) The development will not result in more than 1 rural worker’s dwelling being erected on the land comprising the agricultural or rural industry.</p>	
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<p><b>DLEP: Clause 7.7 Airspace operations</b></p> <p><b>WLEP: N/A</b></p>	
Recommended Clause 7.7	Justification
<p><b>Airspace operations</b></p> <p>(1) The objectives of this clause are as follows:</p> <p>(a) To provide for the effective and ongoing operation of Dubbo City Regional Airport by ensuring that such operation is not compromised by proposed development that penetrates the Obstacle Limitation Surface for that airport,</p> <p>(b) To protect the community from undue risk from that operation.</p> <p>(2) If a development application is received and the consent authority is satisfied that the proposed development will penetrate the Obstacle Limitation Surface, the consent authority must not grant development consent unless it has consulted with the relevant Commonwealth body about the application.</p> <p>(3) The consent authority may grant development consent for the development if relevant Commonwealth body advises that:</p> <p>(a) The development will penetrate the Obstacle Limitation Surface but it has no objection to its construction, or</p> <p>(b) The development will not penetrate the Obstacle Limitation Surface.</p>	<p>This clause applies only to the Dubbo Airport and its surrounds as referred to on Dubbo’s Obstacle Limitation Surface Map.</p> <p>If adopted, Clause 7.7 would not impact the former Wellington LGA.</p> <p>It is recommended that Clause 7.7 be adopted to ensure development within the vicinity of the Dubbo Airport does not compromise its use.</p> <p>The Planning Proposal is considered to be consistent with Direction 20 Enhance access to air travel and public transport under the Central West and Orana Regional Plan.</p>

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<p>(4) The consent authority must not grant development consent for the development if the relevant Commonwealth body advises that the development will penetrate the Obstacle Limitation Surface and should not be constructed.</p> <p>(5) The consent authority must not grant development consent for development that will penetrate the Obstacle Limitation Surface unless the consent authority is satisfied that the development will not create an obstruction, hazard or other potential hazard to aircraft accessing the airport (including a hazard or potential hazard relating to light sources or bird strike).</p> <p>(6) In this clause:  <b>Obstacle Limitation Surface</b> means the Obstacle Limitation Surface shown on the Obstacle Limitation Surface Map.  <b>Obstacle Limitation Surface Map</b> means the <i>Obstacle Limitation Surface Map for Dubbo City Regional Airport</i> prepared by the relevant Commonwealth body.  <b>Relevant Commonwealth body</b> means the body, under Commonwealth legislation, that is responsible for approvals for development that penetrates the Obstacle Limitation Surface for Dubbo City Regional Airport.</p>	
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<p><b>DLEP: Clause 7.8 Development in areas subject to aircraft noise</b></p> <p><b>WLEP: N/A</b></p>	
<b>Recommended Clause 7.8</b>	<b>Justification</b>
<p><b>Development in areas subject to aircraft noise</b></p> <p>(1) The objectives of this clause are as follows:                  (a) To prevent certain sensitive developments from being located near the Dubbo City Regional Airport and its flight paths,</p>	<p>This clause only refers to the Dubbo City Regional Airport.</p> <p>If adopted, Clause 7.8 would not impact the former Wellington LGA.</p>

<p>(b) To assist in minimising the impact of aircraft noise from the airport and its flight paths by requiring appropriate noise attenuation measures in noise sensitive buildings,</p> <p>(c) To ensure that land use and development in the vicinity of the airport does not hinder or have any other adverse impact on the ongoing, safe and efficient operation of the airport.</p> <p>(2) This clause applies to development that:</p> <p>(a) Is on land that:</p> <p>(i) is near the Dubbo City Regional Airport, and</p> <p>(ii) is in an ANEF contour of 20 or greater, and</p> <p>(b) The consent authority considers is likely to be adversely affected by aircraft noise.</p> <p>(3) Before determining a development application for development to which this clause applies, the consent authority:</p> <p>(a) Must consider whether the development will result in an increase in the number of dwellings or people affected by aircraft noise, and</p> <p>(b) Must consider the location of the development in relation to the criteria set out in Table 2.1 (Building Site Acceptability Based on ANEF Zone) in AS 2021 – 2000, and</p> <p>(c) Must be satisfied the development will meet the indoor design sound levels shown in Table 3.3 (Indoor Design Sound Levels for Determination of Aircraft Noise Reduction) in AS 2021-2000.</p> <p>(4) In this clause:</p> <p><i>ANEF contour</i> means a noise exposure contour shown as an ANEF contour on the <i>Noise Exposure Forecast Contour Map</i> for the Dubbo City Regional Airport prepared by the Department of the Commonwealth responsible for airports.</p> <p><i>AS 2021 – 2000</i> means AS 2021 – 2000. <i>Acoustics – Aircraft noise intrusion – Building siting and construction</i>.</p>	<p>It is recommended that Clause 7.8 be adopted under the provisions of the Dubbo Regional Local Environmental Plan.</p> <p>The Planning Proposal is considered to be consistent with Direction 20 Enhance access to air travel and public transport under the Central West and Orana Regional Plan.</p>
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<p><b>DLEP: Clause 7.9 Location of sex services premises</b></p> <p><b>WLEP: Clause 6.8 Location of sex services premises</b></p>	
<b>Recommended Clause 7.9</b>	<b>Justification</b>
<p><b>Location of sex services premises</b></p> <p>(1) The objective of this clause is to minimise land use conflicts and adverse amenity impact by providing a reasonable level of separation between sex services premises, specified land uses and places regularly frequented by children.</p> <p>(2) In deciding whether to grant development consent to development for the purposes of sex services premises the consent authority must consider the following:</p> <p>(a) whether the premises will be located on land that adjoins, is directly opposite, or is separated only by a local road from land:</p> <p style="padding-left: 20px;">(i) in Zone R1 General Residential, Zone R2 Low Density Residential or Zone RE1 Public Recreation, or</p> <p style="padding-left: 20px;">(ii) used as a centre-based child care facility, a community facility, a school or a place of public worship,</p> <p>(b) the impact of the proposed development and its hours of operation on any place likely to be frequented by children:</p> <p style="padding-left: 20px;">(i) that adjoins the proposed development, or</p> <p style="padding-left: 20px;">(ii) that can be viewed from the proposed development, or</p> <p style="padding-left: 20px;">(iii) from which a person can view the proposed development.</p>	<p>The DLEP and WLEP are effectively the same with only minor topographical differences. It is recommended that the DLEP clause be adopted noting that the minor topographical differences will not have any material impact.</p>

<p><b>DLEP: Clause 7.10 Dwelling houses in Zone RU4 Primary Production Small Lots</b></p> <p><b>WLEP: N/A</b></p>	
<b>Recommended Clause 7.10</b>	<b>Justification</b>

<p><b>Dwelling houses in Zone RU4 Primary Production Small Lots</b></p> <p>(1) The objective of this clause is to ensure dwelling houses are developed only where they support the permitted agricultural use of the land.</p> <p>(2) This clause applies to development for the purposes of dwelling houses on land in Zone RU4 Primary Production Small Lots.</p> <p>(3) Development consent must not be granted to development to which this clause applies, unless the consent authority is satisfied that:</p> <ul style="list-style-type: none"> <li>(a) The land is being or is intended to be used for intensive plant agriculture, extensive agriculture or aquaculture, and</li> <li>(b) the dwelling house will be required to support the carrying out of intensive plant agriculture, extensive agriculture or aquaculture, and</li> <li>(c) the dwelling house is not likely to cause any land use conflict with existing agricultural uses being undertaken on neighbouring properties in the zone; and</li> <li>(d) services for the supply of water and electricity to support the agricultural activity are available or adequate arrangements have been made to make them available when required.</li> </ul>	<p>The WLEP does contain this clause.</p> <p>Clause 7.10 aims to facilitate the development of dwelling houses in support of an agricultural land use.</p> <p>In addition, the clause utilises planning controls that protect land adjoining the river system and offers opportunities for intensive agricultural activities.</p> <p>The Planning Proposal is considered to be consistent with Direction 1 Protect the region’s diverse and productive agricultural land under the Central West and Orana Regional Plan.</p> <p>It is recommended that Clause 7.10 Dwelling houses in Zone RU4 Primary Production Small Lots be adopted under the Dubbo Regional Local Environmental Plan.</p>
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<p><b>DLEP: Clause 7.11 Commercial premises in Zone B4 Mixed Use</b></p> <p><b>WLEP: N/A</b></p>	
<p><b>Recommended Clause 7.11</b></p>	<p><b>Justification</b></p>
<p><b>Commercial premises in Zone B4 Mixed Use</b></p> <p>(1) This clause applies to development on land within Zone B4 Mixed Use.</p> <p>(2) Development consent must not be granted to development for business premises or office premises if the gross floor area of that development is greater than 200 square metres.</p>	<p>There is currently no land that is zoned B4 Mixed Use in the former Wellington LGA and as such, the WLEP does not contain this clause.</p> <p>The inclusion of this clause would not result in any impact to the former Wellington LGA.</p>

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<p>(3) Development consent must not be granted to development for retail premise if the gross floor area of that development is greater than 150 square metres.</p> <p>(4) Subclause (2) and (3) do not apply to any development undertaken within a building that existing immediately before the commencement of this Plan.</p>	<p>It is recommended that the new Consolidated LEP adopt Clause 7.11 with no changes.</p>
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<p><b>DLEP: Clause 7.12 Shops in B1 Neighbourhood Centre</b></p> <p><b>WLEP: N/A</b></p>	
<p><b>Recommended Clause 7.12</b></p>	<p><b>Justification</b></p>
<p><b>Shops in Zone B1 Neighbourhood Centre</b></p> <p>(1) The objective of this clause is to maintain the commercial hierarchy of Dubbo by encouraging retail development of an appropriate scale within neighbourhood centres.</p> <p>(2) Despite any other provision of this Plan, the consent authority must not grant development consent to development for retail premises on land within Zone B1 Neighbourhood Centre if the gross floor area of the development will exceed 1,000 square metres.</p> <p>(3) Before granting consent to development for the purpose of shops having a gross floor area of 500 square metres or greater, in either one separate tenancy or any number of tenancies, the consent authority must consider the economic impact of the proposed development and be satisfied that the proposed development will not have an adverse impact on the commercial hierarchy of Dubbo.</p>	<p>There is currently no land that is Zoned B1 Neighbourhood Centre in the former Wellington LGA and as such, the WLEP does not contain this clause.</p> <p>The inclusion of this clause would not result in any impact to the former Wellington LGA.</p> <p>It is recommended that Clause 7.12 be adopted under the Dubbo Regional Local Environmental Plan.</p>

<p><b>DLEP: Clause 7.12A Retail premises on certain land at Boundary Road, Dubbo</b></p> <p><b>WLEP: N/A</b></p>	
Recommended Clause 7.12A	Justification
<p><b>Retail premises on certain land at Boundary Road, Dubbo</b></p> <p>(1) This clause applies to that part of Lot 1002, DP 1236775 at Boundary Road, Dubbo that is:</p> <p style="margin-left: 20px;">(a) Within Zone B1 Neighbourhood Centre, and</p> <p style="margin-left: 20px;">(b) Identified as "5" on the <a href="#">Additional Permitted Uses Map</a>.</p> <p>(2) Despite any other provision of this Plan, development consent may be granted to development for the purposes of retail premises on land to which this clause applies with a gross floor area that will exceed 1,000 square metres.</p> <p>(3) Before granting consent to development for the purpose of shops having a gross floor area of 500 square metres or greater, in either one separate tenancy or any number of tenancies, the consent authority must consider the economic impact of the proposed development and be satisfied that the proposed development will not have an adverse impact on the commercial hierarchy of Dubbo.</p>	<p>This clause refers specifically to Lot 1002, DP 1236775 at Boundary Road, Dubbo. Adoption of this clause would not result in any impact to other land outside of this address.</p> <p>It is recommended that Clause 7.12A be adopted under the Dubbo Regional Local Environmental Plan.</p>
<p><b>DLEP: Clause 7.12B Dwelling houses on certain land at Warrie Road, Dubbo</b></p> <p><b>WLEP: N/A</b></p>	
Recommended Clause 7.12B	Justification
<p><b>Dwelling houses on certain land at Warrie Road, Dubbo</b></p> <p>(1) This clause applies to Lots 147 and 148, DP 754331, Warrie Road, Dubbo.</p>	<p>This clause refers specifically to Lot 147 and Lot 147, DP 754331, Warrie Road, Dubbo. Adoption of this clause</p>

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<p>(2) Despite any other provision of this Plan, development consent may be granted to development for the purposes of a dwelling house on land to which this clause applies if the consent authority is satisfied that—</p> <p>(a) the relevant development application provides for the consolidation of the land to which this clause applies into 1 lot, and</p> <p>(b) the dwelling house will be a manufactured home within the meaning of the <a href="#">Local Government Act 1993</a>, and</p> <p>(c) the development will be ancillary to an approved intensive livestock agriculture use.</p>	<p>would not result in any impact to other land outside of this address.</p> <p>It is recommended that Clause 7.12B be adopted under the Dubbo Regional Local Environmental Plan.</p>
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<p><b>DLEP: Clause 7.12C Use of certain land at Camp Road, Dubbo</b></p> <p><b>WLEP: N/A</b></p>	
Recommended Clause 7.12C	Justification
<p><b>7.12C Use of certain land at Camp Road, Dubbo</b></p> <p>(1) This clause applies to Lot 8, DP1063425, 4L Camp Road, Dubbo (<i>the land</i>).</p> <p>(2) The objectives of this clause are to ensure that any development on the land, including residential development—</p> <p>(a) is not complying development for the purposes of <a href="#">State Environmental Planning Policy (Exempt and Complying Development Codes) 2008</a>, and</p> <p>(b) minimises light pollution and does not impinge on the functioning of the Dubbo Observatory, and</p> <p>(c) incorporates appropriate noise mitigation measures, and</p> <p>(d) minimises land use conflict with adjoining land uses, and</p> <p>(e) does not adversely impact on vegetation on land designated as a buffer zone.</p> <p>(3) The land is designated as being within a buffer area for the purposes of clause 1.19(1)(e)(i) of <a href="#">State Environmental Planning Policy (Exempt and Complying Development Codes) 2008</a>.</p>	<p>This clause is a site specific clause and as such should be adopted under the Dubbo Regional Local Environmental Plan.</p>

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- (4) The consent authority must not grant development consent to development on land identified on the [Lighting Controls Map](#) as "Subject to lighting controls in proximity to Dubbo Observatory" unless satisfied that the development will not result in—
- (a) a skylight being included in any dwelling, and
  - (b) more than 2 outdoor light fittings per dwelling, and
  - (c) an outdoor light not being controlled by way of a motion sensor, and
  - (d) an outdoor light not being shielded and directed downwards to prevent any upward or horizontal light, and
  - (e) an outdoor light emitting more than 940 lumens.

**Note.**

940 lumens is equivalent to 75 watts maximum for an incandescent light bulb or 10 watts for an LED light bulb.

- (5) The consent authority must not grant development consent to development on the land for the purposes of a prescribed use unless satisfied that appropriate noise mitigation measures will be incorporated into the development to reduce noise reaching the land from Morris Park Speedway so that the occupants of any dwelling on the land will not be subject to excessive noise.
- (6) The consent authority must not grant development consent to development on any of the land that borders a buffer zone, as identified on the [Buffer Map](#), for a prescribed use unless satisfied that—
- (a) all dwellings will be located outside the buffer zone, and
  - (b) a suitable vegetation management plan has been prepared for the ongoing management of vegetation in the buffer zone.
- (7) In this clause—
- prescribed use** means—
- (a) dwelling houses, or
  - (b) shop top housing, or
  - (c) tourist and visitor accommodation.

**vegetation management plan** means a plan that specifies a program of action for the management of land, its ecosystems and vegetation

<p><b>DLEP: Clause 7.13 Restricted premises</b></p> <p><b>WLEP: N/A</b></p>	
<b>Recommended Clause 7.13</b>	<b>Justification</b>
<p><b>Restricted premises</b></p> <p>The consent authority must not grant consent to development for the purposes of restricted premises unless it has considered the following:</p> <ul style="list-style-type: none"> <li>(a) If the development is on land other than land in Zone IN3 Heavy Industrial – whether any part of the proposed development, other than an accessway or access point, would be located at street level or on the first floor of a building,</li> <li>(b) Whether any part of a building in which the proposed development will be situated is being, or is proposed to be, used for the purposes of residential accommodation,</li> <li>(c) The impact the proposed development would have on places of high pedestrian activity,</li> <li>(d) The impact the proposed development and its hours of operation would have on any place, likely to be regularly frequented by children:             <ul style="list-style-type: none"> <li>(i) that adjoins the proposed development, or</li> <li>(ii) that can be viewed from the proposed development,</li> <li>(iii) (Repealed)</li> </ul> </li> <li>(e) The visual impact of the proposed development and any associated signage on the amenity of the locality.</li> </ul>	<p>The WLEP does not contain this clause</p> <p>The clause aims to ensure that development for the purpose of a restricted premises is appropriate in nature and limits potential for land use conflicts outside of the IN3 zone.</p> <p>It is recommended that Clause 7.13 be adopted under the Dubbo Regional Local Environmental Plan.</p> <p>The Planning Proposal is considered to be consistent with Direction 12 Plan for greater land use compatibility under the Central West and Orana Regional Plan.</p>

<p><b>DLEP: Clause 7.14 Rural and nature-based tourist facilities</b></p> <p><b>WLEP: N/A</b></p>	
<b>Recommended Clause 7.14</b>	<b>Justification</b>

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<p><b>Rural and nature-based tourist facilities</b></p> <p>(1) The objective of this clause is to ensure that tourism development in rural and nature areas is low scale and does not adversely impact on the agricultural production, scenic or environmental values of the land.</p> <p>(2) This clause applies to land in the following zones:</p> <ul style="list-style-type: none"> <li>(a) Zone RU1 Primary Production,</li> <li>(b) Zone RU2 Rural Landscape,</li> <li>(c) Zone R5 Large Lot Residential.</li> </ul> <p>(3) Development consent must not be granted for development for the purpose of tourist facilities on land which this clause applies unless the consent authority is satisfied that:</p> <ul style="list-style-type: none"> <li>(a) Adequate access exists or will be provided to service the development from a road other than a classified road, taking into account the scale of the development, and</li> <li>(b) The development will not create a land use conflict, and</li> <li>(c) The development is complementary to the rural or environmental attributes of the land and its surrounds, and</li> <li>(d) The development will not have a significant adverse impact on agricultural land production, the scenic amenity of the locality or significant features of the natural environment, and</li> <li>(e) If the development is located in an unsewered area, adequate on-site wastewater systems will service the land without having an adverse impact on the water quality of the area, and</li> <li>(f) The tourist facility will be managed and operated by the owners or by a site manager who resides on the land.</li> </ul> <p>(4) In this clause:  <b>tourist facility</b> means any development where services or facilities are provided for visitors to the area and includes, but is not limited to, camping grounds, eco-tourist</p>	<p>The WLEP does not contain this clause.</p> <p>The purpose of the clause is to accommodate rural and nature-based tourist facilities in the RU1, RU2 and R5 zones.</p> <p>The Planning Proposal is considered to be consistent with Direction 4 Promote and diversify regional tourism markets under the Central West and Orana Regional Plan.</p> <p>It is recommended that Clause 7.13 be adopted under the Dubbo Regional Local Environmental Plan.</p>
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facilities, hotel or motel accommodation, information and education facilities and restaurants or cafes.	
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<b>DLEP: Clause 7.15 Maximum number of lots</b>	
<b>WLEP: N/A</b>	
<b>Recommended Clause 7.15</b>	<b>Justification</b>
<p><b>7.15 Maximum number of lots</b>                  Despite any other provision of this Plan, the consent authority must not grant consent to the subdivision of land identified on the Lot Size Map as "Area A" if the subdivision of land would result in the total number of lots in that area exceeding 196 lots.</p>	<p>This clause is a site specific clause and as such should be adopted under the Dubbo Regional Local Environmental Plan.</p>

<b>DLEP: Clause 7.16 Matter for consideration by consent authority in relation to impacts of salinity on particularly land</b>	
<b>WLEP: N/A</b>	
<b>Recommended Clause 7.16</b>	<b>Justification</b>
<p><b>7.16 Matter for consideration by consent authority in relation to impacts of salinity on particular land</b>                  (1) This clause applies to a development application for development in relation to the following land—                  (a) Lots 64 and 65, DP 754287, 16L and 24L Eulomogo Road, Dubbo,                  (b) Lot 200, DP 825059, 30R Eulomogo Road, Dubbo,                  (c) Lots 316 and 317, DP 754308, Pinedale Road, Dubbo,                  (d) Lot 661, DP 565756, 24L Eulomogo Road, Dubbo,                  (e) Lot 662, DP 565756, 2L Torwood Road, Dubbo.                  (2) Before determining a development application, the consent authority must consider the potential impacts of salinity, in accordance with the <i>Salinity Management Strategy, Daisy Hill Rural-Residential Estate</i>, dated 2 July 2020 and published by the Department</p>	<p>This clause is a site specific clause and as such should be adopted under the Dubbo Regional Local Environmental Plan.</p>

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<b>DLEP: N/A</b>	
<b>WLEP: Clause 6.2 Stormwater management</b>	
<b>WLEP Clause 6.2 – Clause to be deleted</b>	
<p>Clause 6.2 of the WLEP contains provisions with respect to stormwater management on certain land.</p> <p>DLEP does not contain this clause or one similar. Provision of stormwater management has been assessed through the application of the Development Control Plan.</p> <p>It is considered that this clause is not required for the consolidated LEP given the working history of undertaking development within the former Dubbo LGA. It is therefore recommended that this clause be deleted.</p>	

<b>DLEP: N/A</b>	
<b>WLEP: Clause 6.6 Karst topography subsidence risk</b>	
<b>Recommended Clause 7.17</b>	<b>Justification</b>
<p><b>Karst topography subsidence risk</b></p> <p>(1) The objectives of this clause are to ensure that development in areas of subsidence risk from karst topography:</p> <ul style="list-style-type: none"> <li>(a) Does not disturb the underlying geotechnical conditions of the land, and</li> <li>(b) Is restricted on unsuitable land, and</li> <li>(c) Does not endanger life or property.</li> </ul>	<p>The DLEP does not contain any provisions relating to karst topography subsidence risk.</p> <p>The purpose of this clause is to mitigate the impacts of development on karst topography. By adapting this clause within the Comprehensive LEP, the mapped areas will still only apply to the former Wellington LGA and will therefore have no impact on the former Dubbo LGA.</p>

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<p>(2) This clause applies to land identified as “Karst” on the Natural Resource – Karst Map.</p> <p>(3) Before determining a development application for development on land to which this clause applies, the consent authority must consider the following matters to decide whether or not the development is responsive to the risk of subsidence:</p> <ul style="list-style-type: none"> <li>(a) The development’s design and construction methods,</li> <li>(b) The specific geotechnical constraints of the site,</li> <li>(c) Wastewater management, stormwater and drainage across the site.</li> </ul> <p>(4) Development consent must not be granted to development on land to which this clause applies unless:</p> <ul style="list-style-type: none"> <li>(a) The consent authority is satisfactory that: <ul style="list-style-type: none"> <li>(i) the development is designed, sited and will be managed to avoid any significant adverse impact on the development and the land surrounding the development, or</li> <li>(ii) if that impact cannot be avoided by adopting feasible alternative – the development is designed, sited and will be managed to mitigate that impact, and</li> </ul> </li> <li>(b) The consent authority is satisfied that the development will appropriately manage wastewater, stormwater and drainage across the site so as to not affect the rate, volume and quality of water leaving the land.</li> </ul>	<p>The Planning Proposal is considered to be consistent with Direction 13 Protect and manage environmental assets under the Central West and Orana Regional Plan.</p> <p>It is recommended that Clause 7.17 be adopted under the Dubbo Regional Local Environmental Plan.</p>
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<p><b>DLEP: N/A</b></p>
<p><b>WLEP: Clause 6.7 Essential Services</b></p>
<p><b>WLEP Clause 6.7 – Clause to be deleted</b></p>
<p>Clause 6.7 of the WLEP contains provisions with respect to ensuring Council is satisfied that developments are provided with water, electricity, sewage, stormwater and vehicular access.</p>

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The DLEP does not contain this clause or one similar. Provision of the above mentioned services have been considered and implemented through the Development Control Plan (DCP). Given the provision of infrastructure services requires a greater detail of consideration than can be provided for within the LEP, the DCP is the more appropriate document for the consideration, assessment and implementation of necessary infrastructure services.

It is considered that this clause is not required for the consolidated LEP given the working history of undertaking development within the former Dubbo LGA. It is therefore recommended that this clause be deleted.

DLEP: Schedule 1 Additional permitted uses	
WLEP: Schedule 1 Additional permitted uses	
Recommended Schedule 1	Justification
<p><b>1AA Use of certain land at 90–101 Brisbane Street and 27 Erskine Street, Dubbo</b>                      (1) This clause applies to Lots A and B, DP 162733, Lot A, DP 62456, Lot 100, DP 808182, Lot 0, SP 19646 and Lot A, DP 162468 at 90–101 Brisbane Street and 27 Erskine Street, Dubbo.                      (2) Development for the purposes of an agricultural produce industry is permitted with development consent.</p>	<p>DLEP includes a schedule of Additional Permitted Uses. WLEP did not include any Additional Permitted Uses. This planning proposal intends to adopt DLEP Additional Permitted Use schedule.</p> <p>In addition, minor land use permissibilities have changed to provide consistency for the Dubbo Regional Local Environmental Plan (as discussed in the land use comparison). As a result there are new APU’s created and included in the recommended schedule 1.</p>
<p><b>1AB Use of certain land at Narromine Road, Dubbo</b>                      (1) This clause applies to part of Lot 302, DP 602386, part of Lot 23, DP 755114, Lot 46, DP 755114 and part of Lot 151, DP 755094 at Narromine Road, Dubbo, identified as “1AB” on the <a href="#">Additional Permitted Uses Map</a>.                      (2) Development for the purposes of one dwelling house is permitted with development consent.</p>	<p>The Planning Proposal is considered to be consistent with vision of “<i>the most diverse regional economy in NSW with a vibrant network of centres leveraging the opportunities of being at the heart of NSW</i>” from the Central West and Orana Regional Plan.</p>
<p><b>1A Use of certain land at 1 Torvean Avenue, Dubbo</b>                      (1) This clause applies to Lot 100, DP 1168671 at 1 Torvean Avenue, Dubbo.</p>	

(2) Development for the purposes of a recreation facility (indoor) is permitted with development consent.

**1 Use of certain land at 10–12 Victoria Street, Dubbo**

(1) This clause applies to Lot 1, DP 795554 and Lot 103, DP 875089 at 10–12 Victoria Street, Dubbo.

(2) Development for the purposes of office premises.

**2 Use of certain land at Darling Street, Dubbo**

(1) This clause applies to Lot 5, DP 1006205 at Darling Street, Dubbo.

(2) Development for the purposes of a car park is permitted with development consent.

**3 Use of certain land at Palmer Street, Dubbo**

(1) This clause applies to so much of Lot 11, DP 1050240 at Palmer Street, Dubbo (the former RAAF stores depot site) that is within 50 metres of the boundary between—

(a) the part of that land that is in Zone SP3 Tourist, and

(b) the part of that land that is in Zone R1 General Residential.

(2) Development for the purposes permitted in Zone R1 General Residential is permitted with development consent on the land to which this clause applies that is in Zone SP3 Tourist.

(3) Development for the purposes permitted in Zone SP3 Tourist is permitted with development consent on the land to which this clause applies that is in Zone R1 General Residential.

(4) Development consent may be granted under this clause only if the consent authority is satisfied that—

(a) the development is not inconsistent with the objectives for development in both zones, and

(b) the carrying out of the development is desirable due to compatible land use planning, infrastructure capacity and other planning principles relating to the efficient and timely development of land.

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<p><b>4 Use of certain land at 20L Chapmans Road, Dubbo</b>  (1) This clause applies to Lot 3, DP 554158 at 20L Chapmans Road, Dubbo.  (2) Development for the purposes of hotel or motel accommodation is permitted with development consent.</p> <p><b>5 Use of certain land at Boundary Road, Dubbo</b>  (1) This clause applies to that part of Lot 1002, DP 1236775 at Boundary Road, Dubbo that is identified as “5” on the <a href="#">Additional Permitted Uses Map</a>.  (2) Development for the purposes of a recreation facility (indoor) is permitted with development consent.</p> <p><b>6 Use of certain land at 31 Merrilea Road, Dubbo</b>  (1) This clause applies to Lot 12, DP 1154493 at 31 Merrilea Road, Dubbo, identified as “6” on the <a href="#">Additional Permitted Uses Map</a>.  (2) Development for the purposes of an animal boarding or training establishment is permitted with development consent.</p> <p><b>7 Use of certain land at 20 Mitchell Street, Wellington</b>  (1) This clause applies to Lot 21, DP 3831 at 20 Mitchell Street, Wellington identified at “7” on the Additional Permitted Uses Map.  (2) Development for the purpose of a recreation facility (indoor) is permitted with development consent.</p> <p><b>8 Use of certain land at 14-16 Lee Street, Wellington</b>  (1) This clause applies to Lot 3, DP 214773 at 14-16 Lee Street, Wellington identified at “8” on the Additional Permitted Uses Map.  (2) Development for the purpose of a retail premise is permitted with development consent.</p> <p><b>9 Use of certain land at 44 – 48 Curtis Street, Wellington</b>  (1) This clause applies to Lot 2, DP 773253 at 44 – 48 Curtis Street, Wellington identified at “9” on the Additional Permitted Uses Map.</p>	
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(2) Development for the purpose of a caravan park is permitted with development consent.

**9 Use of certain land at 1946 Twelve Mile Road, Wellington, 104 Gladstone Road, Wellington and 808 Mine Road, Wellington**

(1) This clause applies to Lot 4 DP 133162, Lot 6 DP 750760 and Lot 46 DP 1110608 identified at "10" on the Additional Permitted Uses Map.

(2) Development for the purpose of a Livestock Processing Facility (Poultry Abattoir) is permitted with development consent.

## Version 2 – Draft Dubbo Regional Local Environmental Plan 2021

under the

Environmental Planning and Assessment Act 1979

### Part 1 Preliminary

#### 1.1 Name of Plan [compulsory]

This Plan is *Dubbo Regional Local Environmental Plan 2021*.

#### 1.1AA Commencement [compulsory]

This Plan commences on the day on which it is published on the NSW legislation website.

#### 1.2 Aims of Plan [compulsory]

- (1) This Plan aims to make local environmental planning provisions for land in the Dubbo Region in accordance with the relevant standard environmental planning instrument under section 33A of the Act.
- (2) The particular aims of this Plan are as follows:
  - (a) To ensure the Dubbo Central Business District is:
    - (i) Centralised within the City of Dubbo by shifting the residential development emphasis to West Dubbo; and
    - (ii) Maintained as the primary commercial centre for the greater region.
  - (b) To encourage development that complements and enhance the unique character and amenity of Wellington, and the villages across the local government area,
  - (c) To provide high quality open space to meet a wide range of active and passive recreation needs of our community,
  - (d) To ensure environmental cultural heritage is adequately protected and conserved,
  - (e) To ensure adequate provision is made for the development, establishment and enhancement of cultural, educational, research and medical institutions,
  - (f) To ensure land zoned for industrial purposes is protected for development,

- (g) To protect, enhance and conserve agricultural land and recognise the contribution agriculture makes to the regional economy ensuring agricultural land planning maintains the production basis of the rural economy,
- (h) To ensure urban stormwater is managed to maintain quality and not detrimentally impact on downstream development,
- (i) To ensure the floodplains of the Macquarie, Bell and Talbragar rivers are adequately protected from inappropriate development and to ensure the impact of flooding on people and the built and natural environment is minimised,
- (j) To implement the principles of ecologically sustainable development to ensure social, economic and environmental resources are available to present and future generations,
- (k) Actively promote integration of land uses and transport to improve access and reduce dependence on private vehicles and travel demand,
- (l) Encourage a range of housing choices and densities in planned urban and rural locations that are compatible with the residential and rural environment, addresses population growth, and meets the diverse needs of the community,
- (m) The Dubbo Local Government Area is resilient to the impacts of climate change.

**1.3 Land to which Plan applies [compulsory]**

This Plan applies to the land identified on the Land Application Map.

**1.4 Definitions [compulsory]**

The Dictionary at the end of this Plan defines words and expressions for the purposes of this Plan.

**1.5 Notes [compulsory]**

Notes in this Plan are provided for guidance and do not form part of this Plan.

**1.6 Consent authority [compulsory]**

The consent authority for the purposes of this Plan is (subject to the Act) the Council.

**1.7 Maps [compulsory]**

- (1) A reference in this Plan to a named map adopted by this Plan is a reference to a map by that name:
    - (a) approved by the Minister when the map is adopted, and
    - (b) as amended or replaced from time to time by maps declared by environmental planning instruments to amend or replace that map, and approved by the Minister when the instruments are made.
  - (1AA) A reference to the Minister in subclause (1) is taken to be a reference to the Greater Sydney Commission in the case of any map that applies to a local government area in the Greater Sydney Region (within the meaning of the *Greater Sydney Commission Act 2015*) and that is adopted by a local environmental plan on or after 27 January 2016.
  - (2) Any 2 or more named maps may be combined into a single map. In that case, a reference in this Plan to any such named map is a reference to the relevant part or aspect of the single map.
  - (3) Any such maps are to be kept and made available for public access in accordance with arrangements approved by the Minister.
  - (4) For the purposes of this Plan, a map may be in, and may be kept and made available in, electronic or paper form, or both.
- Note.** The maps adopted by this Plan are to be made available on the official NSW legislation website in connection with this Plan. Requirements relating to the maps are set out in the documents entitled *Standard technical requirements for LEP maps* and *Standard requirements for LEP GIS data* which are available on the website of the Department of Planning and Environment.

**1.8 Repeal of planning instruments applying to land [compulsory]**

- (1) All local environmental plans and deemed environmental planning instruments applying only to the land to which this Plan applies are repealed.
- Note. [compulsory if any local environmental plan is wholly repealed]** The following local environmental plans are repealed under this provision:

*Dubbo Local Environmental Plan 2011*

*Wellington Local Environmental Plan 2012*

- (2) All local environmental plans and deemed environmental planning instruments applying to the land to which this Plan applies and to other land cease to apply to the land to which this Plan applies.

**1.9 Application of SEPPs [compulsory]**

- (1) This Plan is subject to the provisions of any State environmental planning policy that prevails over this Plan as provided by section 36 of the Act.
- (2) The following State environmental planning policies (or provisions) do not apply to the land to which this Plan applies:

*State Environmental Planning Policy No 1—Development Standards*

**1.9A Suspension of covenants, agreements and instruments**

- (1) For the purpose of enabling development on land in any zone to be carried out in accordance with this Plan or with a consent granted under the Act, any agreement,

covenant or other similar instrument that restricts that carrying out of that development does not apply to the extent necessary to serve that purpose.

- (2) This clause does not apply –
- (a) to a covenant imposed by the Council or that the Council requires to be imposed, or
  - (b) to any relevant instrument within the meaning of section 13.4 of the *Crown Land Management Act 2016*, or
  - (c) to any conservation agreement within the meaning of the *National Parks and Wildlife Act 1974*, or
  - (d) to any Trust agreement within the meaning of the *Nature Conservation Trust Act 2001*, or
  - (e) to any property vegetation plan within the meaning of the *Native Vegetation Act 2003*, or
  - (f) to any biobanking agreement within the meaning of Part 7A of the *Threatened Species Conservation Act 1995*, or
  - (g) to any planning agreement within the meaning of Subdivision 2 of Division 7.1 of the Act.
- (3) This clause does not affect the rights or interests of any public authority under any registered instrument.
- (4) Under section 3-16 of the Act, the Governor, before the making of this clause, approved of subclauses (1)-(3)

Standard Instrument—Principal Local Environmental Plan [NSW]  
Part 2 Permitted or prohibited development

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## Part 2 Permitted or prohibited development

### 2.1 Land use zones [compulsory]

The land use zones under this Plan are as follows:

#### **Rural Zones**

- RU1 Primary Production
- RU2 Rural Landscape
- RU3 Forestry
- RU4 Primary Production Small Lots
- RU5 Village

#### **Residential Zones**

- R1 General Residential
- R2 Low Density Residential
- R5 Large Lot Residential

#### **Business Zones**

- B1 Neighbourhood Centre
- B2 Local Centre
- B3 Commercial Core
- B4 Mixed Use
- B5 Business Development
- B6 Enterprise Corridor
- B7 Business Park

#### **Industrial Zones**

- IN1 General Industrial
- IN2 Light Industrial
- IN3 Heavy Industrial

#### **Special Purpose Zones**

- SP2 Infrastructure
- SP3 Tourist

#### **Recreation Zones**

- RE1 Public Recreation
- RE2 Private Recreation

#### **Environment Protection Zones**

- E1 National Parks and Nature Reserves
- E2 Environmental Conservation
- E3 Environmental Management

**Waterway Zones**

W1 Natural Waterways

W2 Recreational Waterways

**2.2 Zoning of land to which Plan applies [compulsory]**

For the purposes of this Plan, land is within the zones shown on the *Land Zoning Map*.

**2.3 Zone objectives and Land Use Table [compulsory]**

- (1) The Land Use Table at the end of this Part specifies for each zone:
  - (a) the objectives for development, and
  - (b) development that may be carried out without development consent, and
  - (c) development that may be carried out only with development consent, and
  - (d) development that is prohibited.
- (2) The consent authority must have regard to the objectives for development in a zone when determining a development application in respect of land within the zone.
- (3) In the Land Use Table at the end of this Part:
  - (a) a reference to a type of building or other thing is a reference to development for the purposes of that type of building or other thing, and
  - (b) a reference to a type of building or other thing does not include (despite any definition in this Plan) a reference to a type of building or other thing referred to separately in the Land Use Table in relation to the same zone.
- (4) This clause is subject to the other provisions of this Plan.

**Notes.**

- 1 Schedule 1 sets out additional permitted uses for particular land.
- 2 Schedule 2 sets out exempt development (which is generally exempt from both Parts 4 and 5 of the Act). Development in the land use table that may be carried out without consent is nevertheless subject to the environmental assessment and approval requirements of Part 5 of the Act or, if applicable, Part 3A of the Act.
- 3 Schedule 3 sets out complying development (for which a complying development certificate may be issued as an alternative to obtaining development consent).
- 4 Clause 2.6 requires consent for subdivision of land.
- 5 Part 5 contains other provisions which require consent for particular development.

**2.4 Unzoned land [compulsory]**

- (1) Development may be carried out on unzoned land only with development consent.
- (2) In deciding whether to grant development consent, the consent authority:
  - (a) must consider whether the development will impact on adjoining zoned land and, if so, consider the objectives for development in the zones of the adjoining land, and
  - (b) must be satisfied that the development is appropriate and is compatible with permissible land uses in any such adjoining land.



**2.5 Additional permitted uses for particular land [compulsory]**

- (1) Development on particular land that is described or referred to in Schedule 1 may be carried out:
  - (a) with development consent, or
  - (b) if the Schedule so provides—without development consent, in accordance with the conditions (if any) specified in that Schedule in relation to that development.
- (2) This clause has effect despite anything to the contrary in the Land Use Table or other provision of this Plan.

**2.6 Subdivision—consent requirements [compulsory]**

- (1) Land to which this Plan applies may be subdivided, but only with development consent.

**Notes.**

- 1 If a subdivision is specified as **exempt development** in an applicable environmental planning instrument, such as this Plan or *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008*, the Act enables it to be carried out without development consent.
  - 2 Part 6 of *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008* provides that the strata subdivision of a building in certain circumstances is **complying development**.
- (2) Development consent must not be granted for the subdivision of land on which a secondary dwelling is situated if the subdivision would result in the principal dwelling and the secondary dwelling being situated on separate lots, unless the resulting lots are not less than the minimum size shown on the Lot Size Map in relation to that land.

**Note.** The definition of **secondary dwelling** in the Dictionary requires the dwelling to be on the same lot of land as the principal dwelling.

**2.7 Demolition requires development consent [compulsory]**

The demolition of a building or work may be carried out only with development consent.

**Note.** If the demolition of a building or work is identified in an applicable environmental planning instrument, such as this Plan or *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008*, as exempt development, the Act enables it to be carried out without development consent.

**2.8 Temporary use of land [optional]**

- (1) The objective of this clause is to provide for the temporary use of land if the use does not compromise future development of the land, or have detrimental economic, social, amenity or environmental effects on the land.
- (2) Despite any other provision of this Plan, development consent may be granted for development on land in any zone for a temporary use for a maximum period of 182 days (whether or not consecutive days) in any period of 12 months.
- (3) Development consent must not be granted unless the consent authority is satisfied that:

Standard Instrument—Principal Local Environmental Plan [NSW]  
Part 2 Land Use Table

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- (a) the temporary use will not prejudice the subsequent carrying out of development on the land in accordance with this Plan and any other applicable environmental planning instrument, and
  - (b) the temporary use will not adversely impact on any adjoining land or the amenity of the neighbourhood, and
  - (c) the temporary use and location of any structures related to the use will not adversely impact on environmental attributes or features of the land, or increase the risk of natural hazards that may affect the land, and
  - (d) at the end of the temporary use period the land will, as far as is practicable, be restored to the condition in which it was before the commencement of the use.
- (4) Despite subclause (2), the temporary use of a dwelling as a sales office for a new release area or a new housing estate may exceed the maximum number of days specified in that subclause.
- (5) Subclause (3) (d) does not apply to the temporary use of a dwelling as a sales office mentioned in subclause (4).

### Land Use Table

**Note.** A type of development referred to in the Land Use Table is a reference to that type of development only to the extent it is not regulated by an applicable State environmental planning policy. The following State environmental planning policies in particular may be relevant to development on land to which this Plan applies:

*State Environmental Planning Policy (Affordable Rental Housing) 2008* (including provision for secondary dwellings)

*State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004*

*State Environmental Planning Policy (Infrastructure) 2007*—relating to infrastructure facilities such as those that comprise, or are for, air transport, correction, education, electricity generating works and solar energy systems, health services, ports, railways, roads, waste management and water supply systems

*State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007*

*State Environmental Planning Policy (Rural Lands) 2008*

*State Environmental Planning Policy No 33—Hazardous and Offensive Development*

*State Environmental Planning Policy No 50—Canal Estate Development*

*State Environmental Planning Policy No 63—Sustainable Aquaculture*

*State Environmental Planning Policy No 64—Advertising and Signage*

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**Zone RU1 Primary Production**

**1 Objectives of zone**

- To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.
- To encourage diversity in primary industry enterprises and systems appropriate for the area.
- To minimise the fragmentation and alienation of resource lands.
- To minimise conflict between land uses within this zone and land uses within adjoining zones.
- To enable uses of an appropriate scale to facilitate the economic sustainability of primary production.
- To provide for a range of tourist-related uses that support the agricultural industry or are compatible with agricultural uses.

**2 Permitted without consent**

Environmental protection works; Extensive agriculture; Home-based child care; Home occupations; Roads

**3 Permitted with consent**

Agricultural produce industries; Agriculture; Airstrips; Animal boarding or training establishments; Aquaculture; Boat launching ramps; Boat sheds; Camping grounds; Caravan parks; Cellar door premises; Cemeteries; Centre-based child care facilities; Charter and tourism boating facilities; Correctional centres; **Community facilities**; Depots; Dwelling houses; Eco-tourist facilities; Educational establishments; Environmental facilities; Extractive industries; Farm buildings; Forestry; Function centres; Group homes; Health consulting rooms; Helipads; Highway service centres; Home businesses; Home industries; Industrial training facilities; Information and education facilities; Intensive livestock agriculture; Intensive plant agriculture; Jetties; Mooring pens; Moorings; Open cut mining; Places of public worship; Plant nurseries; Recreation areas; Recreation facilities (major); Recreation facilities (outdoor); Research stations; Respite day care centres; Restaurants or cafes; Roadside stalls; Rural workers' dwellings; Secondary dwellings; Sewerage systems; Signage; Tourist and visitor accommodation; Veterinary hospitals; Water recreation structures; Water supply systems; Wharf or boating facilities

**4 Prohibited**

Advertising structures; Hotel or motel accommodation; Serviced apartments; Any other development not specified in item 2 or 3

**Zone RU2 Rural Landscape**

**1 Objectives of zone**

- To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.
- To maintain the rural landscape character of the land.
- To provide for a range of compatible land uses, including extensive agriculture.

**2 Permitted without consent**

Environmental protection works; Extensive agriculture; Home-based child care;

Home occupations; Roads

**3 Permitted with consent**

Agricultural produce industries; Agriculture; Animal boarding or training establishments; Aquaculture; Boat launching ramps; Camping grounds; Caravan parks; Cellar door premises; Centre\_based child care facilities; Community facilities; Correctional centres; Depots; Dwelling houses; Eco-tourist facilities; Educational establishments; Environmental facilities; Extractive industries; Farm buildings; Forestry; Group homes; Health consulting rooms; Highway service centres; Home businesses; Home industries; Industrial training facilities; Information and education facilities; Jetties; Mooring pens; Moorings; Open cut mining; Plant nurseries; Recreation areas; Recreation facilities (outdoor); Research stations; Respite day care centres; Secondary dwellings; Sewerage systems; Signage; Tourist and visitor accommodation; Truck depots; Water recreation structures; Water supply systems; Wharf or boating facilities

**4 Prohibited**

Advertising structures; Hotel or motel accommodation; Intensive livestock agriculture; Serviced apartments; Any other development not specified in item 2 or 3

**Zone RU3 Forestry**

**1 Objectives of zone**

- To enable development for forestry purposes.
- To enable other development that is compatible with forestry land uses.

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Part 2 Land Use Table

**2 Permitted without consent**

Uses authorised under the *Forestry Act 2012* or under Part 5B (Private native forestry) of the *Local Land Services Act 2013*

**3 Permitted with consent**

Aquaculture; Roads

**4 Prohibited**

Any development not specified in item 2 or 3

**Zone RU4 Primary Production Small Lots**

**1 Objectives of zone**

- 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 encourage agriculture activities which meet sustainable natural resource management principles.
- To ensure land with high potential agricultural productivity is used and capable to be sustained, for the purpose of intensive agriculture while being protected from inappropriate uses.
- To ensure function centres, restaurants and appropriate forms of tourist and visitor accommodation to be developed in conjunction with agricultural uses.

**2 Permitted without consent**

Environmental protection works; Extensive agriculture; Home-based child care; Home occupations; Roads

**3 Permitted with consent**

Agricultural produce industries; Agriculture; Animal boarding or training establishments; Aquaculture; Boat launching ramps; Boat sheds; Cellar door premises; Charter and tourism boating facilities; Community facilities; Correctional centres; Dairies (pasture-based); Depots; Dwelling houses; Educational establishments; Environmental facilities; Extractive industries; Farm buildings; Function centres; Group homes; Health services facilities; Home businesses; Home industries; Information and education facilities; Intensive plant agriculture; Jetties; Mooring pens; Moorings; Open cut mining; Plant nurseries; Recreation areas; Recreation facilities (outdoor); Research stations; Restaurants or cafes; Roadside stalls; Rural workers' dwellings; Sewerage systems; Signage; Tourist and visitor accommodation; Truck depots; Veterinary hospitals; Water recreation structures; Water reticulation systems; Water treatment facilities; Wharf or boating facilities

**4 Prohibited**

Advertising structures; Hotel or motel accommodation; Intensive livestock agriculture; Serviced apartments; Any other development not specified in item 2 or 3

**Zone RU5 Village**

**1 Objectives of zone**

- To provide for a range of land uses, services and facilities that are associated with a rural village.
- To encourage and provide opportunities for population and local employment

- growth commensurate with available services.
- To minimise the impact of non-residential uses and ensure these areas are compatible with the surrounding residential development and character of the village.
- To permit low scale service activities, meeting the recreations, cultural and commercial needs of the community.

**2 Permitted without consent**

Environmental protection works; Home-based child care; Home occupations; Roads

**3 Permitted with consent**

Centre-based child care facilities; Community facilities; Dwelling houses; Horticulture; Light industries; Neighbourhood shops; Oyster aquaculture; Places of public worship; Recreation areas; Recreation facilities (indoor); Recreation facilities (outdoor); Respite day care centres; Schools; Sewage reticulation systems; Tank-based aquaculture; Waste or resource transfer stations; Water reticulation systems; Any other development not specified in item 2 or 4

**4. Prohibited**

Advertising structures; Agriculture; Air transport facilities; Airstrips; Animal boarding or training establishments; Boat building and repair facilities; Car parks; **Cellar door premises**; Charter and tourism boating facilities; Correctional centres; Electricity generating works; Extractive industries; Farm buildings; Farm stay accommodation; Flood mitigation works; Forestry; Freight transport facilities; Heavy industrial storage establishments; Helipads; High technology industries; Home occupations (sex services); Hostels; Industrial training facilities; Industries; Marinas; Multi dwelling housing; Open cut mining; Passenger transport facilities; Pond-based aquaculture; Public administration buildings; Recreation facilities (major); Residential flat buildings; Restricted premises; Rural industries; Rural workers' dwellings; Sewerage systems; Sex services premises; Storage premises; Warehouse or distribution centres; Waste or resource management facilities; Water supply systems



Standard Instrument—Principal Local Environmental Plan [NSW]  
Part 2 Land Use Table

**Zone R1 General Residential**

**1 Objectives of zone**

- To provide for the housing needs of the community.
- To provide for a variety of housing types and densities.
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.
- To ensure development is consistent with the character of the immediate locality.

**2 Permitted without consent**

Environmental protection works; Home-based child care; Home occupations; Roads

**3 Permitted with consent**

Attached dwellings; Boarding houses; Centre-based child care facilities; Community facilities; Dwelling houses; Group homes; Home industries; Hostels; Multi dwelling housing; Neighbourhood shops; Oyster aquaculture; Places of public worship; Pond-based aquaculture; Residential flat buildings; Respite day care centres; Restaurants or cafes; Semi-detached dwellings; Seniors housing; Sewage reticulation systems; Shop top housing; Tank-based aquaculture; Water reticulation systems; 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; Boat building and repair facilities; Boat launching ramps; Boat sheds; Camping grounds; Car parks; Caravan parks; Cemeteries; Charter and tourism boating facilities; Commercial premises; Correctional centres; Crematoria; Depots; Eco-tourist facilities; Electricity generating works; Entertainment facilities; Extractive industries; Farm buildings; Farm stay accommodation; Flood mitigation works; 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; Open cut mining; Passenger transport facilities; Public administration buildings; Recreation facilities (indoor); Recreation facilities (major); Recreation facilities (outdoor); Registered clubs; Research stations; Restricted premises; Rural industries; Rural workers' dwellings; Service stations; Sewerage systems; Sex services premises; Storage premises; 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; Wharf or boating facilities; Wholesale supplies

Standard Instrument—Principal Local Environmental Plan [NSW]  
Part 2 Land Use Table

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**Zone R2 Low Density Residential**

**1 Objectives of zone**

- To provide for the housing needs of the community within a low density residential environment.
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.
- To ensure development is consistent with the character of the immediate locality.
- To encourage low density housing within a landscaped setting on the fringe of the Dubbo urban area.

**2 Permitted without consent**

Environmental protection works; Home-based child care; Home occupations; Roads

**3 Permitted with consent**

Bed and breakfast accommodation; Boarding houses; Centre-based child care facilities; Community facilities; Dwelling houses; Educational establishments; Environmental facilities; Exhibition homes; Exhibition villages; Group homes; Health consulting rooms; Home businesses; Home industries; Information and education facilities; Medical centres; Neighbourhood shops; Oyster aquaculture; Places of public worship; Pond-based aquaculture; Recreation areas; Residential accommodation; Respite day care centres; Signage; Tank-based aquaculture; Water reticulation systems

**4 Prohibited**

Advertising structures; Attached dwellings; Hostels; Multi dwelling housing; Residential flat buildings; Rural workers' dwellings; Shop top housing; Any other development not specified in item 2 or 3



Standard Instrument—Principal Local Environmental Plan [NSW]  
Part 2 Land Use Table

### Zone R5 Large Lot Residential

**Direction.** The following must be included as either "Permitted without consent" or "Permitted with consent" for this zone:

Roads

#### 1 Objectives of zone

- 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.

#### 2 Permitted without consent

Environmental protection works; Extensive agriculture; Home-based child care; Home occupations; Roads

#### 3 Permitted with consent

Agricultural produce industries; Dairies (pasture-based); Dwelling houses; **Dual occupancies**; Home industries; Horticulture; Neighbourhood shops; Oyster aquaculture; Plant nurseries; Pond-based aquaculture; Tank-based aquaculture; Water reticulation systems; 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; Attached dwellings; Boarding houses; Boat building and repair facilities; Boat sheds; Camping grounds; Car parks; Caravan parks; Cemeteries; Charter and tourism boating facilities; Commercial premises; Correctional centres; Crematoria; Depots; **Dual occupancies (detached)**; Eco-tourist facilities; Entertainment facilities; Extractive industries; Farm stay accommodation; Flood mitigation works; Freight transport facilities; Function centres; Heavy industrial storage premises; Helipads; Highway service centres; Home occupations (sex services); Hostels; Hotel or motel accommodation; Industrial retail outlets; Industrial training facilities; Industries; Marinas; Mortuaries; Multi dwelling housing; Open cut mining; Passenger transport facilities; Public administration buildings; Recreation facilities (indoor); Recreation facilities (major); Recreation facilities (outdoor); Registered clubs; Research stations; Residential flat buildings; Restricted premises; Rural industries; Rural workers' dwellings; Semi-detached dwellings; Seniors housing; Service stations; Serviced apartments; Sewerage systems; Sex services premises; Shop top housing; Storage premises; Transport depots; Truck depots; Vehicle body repair workshops; Vehicle repair stations; Warehouse or distribution centres; Waste or resource management facilities; Water supply systems; Wholesale supplies

## Zone B1 Neighbourhood Centre

### 1 Objectives of zone

- To provide a range of small-scale retail, business and community uses that serve the needs of people who live or work in the surrounding neighbourhood.
- To ensure the growth of each neighbourhood centre is consistent with the commercial hierarchy of City of Dubbo.

### 2 Permitted without consent

Environmental protection works; Home-based child care; Roads

### 3 Permitted with consent

Amusement centres; Boarding houses; Business premises; Car parks; Centre-based child care facilities; Commercial premises; Community facilities; Educational establishments; Entertainment facilities; Environmental facilities; Function centres; Health consulting rooms; Home businesses; Home industries; Home occupations; Information and education facilities; Medical centres; Neighbourhood shops; Neighbourhood supermarkets; Oyster aquaculture; Passenger transport facilities; Places of public worship; Respite day care centres; Shop top housing; Signage; Tank-based aquaculture; Tourist and visitor accommodation; Veterinary hospitals; Waste or resource transfer stations; Water reticulation systems

### 4 Prohibited

Advertising structures; Bed and breakfast accommodation; Cellar door premises; Farm stay accommodation; Garden centres; Hardware and building supplies; Kiosks; Landscaping material supplies; Markets; Office premises; Plant nurseries; Pond-based aquaculture Pubs; Restricted premises; Roadside stalls; Rural supplies; Specialised retail premises; Timber yards; Vehicle sales or hire premises; Any other development not specified in item 2 or 3

**Zone B2 Local Centre**

**1 Objectives of zone**

- To provide a range of retail, business, entertainment and community uses that serve the needs of people who live in, work in and visit the local area.
- To encourage employment opportunities in accessible locations.
- To maximise public transport patronage and encourage walking and cycling.
- To ensure Orana Mall remains primarily a retail centre that allows for land use activities expected to fulfil a local centre role.
- To protect and recognise Orana Mall as being a second order centre in the commercial centres hierarchy for Dubbo.
- To ensure that office premises only form a minor component of the land use activities within Orana Mall.

**2 Permitted without consent**

Environmental protection works; Home-based child care; Roads

**3 Permitted with consent**

Boarding houses; Centre-based child care facilities; Commercial premises; Community facilities; Educational establishments; Entertainment facilities; Function centres; Information and education facilities; Medical centres; Oyster aquaculture; Passenger transport facilities; **Public administration building**; Recreation facilities (indoor); Registered clubs; Respite day care centres; Restricted premises; Service stations; Shop top housing; Tank-based aquaculture; Tourist and visitor accommodation; Waste or resource transfer stations; Water reticulation systems; Any other development not specified in item 2 or 4

**4 Prohibited**

Advertising structures; Agriculture; Air transport facilities; Airstrips; Animal boarding or training establishments; Bed and breakfast accommodation; Boat building and repair facilities; Boat launching ramps; Boat sheds; Camping grounds; Caravan parks; Cemeteries; Charter and tourism boating facilities; Correctional centres; Crematoria; Depots; Eco-tourist facilities; Electricity generating works; Exhibition homes; Exhibition villages; Extractive industries; Farm buildings; Farm stay accommodation; Flood mitigation works; Forestry; Freight transport facilities; 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; Open cut mining; Pond-based aquaculture; Recreation facilities (major); Recreation facilities (outdoor); Research stations; Residential accommodation; Rural industries; Sewerage systems; Sex services premises; Storage premises; Transport depots; Truck depots; Vehicle body repair workshops; Vehicle repair stations; Warehouse or distribution centres; Waste or resource management facilities; Water recreation structures; Water supply systems; Wharf or boating facilities; Wholesale supplies

## Zone B3 Commercial Core

### 1 Objectives of zone

- To provide a wide range of retail, business, office, entertainment, community and other suitable land uses that serve the needs of the local and wider community.
- To encourage appropriate employment opportunities in accessible locations.
- To maximise public transport patronage and encourage walking and cycling.
- To reinforce the role of the Dubbo central business district as the commercial, office and retail core of Dubbo and the region.
- To encourage use of the Dubbo business district for cultural entertainment, Leisure and dining activities.
- To achieve activation of the river corridor by encouraging land use activities that front Bligh Street.
- To promote active street frontages within the Dubbo central business district by encouraging business and retail development on the ground floor of buildings facing the street.

### 2 Permitted without consent

Environmental protection works; Home-based child care; Roads

### 3 Permitted with consent

Centre-based child care facilities; Commercial premises; Community facilities; Educational establishments; Entertainment facilities; Function centres; Home industries; Hostels; Hotel or motel accommodation; Information and education facilities; Medical centres; Oyster aquaculture; Passenger transport facilities; Recreation facilities (indoor); Registered clubs; Respite day care centres; Restricted premises; Seniors housing; Shop top housing; Tank-based aquaculture; Waste or resource transfer stations; Water reticulation systems; Any other development not specified in item 2 or 4

### 4 Prohibited

Advertising structures; Agriculture; Air transport facilities; Airstrips; Animal boarding or training establishments; Bed and breakfast accommodation; Boat building and repair facilities; Boat launching ramps; Boat sheds; Camping grounds; Caravan parks; Cemeteries; Charter and tourism boating facilities; Correctional centres; Crematoria; Eco-tourist facilities; Electricity generating works; Exhibition homes; Exhibition villages; Extractive industries; Farm buildings; Farm stay accommodation; Flood mitigation works; Forestry; 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; Open cut mining; Pond-based aquaculture; Recreation facilities (major); Recreation facilities (outdoor); Research stations; Residential accommodation; Rural industries; Sewerage systems; Sex services premises; Storage premises; Vehicle body repair workshops; Warehouse or distribution centres; Waste or resource management facilities; Water recreation structures; Water supply systems; Wharf or boating facilities

### Zone B4 Mixed Use

#### 1 Objectives of zone

- To provide a mixture of compatible land uses.
- To integrate suitable business, office, residential, retail and other development in accessible locations so as to maximise public transport patronage and encourage walking and cycling.
- To preserve the streetscape and character of land adjoining the Dubbo central business district by encouraging the adaptive reuse of existing buildings for small scale business, office or retail premises that support the district.

#### 2 Permitted without consent

Environmental protection works; Home-based child care; Roads

#### 3 Permitted with consent

Boarding houses; Centre-based child care facilities; Commercial premises; Community facilities; Educational establishments; Entertainment facilities; Function centres; Home industries; Hotel or motel accommodation; Information and education facilities; Medical centres; Oyster aquaculture; Passenger transport facilities; Recreation facilities (indoor); Registered clubs; Respite day care centres; Restricted premises; Seniors housing; Shop top housing; Tank-based aquaculture; Waste or resource transfer stations; Water reticulation systems; Any other development not specified in item 2 or 4

#### 4 Prohibited

Advertising structures; Agriculture; Air transport facilities; Airstrips; Animal boarding or training establishments; Boat building and repair facilities; Boat launching ramps; Boat sheds; Camping grounds; Caravan parks; Cemeteries; Charter and tourism boating facilities; Crematoria; Depots; Eco-tourist facilities; Electricity generating works; Exhibition villages; Extractive industries; Farm buildings; Farm stay accommodation; Flood mitigation works; Forestry; Freight transport facilities; Heavy industrial storage premises; Helipads; Highway service centres; Home occupations (sex services); Hostels; Industrial retail outlets; Industrial training facilities; Industries; Jetties; Marinas; Mooring pens; Moorings; Mortuaries; Open cut mining; Pond-based aquaculture Recreation facilities (major); Recreation facilities (outdoor); Research stations; Residential flat buildings; Rural industries; Rural workers' dwellings; Service stations; Sewerage systems; Sex services premises; Storage premises; Transport depots; Truck depots; Vehicle body repair workshops; Vehicle repair stations; Warehouse or distribution centres; Waste or resource management facilities; Water recreation structures; Water supply systems; Wharf or boating facilities; Wholesale supplies

**Zone B6 Enterprise Corridor**

**1 Objectives of zone**

- To promote businesses along main roads and to encourage a mix of compatible uses.
- To provide a range of employment uses (including business, office, retail and light industrial uses).
- To maintain the economic strength of centres by limiting retailing activity.
- To provide for residential uses, but only as part of a mixed use development.
- To facilitate a mix of business and retail development along major roads, in locations that are close to, and that support the viability of, centres.

**2 Permitted without consent**

Environmental protection works; Home-based child care; Roads

**3 Permitted with consent**

Business premises; Community facilities; Garden centres; Hardware and building supplies; Hotel or motel accommodation; Landscaping material supplies; Light industries; Neighbourhood shops; Oyster aquaculture; Passenger transport facilities; Plant nurseries; Restaurants or cafes; Rural supplies; Seniors housing; Shop top housing; Take away food and drink premises; Tank-based aquaculture; Timber yards; Vehicle sales or hire premises; **Waste or resource transfer stations**; Warehouse or distribution centres; Water reticulation systems; Any other development not specified in item 2 or 4

**4 Prohibited**

Advertising structures; Agriculture; Air transport facilities; Airstrips; Animal boarding or training establishments; Bed and breakfast accommodation; Boat building and repair facilities; Boat launching ramps; Boat sheds; Camping grounds; Caravan parks; Cemeteries; Charter and tourism boating facilities; Commercial premises; Correctional centres; Crematoria; Eco-tourist facilities; Electricity generating works; Exhibition homes; Exhibition villages; Extractive industries; Farm buildings; Farm stay accommodation; Flood mitigation works; Forestry; Heavy industrial storage premises; Helipads; Home occupations (sex services); Industrial retail outlets; Industrial training facilities; Industries; Jetties; Marinas; Mooring pens; Moorings; Mortuaries; Open cut mining; Pond based aquaculture Recreation facilities (indoor); Recreation facilities (major); Recreation facilities (outdoor); Research stations; Residential accommodation; Restricted premises; Rural industries; Sewerage systems; Sex services premises; Waste or resource management facilities; Water recreation structures; Water supply systems; Wharf or boating facilities

**Zone B7 Business Park**

**1 Objectives of zone**

- To provide a range of office and light industrial uses.
- To encourage employment opportunities.
- To enable other land uses that provide facilities or services to meet the day to day needs of workers in the area.
- To facilitate the establishment of innovative high technology uses within close proximity to established transport networks.

## Zone B5 Business Development

### 1 Objectives of zone

- To enable a mix of business and warehouse uses, and bulky goods premises that require a large floor area, in locations that are close to, and that support the viability of, centres.
- To identify specific areas for bulky goods retailing.

### 2 Permitted without consent

Environmental protection works; Home-based child care; Roads

### 3 Permitted with consent

Business premises; Centre-based child care facilities; Garden centres; Hardware and building supplies; Home industries; Landscaping material supplies; Light industries; Neighbourhood shops; Office premises; Oyster aquaculture; Passenger transport facilities; Respite day care centres; Restaurants or cafes; Rural supplies; Seniors housing; Specialised retail premises; Take away food and drink premises; Tank-based aquaculture; Timber yards; Vehicle sales or hire premises; Warehouse or distribution centres; Water reticulation systems; 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; Boat building and repair facilities; Boat launching ramps; Boat sheds; Camping grounds; Caravan parks; Cemeteries; Charter and tourism boating facilities; Commercial premises; Correctional centres; Crematoria; Eco-tourist facilities; Electricity generating works; Entertainment facilities; Exhibition homes; Exhibition villages; Extractive industries; Farm buildings; Flood mitigation works; Forestry; Function centres; Heavy industrial storage establishments; Helipads; Home occupations (sex services); Industries; Jetties; Marinas; Mooring pens; Moorings; Mortuaries; Open cut mining; Pond-based aquaculture Recreation facilities (major); Recreation facilities (outdoor); Registered clubs; Residential accommodation; Restricted premises; Rural industries; Sewerage systems; Sex services premises; Tourist and visitor accommodation; Waste or resource management facilities; Water recreation structures; Water supply systems; Wharf or boating facilities

**2 Permitted without consent**

Environmental protection works; Home-based child care; Roads

**3 Permitted with consent**

Business premises; Centre-based child care facilities; Garden centres; Hardware and building supplies; Light industries; Neighbourhood shops; Office premises; Oyster aquaculture; Passenger transport facilities; Respite day care centres; Restaurants or cafes; Rural supplies; Take away food and drink premises; Tank-based aquaculture; Timber yards; Vehicle sales or hire premises; Waste or resource transfer stations; Warehouse or distribution centres; Water reticulation systems; 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; Boat building and repair facilities; Boat launching ramps; Boat sheds; Camping grounds; Car parks; Caravan parks; Cemeteries; Charter and tourism boating facilities; Commercial premises; Correctional centres; Crematoria; Eco-tourist facilities; Entertainment facilities; Exhibition homes; Exhibition villages; Extractive industries; Farm buildings; Flood mitigation works; Forestry; Function centres; Heavy industrial storage establishments; Helipads; Home occupations (sex services); Industries; Jetties; Marinas; Mooring pens; Moorings; Mortuaries; Open cut mining; Pond-based aquaculture Recreation facilities (major); Recreation facilities (outdoor); Registered clubs; Residential accommodation; Restricted premises; Rural industries; Sewerage systems; Sex services premises; Tourist and visitor accommodation; Waste or resource management facilities; Water recreation structures; Water supply systems; Wharf or boating facilities



**Zone IN1 General Industrial**

**1 Objectives of zone**

- To provide a wide range of industrial and warehouse land uses.
- To encourage employment opportunities.
- To minimise any adverse effect of industry on other land uses.
- To support and protect industrial land for industrial uses.

**2 Permitted without consent**

Environmental protection works

**3 Permitted with consent**

Depots; Freight transport facilities; Garden centres; General industries; Hardware and building supplies; Industrial training facilities; Landscaping material supplies; Light industries; Neighbourhood shops; Oyster aquaculture; Places of public worship; Roads; Rural supplies; Tank-based aquaculture; Timber yards; Warehouse or distribution centres; Water storage facilities; Water treatment facilities; Any other development not specified in item 2 or 4

**4 Prohibited**

Agriculture; Air transport facilities; Airstrips; Amusement centres; Boat launching ramps; Boat sheds; Camping grounds; Caravan parks; Cemeteries; Charter and tourism boating facilities; Centre-based child care facilities; Commercial premises; Community facilities; Correctional centres; Eco-tourist facilities; Educational establishments; Entertainment facilities; Exhibition homes; Exhibition villages; Farm buildings; Forestry; Function centres; Health services facilities; Highway service centres; Information and education facilities; Jetties; Marinas; Mooring pens; Moorings; Passenger transport facilities; Pond-based aquaculture; Public administration buildings; Registered clubs; Residential accommodation; Respite day care centres; Restricted premises; Service stations; Sex services premises; Stock and sale yards; Tourist and visitor accommodation; Water recreation structures; Water supply systems; Wharf or boating facilities

## Zone IN2 Light Industrial

### 1 Objectives of zone

- To provide a wide range of light industrial, warehouse and related land uses.
- To encourage employment opportunities and to support the viability of centres.
- To minimise any adverse effect of industry on other land uses.
- To enable other land uses that provide facilities or services to meet the day to day needs of workers in the area.
- To support and protect industrial land for industrial uses.
- To recognise the Depot Road and McKenzie Street industrial area as providing start up and transport related development opportunities.

### 2 Permitted without consent

Environmental protection works; Roads

### 3 Permitted with consent

Agricultural produce industries; Depots; Funeral homes; Garden centres; Hardware and building supplies; Health consulting rooms; Industrial training facilities; Landscaping material supplies; Light industries; Liquid fuel depots; Medical centres; Neighbourhood shops; Oyster aquaculture; Places of public worship; Plant nurseries; Rural supplies; Take away food and drink premises; Tank-based aquaculture; Timber yards; Vehicle sales or hire premises; Warehouse or distribution centres; Waste or resource transfer stations; Water reticulation systems; 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; Boat launching ramps; Boat sheds; Camping grounds; Caravan parks; Cemeteries; Centre-based child care facilities; Charter and tourism boating facilities; Commercial premises; Correctional centres; Eco-tourist facilities; Entertainment facilities; Exhibition homes; Exhibition villages; Farm buildings; Flood mitigation works; Forestry; Function centres; Health services facilities; Heavy industrial storage premises; Helipads; Home-based child care; Home businesses; Home occupations; Home occupations (sex services); Industries; Jetties; Marinas; Mooring pens; Moorings; Pond-based aquaculture; Public administration buildings; Recreation facilities (major); Recreation facilities (outdoor); Registered clubs; Research stations; Residential accommodation; Respite day care centres; Restricted premises; Rural industries; Sewerage systems; Sex services premises; Tourist and visitor accommodation; Waste or resource management facilities; Water recreation structures; Water supply systems; Wharf or boating facilities

Standard Instrument—Principal Local Environmental Plan [NSW]  
Part 2 Land Use Table

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**Zone IN3 Heavy Industrial**

**1 Objectives of zone**

- To provide suitable areas for those industries that need to be separated from other land uses.
- To encourage employment opportunities.
- To minimise any adverse effect of heavy industry on other land uses.
- To support and protect industrial land for industrial uses.

**2 Permitted without consent**

Environmental protection works; Roads

**3 Permitted with consent**

Depots; Freight transport facilities; Funeral homes; General industries; Hazardous storage establishments; Health consulting rooms; Heavy industries; Landscaping material supplies; Medical centres; Neighbourhood shops; Offensive storage establishments; Oyster aquaculture; Rural supplies; Take away food and drink premises; Tank-based aquaculture; Timber yards; Vehicle sales or hire premises; Warehouse or distribution centres; Water reticulation systems; Water treatment 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; Boat launching ramps; Boat sheds; Camping grounds; Caravan parks; Centre-based child care facilities; Charter and tourism boating facilities; Commercial premises; Community facilities; Eco-tourist facilities; Entertainment facilities; Exhibition homes; Exhibition villages; Farm buildings; Flood mitigation works; Forestry; Function centres; Health Dubbo Local Environmental Plan 2011 [NSW] Current version for 1 February 2021 to date (accessed 29 March 2021 at 13:24) Page 25 of 126; services facilities; Helipads; Home-based child care; Home businesses; Home industries; Home occupations; Home occupations (sex services); Jetties; Marinas; Mooring pens; Moorings; Passenger transport facilities; Pond-based aquaculture; Public administration buildings; Recreation facilities (major); Recreation facilities (outdoor); Registered clubs; Research stations; Residential accommodation; Respite day care centres; Tourist and visitor accommodation; Water recreation structures; Water supply systems; Wharf or boating facilities

Standard Instrument—Principal Local Environmental Plan [NSW]  
Part 2 Land Use Table

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**Zone SP2 Infrastructure**

**1 Objectives of zone**

- To provide for infrastructure and related uses.
- To prevent development that is not compatible with or that may detract from the provision of infrastructure.

**2 Permitted without consent**

Roads

**3 Permitted with consent**

Aquaculture; The purpose shown on the Land Zoning Map, including any development that is ordinarily incidental or ancillary to development for that purpose

**4 Prohibited**

Any development not specified in item 2 or 3

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Part 2 Land Use Table

**Zone SP3 Tourist**

**1 Objectives of zone**

- To provide for a variety of tourist-oriented development and related uses.
- To recognise the importance of the Taronga Western Plains Zoo as a key tourist facility within the area.
- To facilitate tourist-orientated development along major transport corridors and at key nodes.
- To ensure that further development in the Cobra Street and Whylandra Street precincts will not interfere with established uses on adjoining residentially zoned land.
- To ensure that development in the Camp Road precinct will not interfere with the continued operation of the Taronga Western Plains Zoo.
- To protect and enhance the natural and environmental qualities that attract tourists and visitors to the area.

**2 Permitted without consent**

Environmental protection works; Extensive agriculture; Roads

**3 Permitted with consent**

Aquaculture; Cellar door premises; Food and drink premises; Health consulting rooms; Markets; Medical centres; Roadside stalls; Shop top housing; Tourist and visitor accommodation; Viticulture; Waste or resource transfer stations; Water reticulation systems; Any other development not specified in item 2 or 4

**4 Prohibited**

Advertising structures; Agriculture; Air transport facilities; Bed and breakfast accommodation; Boat building and repair facilities; Car parks; Cemeteries; Commercial premises; Correctional centres; Crematoria; Depots; Educational establishments; Electricity generating works; Exhibition homes; Exhibition villages; Extractive industries; Flood mitigation works; Forestry; Freight transport facilities; Health services facilities; Heavy industrial storage premises; Home-based child care; Home businesses; Home occupations; Home occupations (sex services); Industrial retail outlets; Industrial training facilities; Industries; Marinas; Mortuaries; Open cut mining; Public administration buildings; Residential accommodation; Restricted premises; Rural industries; Sewerage systems; Sex services premises; Storage premises; Transport depots; Truck depots; Vehicle body repair workshops; Vehicle repair stations; Warehouse or distribution centres; Waste or resource management facilities; Water supply systems; Wholesale supplies

**Zone RE1 Public Recreation**

**1 Objectives of zone**

- To enable land to be used for public open space or recreational purposes.
- To provide a range of recreational settings and activities and compatible land uses.
- To protect and enhance the natural environment for recreational purposes.
- To provide for facilities and amenities to enhance the use of public open space.

**2 Permitted without consent**

Environmental protection works; Roads

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**3 Permitted with consent**

Aquaculture; Boat launching ramps; Boat sheds; Camping grounds; Cemeteries; Charter and tourism boating facilities; Community facilities; Eco-tourist facilities; Environmental facilities; Jetties; Kiosks; Mooring pens; Moorings; Recreation areas; Recreation facilities (indoor); Recreation facilities (major); Recreation facilities (outdoor); Restaurants or cafes; Signage; Water recreation structures; Water reticulation systems; Wharf or boating facilities

**4 Prohibited**

Advertising structures; Any development not specified in item 2 or 3

**Zone RE2 Private Recreation**

**1 Objectives of zone**

- To enable land to be used for private open space or recreational purposes.
- To provide a range of recreational settings and activities and compatible land uses.
- To protect and enhance the natural environment for recreational purposes.

**2 Permitted without consent**

Environmental protection works; Roads

**3 Permitted with consent**

Amusement centres; Aquaculture; Boat launching ramps; Boat sheds; Camping grounds; Caravan parks; Cemeteries; Charter and tourism boating facilities; Community facilities; Crematoria; Eco-tourist facilities; Educational establishments; Entertainment facilities; Environmental facilities; Food and drink premises; Function centres; Information and education facilities; Jetties; Kiosks; Mooring pens; Moorings; Places of public worship; Recreation areas; Recreation facilities (indoor); Recreation facilities (major); Recreation facilities (outdoor); Registered clubs; Signage; Tourist and visitor accommodation; Veterinary hospitals; Water recreation structures; Water reticulation systems; Wharf or boating facilities

**4 Prohibited**

Advertising structures; Bed and breakfast accommodation; Farm stay accommodation; Pubs; Any other development not specified in item 2 or 3

Standard Instrument—Principal Local Environmental Plan [NSW]  
Part 2 Land Use Table

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**Zone E1 National Parks and Nature Reserves**

**1 Objectives of zone**

- To enable the management and appropriate use of land that is reserved under the *National Parks and Wildlife Act 1974* or that is acquired under Part 11 of that Act.
- To enable uses authorised under the *National Parks and Wildlife Act 1974*.
- To identify land that is to be reserved under the *National Parks and Wildlife Act 1974* and to protect the environmental significance of that land.

**2 Permitted without consent**

Uses authorised under the *National Parks and Wildlife Act 1974*

**3 Permitted with consent**

Nil

**4 Prohibited**

Any development not specified in item 2 or 3

**Zone E2 Environmental Conservation**

**1 Objectives of zone**

- To protect, manage and restore areas of high ecological, scientific, cultural or aesthetic values.
- To prevent development that could destroy, damage or otherwise have an adverse effect on those values.

**2 Permitted without consent**

Nil

**3 Permitted with consent**

Building identification signs; Camping grounds; Car parks; Environmental facilities; Environmental protection works; Information and education facilities; Oyster aquaculture; Roads; Water supply systems

**4 Prohibited**

Business premises; Hotel or motel accommodation; Industries; Multi dwelling housing; Pond-based aquaculture; Recreation facilities (major); Residential flat buildings; Restricted premises; Retail premises; Seniors housing; Service stations; Tank-based aquaculture; Warehouse or distribution centres; Any other development not specified in item 2 or 3

### Zone E3 Environmental Management

#### 1 Objectives of zone

- To protect, manage and restore areas with special ecological, scientific, cultural or aesthetic values.
- To provide for a limited range of development that does not have an adverse effect on those values.
- To ensure development is compatible with the flood hazard of the Macquarie, Talbragar and Bell Rivers.
- To ensure development does not exacerbate the existence of existing saline lands.
- To identify land along the Macquarie, Talbragar and Bell Rivers in proximity to the towns and cities which is suitable for low impact development that addresses the flood prone nature of this land.
- To allow for a range of low impact recreational activities and ancillary land uses in the Burrendong State Park that protect and enhance the environmental and scenic qualities of the park and water quality of Lake Burrendong.
- To recognise the environmental, scenic and landscape significance of certain lands in proximity to the Town of Geurie.

#### 2 Permitted without consent

Environmental protection works; Extensive agriculture; Home-based child care; Home occupations; Roads

#### 3 Permitted with consent

Boat launching ramps; Boat sheds; Camping grounds; Charter and tourism boating facilities; Dwelling houses; Environmental facilities; Farm buildings; Group homes; Home businesses; Home industries; Jetties; Mooring pens; Moorings; Oyster aquaculture; Pond-based aquaculture; Recreation areas; Research stations; Siltage; Tank-based aquaculture; Turf farming; Water recreation structures; Water reticulation systems; Wharf or boating facilities

#### 4 Prohibited

Advertising structures; Industries; Multi dwelling housing; Residential flat buildings; Retail premises; Seniors housing; Service stations; Warehouse or distribution centres; Any other development not specified in item 2 or 3



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**Zone W1 Natural Waterways**

**1 Objectives of zone**

- To protect the ecological and scenic values of natural waterways.
- To prevent development that would have an adverse effect on the natural values of waterways in this zone.
- To provide for sustainable fishing industries and recreational fishing.

**2 Permitted without consent**

Nil

**3 Permitted with consent**

Aquaculture; Boat launching ramps; Environmental facilities; Environmental protection works; Jetties; Moorings; Recreation areas; Roads; Water recreation structures; Water supply systems

**4 Prohibited**

Business premises; Hotel or motel accommodation; Industries; Multi dwelling housing; Recreation facilities (major); Residential flat buildings; Restricted premises; Retail premises; Seniors housing; Service stations; Warehouse or distribution centres; Water treatment facilities; Any other development not specified in item 2 or 3

**Zone W2 Recreational Waterways**

**1 Objectives of zone**

- To protect the ecological, scenic and recreation values of recreational waterways.
- To allow for water-based recreation and related uses.
- To provide for sustainable fishing industries and recreational fishing.

**2 Permitted without consent**

Environmental protection works; Roads

**3 Permitted with consent**

Aquaculture; Boat launching ramps; Boat sheds; Car parks; Charter and tourism boating facilities; Environmental facilities; Jetties; Kiosks; Marinas; Mooring pens; Moorings; Recreation areas; Research stations; Signage; Water recreation structures; Water reticulation systems; Water storage facilities; Wharf or boating facilities

**4 Prohibited**

Advertising structures; Industries; Multi dwelling housing; Residential flat buildings; Seniors housing; Warehouse or distribution centres; Any other development not specified in item 2 or 3

Standard Instrument—Principal Local Environmental Plan [NSW]  
Part 2 Land Use Table

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**Zone W3 Working Waterways**

**1 Objectives of zone**

- To enable the efficient movement and operation of commercial shipping, water-based transport and maritime industries.
- To promote the equitable use of waterways, including appropriate recreational uses.
- To minimise impacts on ecological values arising from the active use of waterways.
- To provide for sustainable fishing industries.

**2 Permitted without consent**

**3 Permitted with consent**

Boat building and repair facilities; Port facilities; Wharf or boating facilities

**4 Prohibited**

Any development not specified in item 2 or 3

### Part 3 Exempt and complying development

#### 3.1 Exempt development [compulsory]

**Note.** Under section 76 of the Act, exempt development may be carried out without the need for development consent under Part 4 of the Act or for assessment under Part 5 of the Act.

The section states that exempt development:

- (a) must be of minimal environmental impact, and
  - (b) cannot be carried out in critical habitat of an endangered species, population or ecological community (identified under the *Threatened Species Conservation Act 1995* or the *Fisheries Management Act 1994*), and
  - (c) cannot be carried out in a wilderness area (identified under the *Wilderness Act 1987*).
- (1) The objective of this clause is to identify development of minimal environmental impact as exempt development.
  - (2) Development specified in Schedule 2 that meets the standards for the development contained in that Schedule and that complies with the requirements of this Part is exempt development.
  - (3) To be exempt development, the development:
    - (a) must meet the relevant deemed-to-satisfy provisions of the *Building Code of Australia* or, if there are no such relevant provisions, must be structurally adequate, and
    - (b) must not, if it relates to an existing building, cause the building to contravene the *Building Code of Australia*, and
    - (c) must not be designated development, and
    - (d) must not be carried out on land that comprises, or on which there is, an item that is listed on the State Heritage Register under the *Heritage Act 1977* or that is subject to an interim heritage order under the *Heritage Act 1977*.
    - (e) (Repealed)
  - (4) Development that relates to an existing building that is classified under the *Building Code of Australia* as class 1b or class 2–9 is exempt development only if:
    - (a) the building has a current fire safety certificate or fire safety statement, or
    - (b) no fire safety measures are currently implemented, required or proposed for the building.
  - (5) To be exempt development, the development must:
    - (a) be installed in accordance with the manufacturer's specifications, if applicable, and
    - (b) not involve the removal or pruning of a tree or other vegetation that requires a permit or development consent for removal or pruning, unless that removal or pruning is undertaken in accordance with a permit or development consent.

**Note.** A permit for the removal or pruning of a tree or other vegetation may be granted under this Plan. A development consent for the removal of native vegetation may be granted where relevant under the *Native Vegetation Act 2003*.
  - (6) A heading to an item in Schedule 2 is part of that Schedule.

#### 3.2 Complying development [compulsory]

- (1) The objective of this clause is to identify development as complying development.
- (2) Development specified in Part 1 of Schedule 3 that is carried out in compliance with:
  - (a) the development standards specified in relation to that development, and
  - (b) the requirements of this Part,

Standard Instrument—Principal Local Environmental Plan [NSW]  
Part 3 Exempt and complying development

is complying development.

**Note.** See also clause 5.8 (3) which provides that the conversion of fire alarms is complying development in certain circumstances.

- (3) To be complying development, the development must:
- (a) be permissible, with development consent, in the zone in which it is carried out, and
  - (b) meet the relevant deemed-to-satisfy provisions of the *Building Code of Australia*, and
  - (c) have an approval, if required by the *Local Government Act 1993*, from the Council for an on-site effluent disposal system if the development is undertaken on unsewered land.
- (4) A complying development certificate for development specified in Part 1 of Schedule 3 is subject to the conditions (if any) set out or referred to in Part 2 of that Schedule.
- (5) A heading to an item in Schedule 3 is part of that Schedule.

**3.3 Environmentally sensitive areas excluded [compulsory]**

- (1) Exempt or complying development must not be carried out on any environmentally sensitive area for exempt or complying development.
- (2) For the purposes of this clause:  
*environmentally sensitive area for exempt or complying development* means any of the following:
- (a) the coastal waters of the State,
  - (b) a coastal lake.
  - (c) land to which *State Environmental Planning Policy No 14—Coastal Wetlands* or *State Environmental Planning Policy No 26—Littoral Rainforests* applies,
  - (d) land reserved as an aquatic reserve under the *Fisheries Management Act 1994* or as a marine park under the *Marine Parks Act 1997*,
  - (e) land within a wetland of international significance declared under the Ramsar Convention on Wetlands or within a World heritage area declared under the World Heritage Convention,
  - (f) land within 100 metres of land to which paragraph (c), (d) or (e) applies,
  - (g) land identified in this or any other environmental planning instrument as being of high Aboriginal cultural significance or high biodiversity significance,
  - (h) land reserved under the *National Parks and Wildlife Act 1974* or land acquired under Part 11 of that Act,
  - (i) land reserved or dedicated under the *Crown Lands Act 1989* for the preservation of flora, fauna, geological formations or for other environmental protection purposes,
  - (j) land identified as being critical habitat under the *Threatened Species Conservation Act 1995* or Part 7A of the *Fisheries Management Act 1994*.

**Direction.** Additional areas may be added to this list.

## Part 4 Principal development standards

### 4.1 Minimum subdivision lot size [optional]

- (1) The objectives of this clause are as follows:
  - (a) to protect and enhance the production capacity of rural lands, by maintaining farm sizes and the status of productive lands,
  - (b) to ensure residential allotments are of a suitable shape and size to provide a building envelope, private open space and suitable building setbacks for acoustic and visual privacy,
  - (c) to ensure industrial allotments are of a suitable size and shape to allow for separation from adjoining uses and to ensure appropriately sized vehicles can traverse to and from the land,
  - (d) to ensure commercial allotments are of a suitable size and shape to provide for a range of commercial development without providing for the fragmentation of ownership into smaller lots,
  - (e) to maximise the economic potential of, and provide for more intensive, small lot agricultural uses in areas able to access commercial quantities of irrigation water.
  - (f) to minimise the cost to the community of:
    - (i) fragmented and isolated development of rural land, and
    - (ii) providing, extending and maintaining public amenities, infrastructure and services.
- (2) This clause applies to a subdivision of any land shown on the *Lot Size Map* that requires development consent and that is carried out after the commencement of this Plan.
- (3) The size of any lot resulting from a subdivision of land to which this clause applies is not to be less than the minimum size shown on the *Lot Size Map* in relation to that land.
- (4) This clause does not apply in relation to the subdivision of any land:
  - (a) by the registration of a strata plan or strata plan of subdivision under the *Strata Schemes Development Act 2015*, or
  - (b) by any kind of subdivision under the *Community Land Development Act 1989*.
- (4A) Despite subclause (3), the size of any lot resulting from the subdivision of land identified as “Area A” or “Area B” on the *Lot Size Map* and to be connected to a reticulated sewer must not be less than the area shown in Column 2 of the Table to this subclause opposite the relevant area.

Column 1	Column 2
Area A	4,000 square metres
Area B	2,000 square metres

(4B) Despite subclause (3), the size of any lot resulting from a subdivision of land in Zone RU5 Village, Zone R1 General Residential or Zone R2 Low Density Residential may be less than the minimum lot size shown on the Lot Size Map in relation to that land if—

- (a) The land is connected to a sewage reticulation system, and

Development consent has been granted in respect of the subdivision for the purpose of multi dwelling housing or a dual occupancy.

**4.1AA Minimum subdivision lot size for community title schemes [optional if clause 4.1 is adopted]**

- (1) The objectives of this clause are as follows:
- (a) to ensure that land to which this clause applies is not fragmented by subdivision that would create additional dwelling entitlements
- (2) This clause applies to a subdivision (being a subdivision that requires development consent) under the *Community Land Development Act 1989* of land in any of the following zones:
- (a) Zone RU1 Primary Production,  
 (b) Zone RU2 Rural Landscape,  
 (c) Zone RU4 Primary Production Small Lots,  
 (c1) Zone RU5 Village,  
 (c2) Zone R1 General Residential,  
 (c3) Zone R2 Low Density Residential,  
 (c4) Zone R5 Large Lot Residential,  
 (d) Zone E3 Environmental Management,  
 but does not apply to a subdivision by the registration of a strata plan.
- (3) The size of any lot resulting from a subdivision of land to which this clause applies (other than any lot comprising association property within the meaning of the *Community Land Development Act 1989*) is not to be less than the minimum size shown on the Lot Size Map in relation to that land.
- (4) This clause applies despite clause 4.1.

**4.2 Rural subdivision**

- (1) The objective of this clause is to provide flexibility in the application of standards for subdivision in rural zones to allow land owners a greater chance to achieve the objectives for development in the relevant zone.
- (2) This clause applies to the following rural zones:
- (a) Zone RU1 Primary Production,  
 (b) Zone RU2 Rural Landscape,  
 (baa) Zone RU3 Forestry  
 (c) Zone RU4 Primary Production Small Lots,  
 (d) Zone RU6 Transition.
- (3) Land in a zone to which this clause applies may, with development consent, be subdivided for the purpose of primary production to create a lot of a size that is less than the minimum size shown on the Lot Size Map in relation to that land.
- ~~(4) However, such a lot cannot be created if an existing dwelling would, as the result of~~

the subdivision, be situated on the lot.

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- (5) A dwelling cannot be erected on such a lot.

**Note.** A dwelling includes a rural worker's dwelling (see definition of that term in the Dictionary).

**4.2A Exceptions to minimum subdivision lot sizes for certain subdivisions.**

4.2A Exceptions to minimum subdivision lot sizes for certain rural subdivisions

- (1) The objectives of this clause are to permit the subdivision of land in rural areas to create lots of an appropriate size to meet the needs of current permissible uses other than for the purpose of residential accommodation or tourist and visitor accommodation.
- (2) This clause applies to land in the following rural zones –
- (a) Zone RU1 Primary Production,
  - (b) Zone RU2 Rural Landscape,
  - (c) Zone RU3 Forestry,
  - (d) Zone RU4 Primary Production Small Lots.
- (3) Land to which this clause applies may, with development consent, be subdivided to create a lot of a size that is less than the minimum size shown on the Lot Size Map in relation to that land, if the consent authority satisfied that the use of the land after the subdivision will be the same use (other than residential accommodation or tourist and visitor accommodation) permitted under the existing development consent for the land.
- (4) Development consent must not be granted for the subdivision of land to which this clause applies unless the consent authority is satisfied that –
- (a) the subdivision will not adversely affect the use of the surrounding land for agriculture, and
  - (b) the subdivision is necessary for the ongoing operation of the permissible use, and
  - (c) the subdivision will not cause or increase rural land use conflict in the locality, and
  - (d) the subdivision is appropriate having regard to the natural and physical constraints affecting the land.

**4.2B Minimum subdivision lot size for strata subdivisions of residential or tourist and visitor accommodation in certain rural zones**

- (1) The objective of this clause is to ensure that land to which this clause applies is not fragmented by subdivisions that would create additional dwelling entitlements.
- (2) This clause applies to land in the following zones that is used, or proposed to be used, for residential accommodation or tourist and visitor accommodation:
- (a) Zone RU1 Primary Production,
  - (b) Zone RU2 Rural Landscape,
  - (c) Zone RU4 Primary Production Small Lots,
  - (d) Zone E3 Environmental Management.
- (3) Development consent must not be granted for the subdivision of a lot to which this clause applies for a strata plan that would create lots below the minimum size shown on the Lot Size Map for that lot.

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**4.2C Erection of dwelling houses on land in certain rural and environmental protection zones**

- (1) The objectives of this clause are as follows:
- (a) to minimise unplanned rural residential development,
  - (b) to enable the replacement of lawfully erected dwelling houses in certain rural and environmental protection zones.
- (2) This clause applies to:
- (a) for the erection of a dwelling house—land in Zone RUI Primary Production, Zone RU2 Rural Landscape, Zone RU4 Primary Production Small Lots or Zone E3 Environmental Management, or
  - (b) for the erection of a dual occupancy – land in Zone RUI Primary Production.
- (3) Development consent must not be granted for the erection of a dwelling house or a dual occupancy on land, and on which no dwelling house or dual occupancy has been erected, unless the land:
- (a) is a lot that is at least the minimum lot size shown on the Lot Size Map in relation to that land, or
  - (b) is a lot created under an environmental planning instrument before this Plan commenced and on which the erection of a dwelling house or dual occupancy was permissible immediately before that commencement, or
  - (c) is a lot resulting from a subdivision for which development consent (or equivalent) was granted under an environmental planning instrument before this Plan commenced and on which the erection of a dwelling house or dual occupancy would have been permissible if the plan of subdivision had been registered before that commencement, or
  - (d) is an existing holding, or
  - (e) would have been a lot or a holding referred to in paragraph (a), (b), (c) or (d) had it not been affected by:
    - (i) a minor realignment of its boundaries that did not create an additional lot, or
    - (ii) a subdivision creating or widening a public road or public reserve or for another public purpose.

**Note.**

A dwelling cannot be erected on a lot created under clause 9 of *State Environmental Planning Policy (Rural Lands) 2008* or clause 4.2.

- (4) Development consent may be granted for the erection of a dwelling house or dual occupancy on land to which this clause applies if there is a lawfully erected dwelling house or dual occupancy on the land and the dwelling house or dual occupancy to be erected is intended only to replace the existing dwelling house or dual occupancy.

- (5) In this clause:

**existing holding** means land that:

- (a) was a holding on 26 June 1987,
- (b) was located within the former Wellington Local Government Area prior to 12 May 2016, and
- (c) is a holding at the time the application for development consent referred to in subclause (3) is lodged, whether or not there has been a change in the ownership of the holding since 26 June 1987, and includes any other land adjoining that land acquired by the owner since 26 June 1987.



**holding** means all adjoining land, even if separated by a road or railway, held by the same person or persons.

**Note.** The owner in whose ownership all the land is at the time the application is lodged need not be the same person as the owner in whose ownership all the land was on the stated date.

**4.3 Height of buildings**

[Not adopted]

**4.4 Floor space ratio**

[Not adopted]

**4.5 Calculation of floor space ratio and site area**

[Not adopted]

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**4.6 Exceptions to development standards [compulsory]**

- (1) The objectives of this clause are as follows:
  - (a) to provide an appropriate degree of flexibility in applying certain development standards to particular development,
  - (b) to achieve better outcomes for and from development by allowing flexibility in particular circumstances.
- (2) Development consent may, subject to this clause, be granted for development even though the development would contravene a development standard imposed by this or any other environmental planning instrument. However, this clause does not apply to a development standard that is expressly excluded from the operation of this clause.
- (3) Development consent must not be granted for development that contravenes a development standard unless the consent authority has considered a written request from the applicant that seeks to justify the contravention of the development standard by demonstrating:
  - (a) that compliance with the development standard is unreasonable or unnecessary in the circumstances of the case, and
  - (b) that there are sufficient environmental planning grounds to justify contravening the development standard.
- (4) Development consent must not be granted for development that contravenes a development standard unless:
  - (a) the consent authority is satisfied that:
    - (i) the applicant's written request has adequately addressed the matters required to be demonstrated by subclause (3), and
    - (ii) the proposed development will be in the public interest because it is consistent with the objectives of the particular standard and the objectives for development within the zone in which the development is proposed to be carried out, and
  - (b) the concurrence of the Secretary has been obtained.
- (5) In deciding whether to grant concurrence, the Secretary must consider:
  - (a) whether contravention of the development standard raises any matter of significance for State or regional environmental planning, and
  - (b) the public benefit of maintaining the development standard, and
  - (c) any other matters required to be taken into consideration by the Secretary before granting concurrence.
- (6) Development consent must not be granted under this clause for a subdivision of land in Zone RU1 Primary Production, Zone RU2 Rural Landscape, Zone RU3 Forestry, Zone RU4 Primary Production Small Lots, Zone RU6 Transition, Zone R5 Large Lot Residential, Zone E2 Environmental Conservation, Zone E3 Environmental Management or Zone E4 Environmental Living if:
  - (a) the subdivision will result in 2 or more lots of less than the minimum area specified for such lots by a development standard, or
  - (b) the subdivision will result in at least one lot that is less than 90% of the minimum area specified for such a lot by a development standard.
- (7) After determining a development application made pursuant to this clause, the consent authority must keep a record of its assessment of the factors required to be addressed in the applicant's written request referred to in subclause (3).

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- (8) This clause does not allow development consent to be granted for development that would contravene any of the following:
- (a) a development standard for complying development,
  - (b) a development standard that arises, under the regulations under the Act, in connection with a commitment set out in a BASIX certificate for a building to which *State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004* applies or for the land on which such a building is situated,
  - (c) clause 5.4.
  - (ca) clause 6.2 or 6.3

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**Part 5 Miscellaneous provisions**

**5.1 Relevant acquisition authority [compulsory]**

- (1) The objective of this clause is to identify, for the purposes of section 27 of the Act, the authority of the State that will be the relevant authority to acquire land reserved for certain public purposes if the land is required to be acquired under Division 3 of Part 2 of the *Land Acquisition (Just Terms Compensation) Act 1991 (the owner-initiated acquisition provisions)*.

**Note.** If the landholder will suffer hardship if there is any delay in the land being acquired by the relevant authority, section 23 of the *Land Acquisition (Just Terms Compensation) Act 1991* requires the authority to acquire the land.

- (2) The authority of the State that will be the relevant authority to acquire land, if the land is required to be acquired under the owner-initiated acquisition provisions, is the authority of the State specified below in relation to the land shown on the Land Reservation Acquisition Map (or, if an authority of the State is not specified in relation to land required to be so acquired, the authority designated or determined under those provisions).

<b>Type of land shown on Map</b>	<b>Authority of the State</b>
Zone RE1 Public Recreation and marked "Local open space"	Council
Zone RE1 Public Recreation and marked "Regional open space"	The corporation constituted under section 8 of the Act
Zone SP2 Infrastructure and marked "Classified road"	Roads and Maritime Services
Zone E1 National Parks and Nature Reserves and marked "National Park"	Minister administering the <i>National Parks and Wildlife Act 1974</i>
Zone R1 General Residential	Roads and Maritime Services
Zone E3 Environmental Management	Roads and Maritime Services

- (3) Development on land acquired by an authority of the State under the owner-initiated acquisition provisions may, before it is used for the purpose for which it is reserved, be carried out, with development consent, for any purpose.

**5.1A Development on land intended to be acquired for public purposes**

- (1) The objective of this clause is to limit development on certain land intended to be acquired for public purpose.
- (2) This clause applies to land shown on the Land Reservation Acquisition Map and specified in Column 1 of the table to this clause and that has not been acquired by the relevant authority of the State specified for the land in clause 5.1.
- (3) Development consent must not be granted to any development on land to which this clause applies other than development for a purpose specified opposite that land in Column 2 of that table.

<b>Column 1</b>	<b>Column 2</b>
<b>Land</b>	<b>Development</b>
Zone R1 General Residential	Carparks
Zone E3 Environmental Management	Carparks

**5.2 Classification and reclassification of public land [compulsory]**

- (1) The objective of this clause is to enable the Council to classify or reclassify public land as “operational land” or “community land” in accordance with Part 2 of Chapter 6 of the *Local Government Act 1993*.

**Note.** Under the *Local Government Act 1993*, “public land” is generally land vested in or under the control of a council (other than roads, Crown reserves and commons). The classification or reclassification of public land may also be made by a resolution of the Council under section 31, 32 or 33 of the *Local Government Act 1993*. Section 30 of that Act enables this Plan to discharge trusts on which public reserves are held if the land is reclassified under this Plan as operational land.

- (2) The public land described in Part 1 or Part 2 of Schedule 4 is classified, or reclassified, as operational land for the purposes of the *Local Government Act 1993*.
- (3) The public land described in Part 3 of Schedule 4 is classified, or reclassified, as community land for the purposes of the *Local Government Act 1993*.
- (4) The public land described in Part 1 of Schedule 4:
- (a) does not cease to be a public reserve to the extent (if any) that it is a public reserve, and
  - (b) continues to be affected by any trusts, estates, interests, dedications, conditions, restrictions or covenants that affected the land before its classification, or reclassification, as operational land.
- (5) The public land described in Part 2 of Schedule 4, to the extent (if any) that it is a public reserve, ceases to be a public reserve when the description of the land is inserted into that Part and is discharged from all trusts, estates, interests, dedications, conditions, restrictions and covenants affecting the land or any part of the land, except:
- (a) those (if any) specified for the land in Column 3 of Part 2 of Schedule 4, and
  - (b) any reservations that except land out of the Crown grant relating to the land, and
  - (c) reservations of minerals (within the meaning of the *Crown Lands Act 1989*).

**Note.** In accordance with section 30(2) of the *Local Government Act 1993*, the approval of the Governor to subclause (5) applying to the public land concerned is required before the description of the land is inserted in Part 2 of Schedule 4.

**5.3 Development near zone boundaries [optional]**

- (1) The objective of this clause is to provide flexibility where the investigation of a site and its surroundings reveals that a use allowed on the other side of a zone boundary would enable a more logical and appropriate development of the site and be compatible with the planning objectives and land uses for the adjoining zone.
- (2) This clause applies to so much of any land that is within the relevant distance of a boundary between any 2 zones. The relevant distance is
  - (a) 20 metres from a boundary shared between any land within Zone B1 Neighbourhood Centre, Zone B2 Local Centre, Zone B3 Commercial Core, Zone B4 Mixed Use, Zone B5 Business Development, Zone B6 Enterprise Corridor and Zone B7 Business Park, or
  - (b) 10 metres from any other boundary
- (3) This clause does not apply to:
  - (a) land in Zone RE1 Public Recreation, Zone E1 National Parks and Nature Reserves, Zone E2 Environmental Conservation, Zone E3 Environmental Management or Zone W1 Natural Waterways, or
  - (ab) Zone SP3 Tourist, or
  - (b) land within the coastal zone, or
  - (c) land proposed to be developed for the purpose of sex services or restricted premises.
- (4) Despite the provisions of this Plan relating to the purposes for which development may be carried out, development consent may be granted to development of land to which this clause applies for any purpose that may be carried out in the adjoining zone, but only if the consent authority is satisfied that:
  - (a) the development is not inconsistent with the objectives for development in both zones, and
  - (b) the carrying out of the development is desirable due to compatible land use planning, infrastructure capacity and other planning principles relating to the efficient and timely development of land.
- (5) This clause does not prescribe a development standard that may be varied under this Plan.

**5.4 Controls relating to miscellaneous permissible uses [compulsory]**

**(1) Bed and breakfast accommodation**

If development for the purposes of bed and breakfast accommodation is permitted under this Plan, the accommodation that is provided to guests must consist of no more than 5 bedrooms.

**Note.** Any such development that provides for a certain number of guests or rooms may involve a change in the class of building under the *Building Code of Australia*.

**(2) Home businesses**

If development for the purposes of a home business is permitted under this Plan, the carrying on of the business must not involve the use of more than 30 square metres of floor area.

**(3) Home industries**

If development for the purposes of a home industry is permitted under this Plan, the carrying on of the home industry must not involve the use of more than 50 square metres of floor area.

**(4) Industrial retail outlets**

If development for the purposes of an industrial retail outlet is permitted under this Plan, the retail floor area must not exceed:

- (a) 20% of the gross floor area of the industry or rural industry located on the same land as the retail outlet, or
  - (b) 400 square metres,
- whichever is the lesser.

**(5) Farm stay accommodation**

If development for the purposes of farm stay accommodation is permitted under this Plan, the accommodation that is provided to guests must consist of no more than 15 bedrooms.

**(6) Kiosks**

If development for the purposes of a kiosk is permitted under this Plan, the gross floor area must not exceed 40 square metres.

**(7) Neighbourhood shops**

If development for the purposes of a neighbourhood shop is permitted under this Plan, the retail floor area must not exceed 150 square metres.

**(7aa) Neighbourhood supermarkets**

If development for the purposes of neighbourhood supermarket is permitted under this Plan, the gross floor area must not exceed 1,000 square metres.

**(8) Roadside stalls**

If development for the purposes of a roadside stall is permitted under this Plan, the gross floor area must not exceed 20 square metres.

**(9) Secondary dwellings**

If development for the purposes of a secondary dwelling is permitted under this Plan, the total floor area of the dwelling (excluding any area used for parking) must not exceed whichever of the following is the greater:

- (a) 60 square metres,
- (b) 65% of the total floor area of the principal dwelling.

**(10) Artisan food and drink industry exclusion**

If development for the purposes of an artisan food and drink industry is permitted under this Plan in an industrial or rural zone, the floor area

used for retail sales (not including any café or restaurant area) must not exceed:

- (a) 5% of the gross floor area of the industry, or
- (b) 400 square metres,

Whichever is lesser.

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**5.5 (Repealed)**

**5.6 Architectural roof features**  
[Not adopted]

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**5.7 Development below mean high water mark**  
[Not adopted]

**5.8 Conversion of fire alarms [compulsory]**

- (1) This clause applies to a fire alarm system that can be monitored by Fire and Rescue NSW or by a private service provider.
- (2) The following development may be carried out, but only with development consent:
  - (a) converting a fire alarm system from connection with the alarm monitoring system of Fire and Rescue NSW to connection with the alarm monitoring system of a private service provider,
  - (b) converting a fire alarm system from connection with the alarm monitoring system of a private service provider to connection with the alarm monitoring system of another private service provider,
  - (c) converting a fire alarm system from connection with the alarm monitoring system of a private service provider to connection with a different alarm monitoring system of the same private service provider.
- (3) Development to which subclause (2) applies is complying development if it consists only of:
  - (a) internal alterations to a building, or
  - (b) internal alterations to a building together with the mounting of an antenna, and any support structure, on an external wall or roof of a building so as to occupy a space of not more than 450mm × 100mm × 100mm.
- (4) A complying development certificate for any such complying development is subject to a condition that any building work may only be carried out between 7.00 am and 6.00 pm on Monday to Friday and between 7.00 am and 5.00 pm on Saturday, and must not be carried out on a Sunday or a public holiday.
- (5) In this clause:  
*private service provider* means a person or body that has entered into an agreement that is in force with Fire and Rescue NSW to monitor fire alarm systems.

**5.9, 5.9AA (Repealed)**

**5.10 Heritage conservation [compulsory]**

**Note.** Heritage items (if any) are listed and described in Schedule 5. Heritage conservation areas (if any) are shown on the Heritage Map as well as being described in Schedule 5.

**Direction.** Heritage items as identified in Schedule 5 must be shown on the Heritage Map.

The location and nature of Aboriginal objects and Aboriginal places of heritage significance may be described in Schedule 5 and shown on the Heritage Map (see the direction to Schedule 5).

(1) **Objectives**

The objectives of this clause are as follows:

- (a) to conserve the environmental heritage of [*Name of local government area or other relevant name*],
- (b) to conserve the heritage significance of heritage items and heritage conservation areas, including associated fabric, settings and views,
- (c) to conserve archaeological sites,
- (d) to conserve Aboriginal objects and Aboriginal places of heritage significance.

(2) **Requirement for consent**

Development consent is required for any of the following:

- (a) demolishing or moving any of the following or altering the exterior of any of the following (including, in the case of a building, making changes to its detail, fabric, finish or appearance)
  - (i) a heritage item,
  - (ii) an Aboriginal object,
  - (iii) a building, work, relic or tree within a heritage conservation area,
- (b) altering a heritage item that is a building by making structural changes to its interior or by making changes to anything inside the item that is specified in Schedule 5 in relation to the item,
- (c) disturbing or excavating an archaeological site while knowing, or having reasonable cause to suspect, that the disturbance or excavation will or is likely to result in a relic being discovered, exposed, moved, damaged or destroyed,
- (d) disturbing or excavating an Aboriginal place of heritage significance,
- (e) erecting a building on land:
  - (i) on which a heritage item is located or that is within a heritage conservation area, or
  - (ii) on which an Aboriginal object is located or that is within an Aboriginal place of heritage significance,
- (f) subdividing land:
  - (i) on which a heritage item is located or that is within a heritage conservation area, or
  - (ii) on which an Aboriginal object is located or that is within an Aboriginal place of heritage significance.

(3) **When consent not required**

However, development consent under this clause is not required if:

- (a) the applicant has notified the consent authority of the proposed development and the consent authority has advised the applicant in writing before any work is carried out that it is satisfied that the proposed development:
- (i) is of a minor nature or is for the maintenance of the heritage item, Aboriginal object, Aboriginal place of heritage significance or archaeological site or a building, work, relic, tree or place within the heritage conservation area, and
  - (ii) would not adversely affect the heritage significance of the heritage item, Aboriginal object, Aboriginal place, archaeological site or heritage conservation area, or
- (b) the development is in a cemetery or burial ground and the proposed development:
- (i) is the creation of a new grave or monument, or excavation or disturbance of land for the purpose of conserving or repairing monuments or grave markers, and
  - (ii) would not cause disturbance to human remains, relics, Aboriginal objects in the form of grave goods, or to an Aboriginal place of heritage significance, or
- (c) the development is limited to the removal of a tree or other vegetation that the Council is satisfied is a risk to human life or property, or
- (d) the development is exempt development.
- (4) **Effect of proposed development on heritage significance**  
The consent authority must, before granting consent under this clause in respect of a heritage item or heritage conservation area, consider the effect of the proposed development on the heritage significance of the item or area concerned. This subclause applies regardless of whether a heritage management document is prepared under subclause (5) or a heritage conservation management plan is submitted under subclause (6).
- (5) **Heritage assessment**  
The consent authority may, before granting consent to any development:
- (a) on land on which a heritage item is located, or
  - (b) on land that is within a heritage conservation area, or
  - (c) on land that is within the vicinity of land referred to in paragraph (a) or (b),
- require a heritage management document to be prepared that assesses the extent to which the carrying out of the proposed development would affect the heritage significance of the heritage item or heritage conservation area concerned.
- (6) **Heritage conservation management plans**  
The consent authority may require, after considering the heritage significance of a heritage item and the extent of change proposed to it, the submission of a heritage conservation management plan before granting consent under this clause.
- (7) **Archaeological sites**  
The consent authority must, before granting consent under this clause to the carrying out of development on an archaeological site (other than land listed on the State Heritage Register or to which an interim heritage order under the *Heritage Act 1977* applies):
- (a) notify the Heritage Council of its intention to grant consent, and
  - (b) take into consideration any response received from the Heritage Council within 28 days after the notice is sent.

**(8) Aboriginal places of heritage significance**

The consent authority must, before granting consent under this clause to the carrying out of development in an Aboriginal place of heritage significance:

- (a) consider the effect of the proposed development on the heritage significance of the place and any Aboriginal object known or reasonably likely to be located at the place by means of an adequate investigation and assessment (which may involve consideration of a heritage impact statement), and
- (b) notify the local Aboriginal communities, in writing or in such other manner as may be appropriate, about the application and take into consideration any response received within 28 days after the notice is sent.

**(9) Demolition of nominated State heritage items**

The consent authority must, before granting consent under this clause for the demolition of a nominated State heritage item:

- (a) notify the Heritage Council about the application, and
- (b) take into consideration any response received from the Heritage Council within 28 days after the notice is sent.

**(10) Conservation incentives**

The consent authority may grant consent to development for any purpose of a building that is a heritage item or of the land on which such a building is erected, or for any purpose on an Aboriginal place of heritage significance, even though development for that purpose would otherwise not be allowed by this Plan, if the consent authority is satisfied that:

- (a) the conservation of the heritage item or Aboriginal place of heritage significance is facilitated by the granting of consent, and
- (b) the proposed development is in accordance with a heritage management document that has been approved by the consent authority, and
- (c) the consent to the proposed development would require that all necessary conservation work identified in the heritage management document is carried out, and
- (d) the proposed development would not adversely affect the heritage significance of the heritage item, including its setting, or the heritage significance of the Aboriginal place of heritage significance, and
- (e) the proposed development would not have any significant adverse effect on the amenity of the surrounding area.

**5.11 Bush fire hazard reduction [compulsory]**

Bush fire hazard reduction work authorised by the *Rural Fires Act 1997* may be carried out on any land without development consent.

**Note.** The *Rural Fires Act 1997* also makes provision relating to the carrying out of development on bush fire prone land.

**5.12 Infrastructure development and use of existing buildings of the Crown [compulsory]**

- (1) This Plan does not restrict or prohibit, or enable the restriction or prohibition of, the carrying out of any development, by or on behalf of a public authority, that is permitted to be carried out with or without development consent, or that is exempt development, under *State Environmental Planning Policy (Infrastructure) 2007*.
- (2) This Plan does not restrict or prohibit, or enable the restriction or prohibition of, the use of existing buildings of the Crown by the Crown.

**5.13 Eco-tourist facilities [compulsory if eco-tourist facilities permitted with consent]**

- (1) The objectives of this clause are as follows:
  - (a) to maintain the environmental and cultural values of land on which development for the purposes of eco-tourist facilities is carried out,
  - (b) to provide for sensitively designed and managed eco-tourist facilities that have minimal impact on the environment both on and off-site.
- (2) This clause applies if development for the purposes of an eco-tourist facility is permitted with development consent under this Plan.
- (3) The consent authority must not grant consent under this Plan to carry out development for the purposes of an eco-tourist facility unless the consent authority is satisfied that:
  - (a) there is a demonstrated connection between the development and the ecological, environmental and cultural values of the site or area, and
  - (b) the development will be located, constructed, managed and maintained so as to minimise any impact on, and to conserve, the natural environment, and
  - (c) the development will enhance an appreciation of the environmental and cultural values of the site or area, and
  - (d) the development will promote positive environmental outcomes and any impact on watercourses, soil quality, heritage and native flora and fauna will be minimal, and
  - (e) the site will be maintained (or regenerated where necessary) to ensure the continued protection of natural resources and enhancement of the natural environment, and
  - (f) waste generation during construction and operation will be avoided and that any waste will be appropriately removed, and
  - (g) the development will be located to avoid visibility above ridgelines and against escarpments and from watercourses and that any visual intrusion will be minimised through the choice of design, colours, materials and landscaping with local native flora, and
  - (h) any infrastructure services to the site will be provided without significant modification to the environment, and
  - (i) any power and water to the site will, where possible, be provided through the use of passive heating and cooling, renewable energy sources and water efficient design, and
  - (j) the development will not adversely affect the agricultural productivity of adjoining land, and
  - (k) the following matters are addressed or provided for in a management strategy for minimising any impact on the natural environment:
    - (i) measures to remove any threat of serious or irreversible environmental damage,
    - (ii) the maintenance (or regeneration where necessary) of habitats,
    - (iii) efficient and minimal energy and water use and waste output,
    - (iv) mechanisms for monitoring and reviewing the effect of the development on the natural environment,
    - (v) maintaining improvements on an on-going basis in accordance with relevant ISO 14000 standards relating to management and quality control.

**5.14 Siding Spring Observatory—maintaining dark sky**

- (1) The objective of this clause is to protect observing conditions at the Siding Spring Observatory by promoting lighting practices that minimise light pollution.
- (2) **Light emissions—general considerations for all development**

Before granting development consent for development on land to which this Plan applies, the consent authority must consider whether the development is likely to adversely affect observing conditions at the Siding Spring Observatory, taking into account the following matters:

  - (a) the amount and type of light to be emitted as a result of the development and the measures to be taken to minimise light pollution,
  - (b) the impact of those light emissions cumulatively with other light emissions and whether the light emissions are likely to cause a critical level to be reached,
  - (c) whether outside light fittings associated with the development are shielded light fittings,
  - (d) the measures to be taken to minimise dust associated with the development,  
**Note.** Dust tends to scatter light and increase light pollution.
  - (e) the *Dark Sky Planning Guideline* prepared by the Secretary and published in the Gazette.
- (3) **Development on land within 18 kilometres of observatory**

Development consent is required for all lit development on land less than 18 kilometres from the Siding Spring Observatory.
- (4) The consent authority must consult with the observatory director before granting development consent to lit development on land less than 18 kilometres from the Siding Spring Observatory.
- (5) The consent authority must not (except with the concurrence of the Secretary) grant development consent to development on land less than 18 kilometres from the Siding Spring Observatory if the consent authority considers that the development is likely to result in any one or more of the following:
  - (a) an outside light fitting other than a shielded light fitting,
  - (b) an outside light fitting emitting light of more than:
    - (i) if the development is on land less than 12 kilometres from the Siding Spring Observatory—900 lumens, or
    - (ii) in any other case—1,800 lumens,
  - (c) more than 4 shielded outside light fittings,
  - (d) light of more than 7,200 lumens being emitted.
- (6) The consent authority must not grant development consent to lit development on land less than 18 kilometres from the Siding Spring Observatory unless the consent authority is satisfied that the development will incorporate designs that minimise light pollution and measures that will prevent the escape of light at night through skylights, windows or other openings.
- (7) **Development on land 18 kilometres or more from observatory**

The consent authority must not (except with the concurrence of the Secretary) grant development consent to development on land that is 18 kilometres or more from the Siding Spring Observatory if the consent authority considers that the development is likely to result in the emission of light of 1,000,000 lumens or more.

- (8) The consent authority must consult with the observatory director before granting development consent to development for the purposes of a dwelling house, secondary dwelling or dual occupancy on land that is 18 kilometres or more from the Siding Spring Observatory if the consent authority considers that the development is likely to result in a dwelling having:
- (a) an outside light fitting other than a shielded light fitting, or
  - (b) more than 7 shielded outside light fittings or more than 5 such light fittings that are not automatic light fittings.
- (9) The consent authority must consult with the observatory director before granting development consent to development (other than development for the purposes of a dwelling house, secondary dwelling or dual occupancy) on land that is 18 kilometres or more from the Siding Spring Observatory if the consent authority considers that the development is likely to result in the emission of light of 50,000 lumens or more.
- (10) **Granting concurrence**  
The Secretary must take the following into account in deciding whether to grant concurrence under this clause:
- (a) any comments made by the observatory director in relation to the development,
  - (b) the effect the development would have on observing conditions at the Siding Spring Observatory,
  - (c) the quantity of artificial light in the night sky measured through a telescope at the Siding Spring Observatory on or about the date the development application is made and the relationship of that level to the critical level,
  - (d) whether any public interest in permitting the development outweighs the public interest in preserving the observing conditions at the Siding Spring Observatory.
- (11) A reference in this clause to light emitted as a result of development for the purposes of a building or work includes light emitted from any other building or work that is to be used as part of or in connection with that building or work.
- (12) A requirement in this clause to consult with the observatory director in respect of development is a requirement to give written notice of the development to the observatory director and to take into account any comments received from the observatory director within 21 days after the notice is given.
- (13) Clause 4.6 does not allow development consent to be granted for development that would contravene this clause.
- (14) In this clause:
- automatic light fitting** means a light fitting that is activated by a sensor and switches off automatically after a period of time.
- critical level** means the level at which the quantity of artificial light in the night sky measured through a telescope at the Siding Spring Observatory is greater than:
- (a) if the telescope is inclined at 30 degrees from the horizon—10% of the surface brightness of the night sky attributable to natural light sources, at the time of the solar cycle when the sky is at its darkest, or
  - (b) if the telescope is inclined at 90 degrees from the horizon—3% of the surface brightness of the night sky attributable to natural light sources, at the time of the solar cycle when the sky is at its darkest.
- horizontal plane**, in relation to a light fitting, means the horizontal plane passing through the centre of the light source (for example, the bulb) of the light fitting.



*light pollution* means brightening of the night sky caused by artificial light.

*lit development* means development that is likely to result in the emission of light.

*observatory director* means the Director of the Research School of Astronomy and Astrophysics at the Australian National University.

*outside light fitting* means a light fitting that is attached or fixed outside, including on the exterior, of a building.

*shielded light fitting* means a light fitting that does not permit light to shine above the horizontal plane.

*Siding Spring Observatory* means the land owned by the Australian National University at Siding Spring and the buildings and equipment situated on that land.

**Direction.** This clause may be adopted without subclause (9).

**5.15 Defence communications facility**  
[Not adopted]

**5.16 Subdivision of, or dwellings on, land in certain rural, residential or environment protection zones**

- (1) The objective of this clause is to minimise potential land use conflict between existing and proposed development on land in the rural, residential or environment protection zones concerned (particularly between residential land uses and other rural land uses).
- (2) This clause applies to land in the following zones—
  - (a) Zone RU1 Primary Production,
  - (b) Zone RU2 Rural Landscape,
  - (c) Zone RU3 Forestry,
  - (d) Zone RU4 Primary Production Small Lots,
  - (e) Zone RU6 Transition,
  - (f) Zone R5 Large Lot Residential,
  - (g) Zone E2 Environmental Conservation,
  - (h) Zone E3 Environmental Management,
  - (i) Zone E4 Environmental Living.
- (3) A consent authority must take into account the matters specified in subclause (4) in determining whether to grant development consent to development on land to which this clause applies for either of the following purposes—
  - (a) subdivision of land proposed to be used for the purposes of a dwelling,
  - (b) erection of a dwelling.
- (4) The following matters are to be taken into account—
  - (a) the existing uses and approved uses of land in the vicinity of the development,
  - (b) whether or not the development is likely to have a significant impact on land uses that, in the opinion of the consent authority, are likely to be preferred and the predominant land uses in the vicinity of the development,
  - (c) whether or not the development is likely to be incompatible with a use referred to in paragraph (a) or (b),

(d) any measures proposed by the applicant to avoid or minimise any incompatibility referred to in paragraph (c).

**5.17 Artificial waterbodies in environmentally sensitive areas in areas of operation of irrigation corporations**

[Not applicable]

**5.18 Intensive livestock agriculture**

- (1) The objectives of this clause are—
- (a) to ensure appropriate environmental assessment of development for the purpose of intensive livestock agriculture that is permitted with consent under this Plan, and
  - (b) to provide for certain capacity thresholds below which development consent is not required for that development subject to certain restrictions as to location.
- (2) This clause applies if development for the purpose of intensive livestock agriculture is permitted with consent under this Plan.
- (3) In determining whether or not to grant development consent under this Plan to development for the purpose of intensive livestock agriculture, the consent authority must take the following into consideration—
- (a) the adequacy of the information provided in the statement of environmental effects or (if the development is designated development) the environmental impact statement accompanying the development application,
  - (b) the potential for odours to adversely impact on the amenity of residences or other land uses within the vicinity of the site,
  - (c) the potential for the pollution of surface water and ground water,
  - (d) the potential for the degradation of soils,
  - (e) the measures proposed to mitigate any potential adverse impacts,
  - (f) the suitability of the site in the circumstances,
  - (g) whether the applicant has indicated an intention to comply with relevant industry codes of practice for the health and welfare of animals,
  - (h) the consistency of the proposal with, and any reasons for departing from, the environmental planning and assessment aspects of any guidelines for the establishment and operation of relevant types of intensive livestock agriculture published, and made available to the consent authority, by the Department of Primary Industries (within the Department of Industry) and approved by the Planning Secretary.
- (4) Despite any other provision of this Plan, development for the purpose of intensive livestock agriculture may be carried out without development consent if—
- (a) the development is of a type specified in subclause (5), and
  - (b) the consent authority is satisfied that the development will not be located—
    - (i) in an environmentally sensitive area, or
    - (ii) within 100 metres of a natural watercourse, or
    - (iii) in a drinking water catchment, or

- (iv) within 500 metres of any dwelling that is not associated with the development, or a residential zone, or
  - (v) if the development is a poultry farm—within 500 metres of another poultry farm.
- (5) The following types of development are specified for the purposes of subclause (4)—
- (a) a cattle feedlot having a capacity to accommodate fewer than 50 head of cattle,
  - (b) a goat feedlot having a capacity to accommodate fewer than 200 goats,
  - (c) a sheep feedlot having a capacity to accommodate fewer than 200 sheep,
  - (d) a pig farm having a capacity to accommodate fewer than 20 breeding sows, or fewer than 200 pigs (of which fewer than 20 may be breeding sows),
  - (e) a dairy (restricted) having a capacity to accommodate fewer than 50 dairy cows,
  - (f) a poultry farm having a capacity to accommodate fewer than 1,000 birds for meat or egg production (or both).
- (6) For the avoidance of doubt, subclause (4) does not apply to development that is prohibited or that may be carried out without development consent under this or any other environmental planning instrument.
- (7) In this clause—

*environmentally sensitive area* has the same meaning as in clause 1.5 of *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008*.

*residential zone* means Zone RU4 Primary Production Small Lots, Zone RU5 Village, Zone RU6 Transition, Zone R1 General Residential, Zone R2 Low Density Residential, Zone R3 Medium Density Residential, Zone R4 High Density Residential, Zone R5 Large Lot Residential, Zone B4 Mixed Use, Zone B6 Enterprise Corridor, Zone E3 Environmental Management or Zone E4 Environmental Living.

#### 5.19 Pond-based, tank-based and oyster aquaculture

- (1) **Objectives** The objectives of this clause are as follows—
- (a) to encourage sustainable oyster, pond-based and tank-based aquaculture in the State, namely, aquaculture development that uses, conserves and enhances the community's resources so that the total quality of life now and in the future can be preserved and enhanced,
  - (b) to set out the minimum site location and operational requirements for permissible pond-based and tank-based aquaculture development.
- (2) **Pond-based or tank-based aquaculture—matters of which consent authority must be satisfied before granting consent**
- The consent authority must not grant development consent to carry out development for the purpose of pond-based aquaculture or tank-based aquaculture unless the consent authority is satisfied of the following—
- (a) that the development complies with the site location and operational requirements set out in Part 1 of Schedule 6 for the development,
  - (b) in the case of—

- (i) pond-based aquaculture or tank-based aquaculture in Zone R1 General Residential, Zone R2 Low Density Residential or Zone R5 Large Lot Residential—that the development is for the purpose of small scale aquarium fish production, and
  - (ii) pond-based aquaculture in Zone E3 Environmental Management or Zone E4 Environmental Living—that the development is for the purpose of extensive aquaculture, and
  - (iii) tank-based aquaculture in Zone R3 Medium Density Residential, Zone E3 Environmental Management or Zone E4 Environmental Living—that the development is for the purpose of small scale aquarium fish production, and
  - (iv) pond-based aquaculture or tank-based aquaculture in Zone W1 Natural Waterways, Zone W2 Recreational Waterways or Zone W3 Working Waterways—that the development will use waterways to source water.
- (3) The requirements set out in Part 1 of Schedule 6 are minimum requirements and do not limit the matters a consent authority is required to take into consideration under the Act or the conditions that it may impose on any development consent.

**(4) Extensive pond-based aquaculture permitted without consent in certain zones**

Development for the purpose of pond-based aquaculture, that is also extensive aquaculture, may be carried out without development consent if—

- (a) the development is carried out in Zone RU1 Primary Production, Zone RU2 Rural Landscape, Zone RU3 Forestry, Zone RU4 Primary Production Small Lots or Zone RU6 Transition, and
- (b) the development complies with the site location requirements and operational requirements set out in Part 2 of Schedule 6.

**(5) Oyster aquaculture—additional matters that consent authority must consider in determining a development application**

In determining a development application for development for the purpose of oyster aquaculture, the consent authority must consider—

- (a) any provisions of any aquaculture industry development plan that are relevant to the subject of the development application, and
- (b) the *NSW Oyster Industry Sustainable Aquaculture Strategy*.

**(6) Oyster aquaculture permitted without consent in priority oyster aquaculture areas**

Development for the purpose of oyster aquaculture may be carried out without development consent—

- (a) on land that is wholly within a priority oyster aquaculture area, or
- (b) on land that is partly within and partly outside a priority oyster aquaculture area, but only if the land outside the area is no more than 0.1 hectare in area.

**(7) Definitions** In this clause—

*aquaculture industry development plan* means an aquaculture industry development plan published under Part 6 of the *Fisheries Management Act 1994*.

*extensive aquaculture* has the same meaning as in the *Fisheries Management (Aquaculture) Regulation 2017*.

*NSW Oyster Industry Sustainable Aquaculture Strategy* means the third edition of the publication of that title, as published in 2016 by the Department of Primary Industries (within the Department of Industry).

*priority oyster aquaculture area* means an area identified as a priority oyster aquaculture area on a map referred to in Chapter 5.3 of the *NSW Oyster Industry Sustainable Aquaculture Strategy*, being a map a copy of which is held in the head office of the Department of Primary Industries (within the Department of Industry) and published on that Department's website.

**5.20 Standards that cannot be used to refuse consent—playing and performing music**

- (1) The consent authority must not refuse consent to development in relation to licensed premises on the following grounds—
  - (a) the playing or performance of music, including the following—
    - (i) the genre of music played or performed, or
    - (ii) whether the music played or performed is live or amplified, or
    - (iii) whether the music played or performed is original music, or
    - (iv) the number of musicians or live entertainment acts playing or performing, or
    - (v) the type of instruments played,
  - (b) whether dancing occurs,
  - (c) the presence or use of a dance floor or another area ordinarily used for dancing,
  - (d) the direction in which a stage for players or performers faces,
  - (e) the decorations to be used, including, for example, mirror balls, or lighting used by players or performers.
- (2) The consent authority must not refuse consent to development in relation to licensed premises on the grounds of noise caused by the playing or performance of music, if the consent authority is satisfied the noise may be managed and minimised to an acceptable level.
- (3) In this clause—

*licensed premises* has the same meaning as in the *Liquor Act 2007*.

**Part 6 Urban release areas**

**6.1 Arrangements for designated State public infrastructure**

- (1) The objective of this clause is to require satisfactory arrangements to be made for the provision of designated State public infrastructure before the subdivision of land in an urban release area to satisfy needs that arise from development on the land, but only if the land is developed intensively for urban purposes.
- (2) Development consent must not be granted for the subdivision of land in an urban release area unless the Director-General has certified in writing to the consent authority that satisfactory arrangements have been made to contribute to the provision of designated State public infrastructure in relation to that land.
- (3) Subclause (2) does not apply to—

- (a) any lot identified in the certificate as a residue lot, or

- (b) any lot to be created by a subdivision on land that was the subject of a previous development consent granted in accordance with this clause, or
  - (c) any lot that is proposed in the development application to be reserved or dedicated for public open space, public roads, public utility undertakings, educational facilities or any other public purpose, or
  - (d) a subdivision for the purpose only of rectifying an encroachment on any existing lot.
- (4) This clause does not apply to land in an urban release area if all or any part of the land is in a special contributions area (as defined by section 7.1 of the Act).

### 6.2 Public utility infrastructure

- (1) Development consent must not be granted for development on land in an urban release area unless the Council is satisfied that any public utility infrastructure that is essential for the proposed development is available or that adequate arrangements have been made to make that infrastructure available when it is required.
- (2) This clause does not apply to development for the purpose of providing, extending, augmenting, maintaining or repairing any public utility infrastructure.

### 6.3 Development control plan

- (1) The objective of this clause is to ensure that development on land in an urban release area occurs in a logical and cost-effective manner, in accordance with a staging plan and only after a development control plan that includes specific controls has been prepared for the land.
- (2) Development consent must not be granted for development on land in an urban release area unless a development control plan that provides for the matters specified in subclause (3) has been prepared for the land.
- (3) The development control plan must provide for all of the following—
  - (a) a staging plan for the timely and efficient release of urban land, making provision for necessary infrastructure and sequencing,
  - (b) an overall transport movement hierarchy showing the major circulation routes and connections to achieve a simple and safe movement system for private vehicles, public transport, pedestrians and cyclists,
  - (c) an overall landscaping strategy for the protection and enhancement of riparian areas and remnant vegetation, including visually prominent locations, and detailed landscaping requirements for both the public and private domain,
  - (d) a network of passive and active recreational areas,
  - (e) stormwater and water quality management controls,
  - (f) amelioration of natural and environmental hazards, including bush fire, flooding and site contamination and, in relation to natural hazards, the safe occupation of, and the evacuation from, any land so affected,
  - (g) detailed urban design controls for significant development sites,
  - (h) measures to encourage higher density living around transport, open space and service nodes,

- (i) measures to accommodate and control appropriate neighbourhood commercial and retail uses,
  - (j) suitably located public facilities and services, including provision for appropriate traffic management facilities and parking.
- (4) Subclause (2) does not apply to any of the following development—
- (a) a subdivision for the purpose of a realignment of boundaries that does not create additional lots,
  - (b) a subdivision of land if any of the lots proposed to be created is to be reserved or dedicated for public open space, public roads or any other public or environmental protection purpose,
  - (c) a subdivision of land in a zone in which the erection of structures is prohibited,
  - (d) proposed development on land that is of a minor nature only, if the consent authority is of the opinion that the carrying out of the proposed development would be consistent with the objectives of the zone in which the land is situated.

#### 6.4 Relationship between Part and remainder of Plan

A provision of this Part prevails over any other provision of this Plan to the extent of any inconsistency.

### Part 7 Additional local provisions

#### 7.1 Flood planning

- (1) The objectives of this clause are as follows:
- (a) to minimise the flood risk to life and property associated with the use of land,
  - (b) to allow development on land that is compatible with the land's flood hazard, taking into account projected changes as a result of climate change,
  - (c) to avoid significant adverse impact on flood behaviour and the environment.
- (2) This clause applies to:
- (a) land that is shown as "Flood planning area" on the Flood Planning Map, and
  - (b) other land at or below the flood planning level.
- (3) Development consent must not be granted to development on land to which this clause applies unless the consent authority is satisfied that the development:
- (a) is compatible with the flood hazard of the land, and
  - (b) will not significantly adversely affect flood behaviour resulting in detrimental increases in the potential flood affectation of other development or properties, and
  - (c) incorporates appropriate measures to manage risk to life from flood, and
  - (d) will not significantly adversely affect the environment or cause avoidable erosion, siltation, destruction of riparian vegetation or a reduction in the stability of river banks or watercourses, and
  - (e) is not likely to result in unsustainable social and economic costs to the community as a consequence of flooding.



(4) A word or expression used in this clause has the same meaning as it has in the Floodplain Development Manual (ISBN 0 7347 5476 0), published in 2005 by the NSW Government, unless it is otherwise defined in this clause.

(5) In this clause:

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

## 7.2 Terrestrial biodiversity

- (1) The objectives of this clause is to maintain terrestrial biodiversity by:
- Protecting native fauna and flora, and
  - Protecting the ecological processes necessary for their continued existence, and
  - Encouraging the conservation and recovery of native fauna and flora and their habitats.
- (2) This clause applies to land identified as "Biodiversity" on the *Terrestrial Biodiversity Map*.
- (3) Before determining a development application for development on land to which this clause applies, the consent authority must consider:
- Whether the development is likely to have:
    - any adverse impact on the condition, ecological value and significance of the fauna and flora on the land, and
    - any adverse impact on the importance of the vegetation on the land to the habitat and survival of native fauna, and
  - any potential to fragment, disturb or diminish the biodiversity structure, function and composition of the land, and
  - any adverse impact on the habitat elements providing connectivity on the land, and
- (b) any appropriate measures proposed to avoid, minimise or mitigate the impacts of the development.
- (4) Development consent must not be granted to development on land to which this clause applies unless the consent authority is satisfied that:
- The development is designed, sited and will be managed to avoid any significant adverse environmental impact, or
  - If that impact cannot be reasonably avoided by adopting feasible alternative – the development is designed, sited and will be managed to minimise that impact, or
- If that impact cannot be minimised – the development will be managed to mitigate that impact.

## 7.3 Earthworks

- (1) The objectives of this clause are as follows:
- To ensure that earthworks for which development consent is required will not have a detrimental impact on the environmental functions and processes, neighbouring uses, cultural or heritage items or features of the surrounding land,
  - To allow earthworks or a minor nature without requiring separate development consent.



- (2) Development consent is required for earthworks unless:
  - (a) The work is exempt development under this Plan or another applicable environmental planning instrument, or
  - (b) The work is ancillary to other development for which development consent has been given.
- (3) Before granting development consent for earthworks, the consent authority must consider the following matters:
  - (a) The likely disruption of, or any detrimental effect on, existing drainage patterns and soil stability in the locality,
  - (b) The effect of the proposed development on the likely future use or redevelopment of the land,
  - (c) The quality of the fill or the soil to be excavated, or both,
  - (d) The effect of the proposed development on the existing and likely amenity of adjoining properties,
  - (e) The source of any fill material and the destination of any excavated material,
  - (f) The likelihood of disturbing relics,
  - (g) The proximity to and potential for adverse impact on any watercourse, drinking water catchment or environmentally sensitive area.

**Note.** The *National Parks and Wildlife Act 1974*, particularly section 86, deals with disturbing or excavating land and Aboriginal objects.

#### 7.4 Natural resource – riparian land and waterways

- (1) The objectives of this clause are to protect or improve:
  - (a) Water quality within waterways, and
  - (b) Stability of the bed and banks of waterways, and
  - (c) Aquatic and riparian habitats, and
  - (d) Ecological processes within waterways and riparian areas, and threatened aquatic species, communities, populations and their habitats, and
  - (e) Scenic and cultural heritage values of waterways and riparian areas.
- (2) This clause applies to land that is:
  - (a) Identified on the Natural Resource – Water Map, or
  - (b) Situated within 40 metres of the bank or shore (measured horizontally from the top of the bank or shore), of a waterway on land identified in subclause (a).
- (3) Development consent must not be granted to development on land to which this clause applies, unless the consent authority has taken into consideration the following matters:
  - (a) Identification of any potential adverse impact on any of the following:
    - (i) water quality within the waterway,
    - (ii) aquatic and riparian habitats and ecosystems,
    - (iii) stability of the bed, shore and banks of the waterway,
    - (iv) the free passage of the fish and other aquatic organism within or along the waterway,
    - (v) habitats of any threatened species, population or ecological community,
  - (b) The likelihood that a development will increase water extraction from the waterway for domestic or stock use and the potential impact of any extraction on the waterway,
  - (c) A description of all proposed measures that may be undertaken to ameliorate any potential adverse impact.

- (4) Development consent must not be granted to development on land to which this clause applies, unless the consent authority is satisfied that development is consistent with the objectives of this clause and:
- (a) The development is designed, sited and managed to avoid any potential adverse environmental impact, or
  - (b) If the potential adverse impact cannot be avoided, the development:
    - (i) is designed and sited so as to have minimum adverse impact, and
    - (ii) incorporates effective measures so as to have minimal adverse impact, and
    - (iii) mitigates any adverse impact through the restoration of any existing disturbed area on the site.

- (5) In this clause:

*Natural Resource – Water Map* means the [Dubbo Region Environmental Plan 2019 Natural Resource Map – Water Map](#).

#### 7.5 Groundwater vulnerability

- (1) The objective of this clause is to maintain the hydrological functions of key groundwater systems and to protect vulnerable groundwater resources from depletion and contamination as a result of inappropriate development.
- (2) This clause applies to the land identified as “Groundwater vulnerability” on the Natural Resource – Groundwater Vulnerability Map.
- (3) Before determining a development application for development on land to which this clause applies, the consent authority must consider:
- (a) Whether or not the development (including any on-site storage or disposal of solid or liquid waste chemicals) will cause any groundwater contamination or any adverse effect on groundwater dependent ecosystems, and
  - (b) The cumulative impact (including the impact on nearby groundwater extraction for potable water supply or stock water supply) of the development and any other existing development on groundwater.
- (4) Development consent must not be granted to development on land to which this clause applies unless the consent authority is satisfied that:
- (a) The development is designed, sited and will be managed to avoid any significant adverse environmental impact, or
  - (b) If that impact cannot be avoided by adopting feasible alternatives – the development is designed, sited and will be managed to minimise that impact, or
  - (c) If that impact cannot be minimised – the development will be managed to mitigate that impact.

- (5) In this clause:

*Natural Resource – Groundwater Vulnerability Map* means the [Dubbo Region Local Environmental Plan 2019 Natural Resource – Groundwater Vulnerability Map](#).

#### 7.6 Erection of rural workers’ dwellings on land in Zoned RU1 and RU4

- (1) The objectives of this clause are:
- (a) To ensure adequate provision for existing agricultural and rural industries that genuinely require accommodation for permanent on-site employees, and

- (b) To prevent development for a rural worker's dwelling if agriculture or rural industry does not have the capacity to support the rural worker's employment.
- (2) This clause applies to land in the following zones:
  - (a) Zone RU1 Primary Production,
  - (b) Zone RU4 Primary Production Small Lots.
- (3) Development consent must not be granted for the erection of a rural worker's dwelling on land to which this clause applies unless the consent authority is satisfied that:
  - (a) There is a demonstrated economic capacity of the agricultural or rural industry to support the on-going employment of rural workers, and
  - (b) The development is necessary considering the nature of the agricultural or rural industry land use lawfully occurring on the land or as a result of the remote or isolated location of the land, and

The development will not result in more than 1 rural worker's dwelling being erected on the land comprising the agricultural or rural industry.

#### 7.7 Airspace operations

##### Airspace operations

- (1) The objectives of this clause are as follows:
  - (a) To provide for the effective and ongoing operation of Dubbo City Regional Airport by ensuring that such operation is not compromised by proposed development that penetrates the Obstacle Limitation Surface for that airport,
  - (b) To protect the community from undue risk from that operation.
- (2) If a development application is received and the consent authority is satisfied that the proposed development will penetrate the Obstacle Limitation Surface, the consent authority must not grant development consent unless it has consulted with the relevant Commonwealth body about the application.
- (3) The consent authority may grant development consent for the development if relevant Commonwealth body advises that:
  - (a) The development will penetrate the Obstacle Limitation Surface but it has no objection to its construction, or
  - (b) The development will not penetrate the Obstacle Limitation Surface.
- (4) The consent authority must not grant development consent for the development if the relevant Commonwealth body advises that the development will penetrate the Obstacle Limitation Surface and should not be constructed.
- (5) The consent authority must not grant development consent for development that will penetrate the Obstacle Limitation Surface unless the consent authority is satisfied that the development will not create an obstruction, hazard or other potential hazard to aircraft accessing the airport (including a hazard or potential hazard relating to light sources or bird strike).
- (6) In this clause:
  - Obstacle Limitation Surface** means the Obstacle Limitation Surface shown on the Obstacle Limitation Surface Map.
  - Obstacle Limitation Surface Map** means the *Obstacle Limitation Surface Map for Dubbo City Regional Airport* prepared by the relevant Commonwealth body.

*Relevant Commonwealth body* means the body, under Commonwealth legislation, that is responsible for approvals for development that penetrates the Obstacle Limitation Surface for Dubbo City Regional Airport.

**7.8 Development in areas subject to aircraft noise**

- (1) The objectives of this clause are as follows:
  - (a) To prevent certain sensitive developments from being located near the Dubbo City Regional Airport and its flight paths,
  - (b) To assist in minimising the impact of aircraft noise from the airport and its flight paths by requiring appropriate noise attenuation measures in noise sensitive buildings,
  - (c) To ensure that land use and development in the vicinity of the airport does not hinder or have any other adverse impact on the ongoing, safe and efficient operation of the airport.
- (2) This clause applies to development that:
  - (a) Is on land that:
    - (i) is near the Dubbo City Regional Airport, and
    - (ii) is in an ANEF contour of 20 or greater, and
  - (b) The consent authority considers is likely to be adversely affected by aircraft noise.
- (3) Before determining a development application for development to which this clause applies, the consent authority:
  - (a) Must consider whether the development will result in an increase in the number of dwellings or people affected by aircraft noise, and
  - (b) Must consider the location of the development in relation to the criteria set out in Table 2.1 (Building Site Acceptability Based on ANEF Zone) in AS 2021 – 2000, and
  - (c) Must be satisfied the development will meet the indoor design sound levels shown in Table 3.3 (Indoor Design Sound Levels for Determination of Aircraft Noise Reduction) in AS 2021-2000.

(4) In this clause:  
*ANEF contour* means a noise exposure contour shown as an ANEF contour on the *Noise Exposure Forecast Contour Map* for the Dubbo City Regional Airport prepared by the Department of the Commonwealth responsible for airports.

*AS 2021 – 2000* means AS 2021 – 2000. *Acoustics – Aircraft noise intrusion – Building siting and construction*.

**7.9 Location of sex services premises**

- (1) The objective of this clause is to minimise land use conflicts and adverse amenity impact by providing a reasonable level of separation between sex services premises, specified land uses and places regularly frequented by children.
- (2) In deciding whether to grant development consent to development for the purposes of sex services premises the consent authority must consider the following:
  - (a) whether the premises will be located on land that adjoins, is directly opposite, or is separated only by a local road from land:
    - (i) in Zone R1 General Residential, Zone R2 Low Density Residential or Zone RE1 Public Recreation, or

- (ii) used as a centre-based child care facility, a community facility, a school or a place of public worship,
- (b) the impact of the proposed development and its hours of operation on any place likely to be frequented by children:
  - (i) that adjoins the proposed development, or
  - (ii) that can be viewed from the proposed development, or
- (iii) from which a person can view the proposed development.

**7.10 Dwelling houses in Zone RU4 Primary Production Small Lots**

- (1) The objective of this clause is to ensure dwelling houses are developed only where they support the permitted agricultural use of the land
  - (2) This clause applies to development for the purposes of dwelling houses on land in Zone RU4 Primary Production Small Lots.
  - (3) Development consent must not be granted to development to which this clause applies, unless the consent authority is satisfied that:
    - (a) The land is being or is intended to be used for intensive plant agriculture, extensive agriculture or aquaculture, and
    - (b) the dwelling house will be required to support the carrying out of intensive plant agriculture, extensive agriculture or aquaculture, and
    - (c) the dwelling house is not likely to cause any land use conflict with existing agricultural uses being undertaken on neighbouring properties in the zone; and
- services for the supply of water and electricity to support the agricultural activity are available or adequate arrangements have been made to make them available when required.

**7.11 Commercial premises in Zone B4 Mixed Use**

- (1) This clause applies to development on land within Zone B4 Mixed Use.
- (2) Development consent must not be granted to development for business premises or office premises if the gross floor area of that development is greater than 200 square metres.
- (3) Development consent must not be granted to development for retail premise if the gross floor area of that development is greater than 150 square metres.
- (4) Subclause (2) and (3) do not apply to any development undertaken within a building that existing immediately before the commencement of this Plan.

**7.12 Shops in Zone B1 Neighbourhood Centre**

- (1) The objective of this clause is to maintain the commercial hierarchy of Dubbo by encouraging retail development of an appropriate scale within neighbourhood centres.
- (2) Despite any other provision of this Plan, the consent authority must not grant development consent to development for retail premises on land within Zone B1 Neighbourhood Centre if the gross floor area of the development will exceed 1,000 square metres.
- (3) Before granting consent to development for the purpose of shops having a gross floor area of 500 square metres or greater, in either one separate tenancy or any number of tenancies,

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the consent authority must consider the economic impact of the proposed development and be satisfied that the proposed development will not have an adverse impact on the commercial hierarchy of Dubbo.

**7.12A Retail premises on certain land at Boundary Road, Dubbo**

- (1) This clause applies to that part of Lot 1002, DP 1236775 at Boundary Road, Dubbo that is:
  - (a) Within Zone B1 Neighbourhood Centre, and
  - (b) Identified as “5” on the [Additional Permitted Uses Map](#).
- (2) Despite any other provision of this Plan, development consent may be granted to development for the purposes of retail premises on land to which this clause applies with a gross floor area that will exceed 1,000 square metres.
- (3) Before granting consent to development for the purpose of shops having a gross floor area of 500 square metres or greater, in either one separate tenancy or any number of tenancies, the consent authority must consider the economic impact of the proposed development and be satisfied that the proposed development will not have an adverse impact on the commercial hierarchy of Dubbo.

**7.12B Dwelling houses on certain land at Warrie Road, Dubbo**

This clause applies to Lots 147 and 148, DP 754331, Warrie Road, Dubbo.

- (2) Despite any other provision of this Plan, development consent may be granted to development for the purposes of a dwelling house on land to which this clause applies if the consent authority is satisfied that—
  - (a) the relevant development application provides for the consolidation of the land to which this clause applies into 1 lot, and
  - (b) the dwelling house will be a manufactured home within the meaning of the [Local Government Act 1993](#), and
  - (c) the development will be ancillary to an approved intensive livestock agriculture use.

**7.12C Use of certain land at Camp Road, Dubbo**

- (1) This clause applies to Lot 8, DP1063425, 4L Camp Road, Dubbo (*the land*).
- (2) The objectives of this clause are to ensure that any development on the land, including residential development—
  - (a) is not complying development for the purposes of [State Environmental Planning Policy \(Exempt and Complying Development Codes\) 2008](#), and
  - (b) minimises light pollution and does not impinge on the functioning of the Dubbo Observatory, and
  - (c) incorporates appropriate noise mitigation measures, and
  - (d) minimises land use conflict with adjoining land uses, and
  - (e) does not adversely impact on vegetation on land designated as a buffer zone.



- (3) The land is designated as being within a buffer area for the purposes of clause 1.19(1)(e)(i) of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.
- (4) The consent authority must not grant development consent to development on land identified on the Lighting Controls Map as “Subject to lighting controls in proximity to Dubbo Observatory” unless satisfied that the development will not result in—
- (a) a skylight being included in any dwelling, and
  - (b) more than 2 outdoor light fittings per dwelling, and
  - (c) an outdoor light not being controlled by way of a motion sensor, and
  - (d) an outdoor light not being shielded and directed downwards to prevent any upward or horizontal light, and
  - (e) an outdoor light emitting more than 940 lumens.

**Note.**

940 lumens is equivalent to 75 watts maximum for an incandescent light bulb or 10 watts for an LED light bulb.

- (5) The consent authority must not grant development consent to development on the land for the purposes of a prescribed use unless satisfied that appropriate noise mitigation measures will be incorporated into the development to reduce noise reaching the land from Morris Park Speedway so that the occupants of any dwelling on the land will not be subject to excessive noise.
- (6) The consent authority must not grant development consent to development on any of the land that borders a buffer zone, as identified on the Buffer Map, for a prescribed use unless satisfied that—
- (a) all dwellings will be located outside the buffer zone, and
  - (b) a suitable vegetation management plan has been prepared for the ongoing management of vegetation in the buffer zone.
- (7) In this clause—

**prescribed use** means—

- (a) dwelling houses, or
- (b) shop top housing, or
- (c) tourist and visitor accommodation.

**vegetation management plan** means a plan that specifies a program of action for the management of land, its ecosystems and vegetation

**7.13 Restricted premises**

The consent authority must not grant consent to development for the purposes of restricted premises unless it has considered the following:

- (a) If the development is on land other than land in Zone IN3 Heavy Industrial – whether any part of the proposed development, other than an accessway or access point, would be located at street level or on the first floor of a building,
- (b) Whether any part of a building in which the proposed development will be situated is being, or is proposed to be, used for the purposes of residential accommodation,
- (c) The impact the proposed development would have on places of high pedestrian activity,
- (d) The impact the proposed development and its hours of operation would have on any place, likely to be regularly frequented by children:
  - (i) that adjoins the proposed development, or
  - (ii) that can be viewed from the proposed development,
  - (iii) (Repealed)

The visual impact of the proposed development and any associated signage on the amenity of the locality.

**7.14 Rural and nature-based tourist facilities**

- (1) The objective of this clause is to ensure that tourism development in rural and nature areas is low scale and does not adversely impact on the agricultural production, scenic or environmental values of the land.
- (2) This clause applies to land in the following zones:
  - (a) Zone RU1 Primary Production,
  - (b) Zone RU2 Rural Landscape,
  - (c) Zone R5 Large Lot Residential.
- (3) Development consent must not be granted for development for the purpose of tourist facilities on land which this clause applies unless the consent authority is satisfied that:
  - (a) Adequate access exists or will be provided to service the development from a road other than a classified road, taking into account the scale of the development, and
  - (b) The development will not create a land use conflict, and
  - (c) The development is complementary to the rural or environmental attributes of the land and its surrounds, and
  - (d) The development will not have a significant adverse impact on agricultural land production, the scenic amenity of the locality or significant features of the natural environment, and
  - (e) If the development is located in an unsewered area, adequate on-site wastewater systems will service the land without having an adverse impact on the water quality of the area, and
  - (f) The tourist facility will be managed and operated by the owners or by a site manager who resides on the land.

(4) In this clause:

**tourist facility** means any development where services or facilities are provided for visitors to the area and includes, but is not limited to, camping grounds, eco-tourist facilities, hotel or motel accommodation, information and education facilities and restaurants or cafes.



**7.15 Maximum number of lots**

Despite any other provision of this Plan, the consent authority must not grant consent to the subdivision of land identified on the Lot Size Map as “Area A” if the subdivision of land would result in the total number of lots in that area exceeding 196 lots.

**7.16 Matters for consideration by consent authority in relation to impacts of salinity on particular land**

(1) This clause applies to a development application for development in relation to the following land—

- (a) Lots 64 and 65, DP 754287, 16L and 24L Eulomogo Road, Dubbo,
- (b) Lot 200, DP 825059, 30R Eulomogo Road, Dubbo,
- (c) Lots 316 and 317, DP 754308, Pinedale Road, Dubbo,
- (d) Lot 661, DP 565756, 24L Eulomogo Road, Dubbo,
- (e) Lot 662, DP 565756, 2L Torwood Road, Dubbo.

(2) Before determining a development application, the consent authority must consider the potential impacts of salinity, in accordance with the *Salinity Management Strategy, Daisy Hill Rural-Residential Estate*, dated 2 July 2020 and published by the Department

**7.17 Karst topography subsidence risk**

(1) The objectives of this clause are to ensure that development in areas of subsidence risk from karst topography:

- (a) Does not disturb the underlying geotechnical conditions of the land, and
- (b) Is restricted on unsuitable land, and
- (c) Does not endanger life or property.

(2) This clause applies to land identified as “Karst” on the Natural Resource – Karst Map.

(3) Before determining a development application for development on land to which this clause applies, the consent authority must consider the following matters to decide whether or not the development is responsive to the risk of subsidence:

- (a) The development’s design and construction methods,
- (b) The specific geotechnical constraints of the site,
- (c) Wastewater management, stormwater and drainage across the site.

(4) Development consent must not be granted to development on land to which this clause applies unless:

- (a) The consent authority is satisfied that:
  - (i) the development is designed, sited and will be managed to avoid any significant adverse impact on the development and the land surrounding the development, or
  - (ii) if that impact cannot be avoided by adopting feasible alternative – the development is designed, sited and will be managed to mitigate that impact, and
- (b) The consent authority is satisfied that the development will appropriately manage wastewater, stormwater and drainage across the site so as to not affect the rate, volume and quality of water leaving the land.

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## **Schedule 1 Additional permitted uses**

### **1AA Use of certain land at 90–101 Brisbane Street and 27 Erskine Street, Dubbo**

(1) This clause applies to Lots A and B, DP 162733, Lot A, DP 62456, Lot 100, DP 808182, Lot 0, SP 19646 and Lot A, DP 162468 at 90–101 Brisbane Street and 27 Erskine Street, Dubbo.

(2) Development for the purposes of an agricultural produce industry is permitted with development consent.

### **1AB Use of certain land at Narromine Road, Dubbo**

(1) This clause applies to part of Lot 302, DP 602386, part of Lot 23, DP 755114, Lot 46, DP 755114 and part of Lot 151, DP 755094 at Narromine Road, Dubbo, identified as "1AB" on the [Additional Permitted Uses Map](#).

(2) Development for the purposes of one dwelling house is permitted with development consent.

### **1A Use of certain land at 1 Torvean Avenue, Dubbo**

(1) This clause applies to Lot 100, DP 1168671 at 1 Torvean Avenue, Dubbo.

(2) Development for the purposes of a recreation facility (indoor) is permitted with development consent.

### **1 Use of certain land at 10–12 Victoria Street, Dubbo**

(1) This clause applies to Lot 1, DP 795554 and Lot 103, DP 875089 at 10–12 Victoria Street, Dubbo.

(2) Development for the purposes of office premises.

### **2 Use of certain land at Darling Street, Dubbo**

(1) This clause applies to Lot 5, DP 1006205 at Darling Street, Dubbo.

(2) Development for the purposes of a car park is permitted with development consent.

### **3 Use of certain land at Palmer Street, Dubbo**

(1) This clause applies to so much of Lot 11, DP 1050240 at Palmer Street, Dubbo (the former RAAF stores depot site) that is within 50 metres of the boundary between—

(a) the part of that land that is in Zone SP3 Tourist, and

(b) the part of that land that is in Zone R1 General Residential.

(2) Development for the purposes permitted in Zone R1 General Residential is permitted with development consent on the land to which this clause applies that is in Zone SP3 Tourist.

(3) Development for the purposes permitted in Zone SP3 Tourist is permitted with development consent on the land to which this clause applies that is in Zone R1 General Residential.

(4) Development consent may be granted under this clause only if the consent authority is satisfied that—

(a) the development is not inconsistent with the objectives for development in both zones, and

(b) the carrying out of the development is desirable due to compatible land use planning, infrastructure capacity and other planning principles relating to the efficient and timely development of land.

**4 Use of certain land at 20L Chapmans Road, Dubbo**

(1) This clause applies to Lot 3, DP 554158 at 20L Chapmans Road, Dubbo.

(2) Development for the purposes of hotel or motel accommodation is permitted with development consent.

**5 Use of certain land at Boundary Road, Dubbo**

(1) This clause applies to that part of Lot 1002, DP 1236775 at Boundary Road, Dubbo that is identified as "5" on the [Additional Permitted Uses Map](#).

(2) Development for the purposes of a recreation facility (indoor) is permitted with development consent.

**6 Use of certain land at 31 Merrilea Road, Dubbo**

(1) This clause applies to Lot 12, DP 1154493 at 31 Merrilea Road, Dubbo, identified as "6" on the [Additional Permitted Uses Map](#).

(2) Development for the purposes of an animal boarding or training establishment is permitted with development consent.

**7 Use of certain land at Camp Road, Dubbo**

(1) This clause applies to part of Lot 8, DP1063425 at 4L Camp Road, Dubbo, identified as "7" on the [Additional Permitted Uses Map](#).

(2) Development for the purposes of dwelling houses or home occupations is permitted with development consent.

**8 Use of certain land at 20 Mitchell Street, Wellington**

(1) This clause applies to Lot 21, DP 3831 at 20 Mitchell Street, Wellington identified at "7" on the [Additional Permitted Uses Map](#).

(2) Development for the purpose of a recreation facility (indoor) is permitted with development consent.

**9 Use of certain land at 14-16 Lee Street, Wellington**

(1) This clause applies to Lot 3, DP 214773 at 14-16 Lee Street, Wellington identified at "8" on the [Additional Permitted Uses Map](#).

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Additional Permitted Uses Map.

(2) Development for the purpose of a retail premise is permitted with development consent.

**10 Use of certain land at 44 – 48 Curtis Street, Wellington**

(1) This clause applies to Lot 2, DP 773253 at 44 – 48 Curtis Street, Wellington identified at “9” on the Additional Permitted Uses Map.

(2) Development for the purpose of a caravan park is permitted with development consent.

**11 Use of certain land at 1946 Twelve Mile Road, Wellington, 104 Gladstone Road, Wellington and 808 Mine Road, Wellington**

(1) This clause applies to Lot 4 DP 133162, Lot 6 DP 750760 and Lot 46 DP 1110608 identified at “10” on the Additional Permitted Uses Map.

(2) Development for the purpose of a Livestock Processing Facility (Poultry Abattoir) is permitted with development consent.

(Clause 2.5)

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Standard Instrument—Principal Local Environmental Plan [NSW]  
Schedule 2 Exempt development

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## Schedule 2 Exempt development

(Clause 3.1)

**Note 1.** *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008* specifies exempt development under that Policy. The Policy has State-wide application. This Schedule contains additional exempt development not specified in that Policy.

**Note 2.** Exempt development may be carried out without the need for development consent under the Act. Such development is not exempt from any approval, licence, permit or authority that is required under any other Act and adjoining owners' property rights and the common law still apply.

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Standard Instrument—Principal Local Environmental Plan [NSW]  
Schedule 3 Complying development

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### Schedule 3 Complying development

(Clause 3.2)

**Note.** *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008* specifies complying development and the complying development conditions for that development under that Policy. The Policy has State-wide application. This Schedule contains additional complying development not specified in that Policy.

#### Part 1 Types of development

#### Part 2 Complying development certificate conditions

**Note.** Complying development must comply with the requirements of the Act, the regulations under the Act and this Plan.

##### General conditions

Any development specified in Part 1 is subject to the same conditions set out in Schedule 6 to *State Environmental Planning Policy (Exempt and Complying Development Codes) 2008*.

**Direction.** Other conditions may be included in this Part.

Standard Instrument—Principal Local Environmental Plan [NSW]  
 Schedule 4 Classification and reclassification of public land

**Schedule 4 Classification and reclassification of public land**

(Clause 5.2)

**Part 1 Land classified, or reclassified, as operational land—no interests changed**

Column 1 Locality	Column 2 Description
Dubbo	Lot 86, DP 253859, Sapphire Street

**Part 2 Land classified, or reclassified, as operational land—interests changed**

Column 1 Locality	Column 2 Description	Column 3 Any trusts etc not discharged
Dubbo	Lot 100, DP 261729, 55 Thompson Street	Nil
Dubbo	Lot 1, DP 258008, Wheelers Lane	Nil
Dubbo	Part of Lot 2, DP 258008, Wheelers Lane and Mitchell Highway, as shown edged heavy red on the <a href="#">Land Reclassification (Part Lots) Map</a>	Nil

**Part 3 Land classified, or reclassified, as community land**

Column 1 Locality	Column 2 Description
Nil	



Standard Instrument—Principal Local Environmental Plan [NSW]  
Schedule 5 Environmental heritage

**Schedule 5 Environmental heritage**

(Clause 5.10)

Apsley	“Wellington Caves” (Limestone/ Phosphate Mine)	97 Caves Road	Lot 334, DP 728718; Lot 302, DP 756920	Local	I1	
Apsley	Wellington Cemetery	Pioneer Highway	9700 Mitchell	Lot 7018, DP 1020768	Local	I2
Apsley	Wellington Cemetery	General Road	11 Old Sydney	Lots 7305 and 7306, DP 1139087	Local	I3
Bakers Swamp	Gowan Green Overfold	1064 Gowan Green Road (“Oakville”)	Lot 1, DP 175753	Local	I4	
Bakers Swamp	Naroogal homestead buildings	Park 853 Naroogal Road (“Naroogal Park”)	Lot 1, DP 1012352	Local	I5	
Ballimore	Cemetery and Surveyor’s stump	A’Courts Road	Lot 7017, DP 1122209	Local	I1	
Ballimore	Ballimore school	22 Bomen Street and Rymer Street	Lot 1, Section 9, DP 758046 and Lot 118, DP 754322	Local	I2	
Ballimore	Soda Springs	“Melrose” Road	Dunedoo Lot 5, DP 754285	Local	I3	
Ballimore	Barbigal Hill	169 Dunedoo Road	Lots 4 and 5, DP 792244	Local	I102	
Ballimore	“Barbigal” homestead and woolshed	210 Dunedoo Road	Lot 111, DP 754286	Local	I103	
Ballimore	Ballimore Inn (The Royal Hotel)	26 Federation Street	Lot 1, DP 959816	Local	I4	
Ballimore	Slab Hut “Fettlers Hut”	Firbank Street	Lot 86, DP 754322	Local	I5	
Ballimore	Muronbung Springs	Mineral Highway (“Shirley”)	5399 Golden Lot 114, DP 754322	Local	I6	
Benalong	Shepherd’s Hill	Strathmore Road	Lot 7001, DP 1019838	Local	I211	

Bodangora	Survey Tree (Sturt 1828)	1196 Bodangora Road ("Glen Mitchell")	Lot 2, DP 880633	Local	I7
Bodangora	St Paul's Catholic Church	16 Church Street	Lots 92 and 93, DP 754290	Local	I8
Bodangora	Bodangora Gold Mine (former)—chimney, shaft and engine footings	251 Dick Street ("Gold Hill")	Lot 1, DP 947683; Lot 17, DP 750760	Local	I9
Bodangora	Kaiser Mine Site	530 Driel Creek Road ("Ahwahnee")	Lot 1, DP 133286	Local	I10
Bodangora	Noonee homestead	Nyrang 6444 Goolma Road ("Noonee Nyrang")	Lot 84, DP 2987	Local	I11
Bodangora	Bodangora Memorial	War 16 Memorial Lane	Lot 97, DP 750760	Local	I12
Bodangora	Bodangora Cemetery	120 Mine Road	Lots 7001 and 7002, DP 1020117; Lot 7010, DP 1023438	Local	I13
Boothenba	Woolshed & Silo	Boothenba Road	Lot 1051, DP 605363	Local	I9
Comobella	Comobella Hall	16 Forestvale Road	Lot 115, DP 754327	Local	I14
Curra Creek	Curra Creek Cemetery (former Murrumbong)	40 Cosier Lane	Lot 136, DP 753253	Local	I15
Curra Creek	Curra Creek Union Church	1161 Curra Creek Road	Lot 1, DP 136818	Local	I16
Curra Creek	Road Formations (Three Eras)	737 Renshaw McGirr Way ("Elysian Farm")	Lot 2, DP 519851	Local	I17
Curra Creek	Roselayne Cemetery	15 Tillings Lane	Lot B, DP 314163	Local	I18
Dripstone	Dripstone Railway Cutting Geological Site	Burrendong Way (behind Mack Station)	Road/Rail Reserve	Local	I19
Dripstone	St Agnes of the Springs Catholic Church (former)	8087 Burrendong Way	Lot 90, DP 756882	Local	I20
Dubbo	Old Dubbo Pioneer Cemetery	Angle Road	Lot 181, DP 754331	Local	I10

Dubbo	Butlers Falls River Crossing	Angle and Cumboogle Roads	Lot 7004, DP 754331 and Lot 7005, DP 1019857	Local	I11
Dubbo	"Regand Park"	7 Avalon Place	Lot 32, DP 1100758	Local	I12
Dubbo	Edwardian house	7 Belmore Street	Lots 7 and 8, Section 5, DP 907	Local	I13
Dubbo	Woolshed & Shearers' Hut	Benolong Road	Lot 90, DP 253576	Local	I14
Dubbo	Edwardian house	19 Bishop Street	Lot N, DP 383165	Local	I17
Dubbo	Vertical Weatherboard Cottage	37 Bishop Street	Lot 10, Section 3, DP 2860	Local	I18
Dubbo	Railway bridge	Bligh Street		Local	I19
Dubbo	"Mayvilla"	80 Bourke Street	Lot 5, Section A, DP 2683	Local	I20
Dubbo	"Emoh Ruo"	84 Bourke Street	Lot 11, DP 3113	Local	I21
Dubbo	"Moutana"	106 Bourke Street	Lot 18, DP 5855	Local	I22
Dubbo	Edwardian cottage	108 Bourke Street	Lot 17, DP 5855	Local	I23
Dubbo	Cottage	110 Bourke Street	Lot 16, DP 5855	Local	I24
Dubbo	"Eastonville"	122 Bourke Street	Lot 17, DP 1541	Local	I25
Dubbo	"Yalarbon" Victorian house	133 Bourke Street	Lot 10, DP 628609	Local	I26
Dubbo	Cottage	135 Bourke Street	Lot 3, DP 1089262	Local	I27
Dubbo	Cottage	137 Bourke Street	Lot 1, DP 996193	Local	I28
Dubbo	Former "Macquarie Brewery"	72 Brisbane Street	Lot 2, DP 580341	Local	I29
Dubbo	"Hub of the West, Lodge"	79 Brisbane Street	Lot 781, DP 997786	Local	I30
Dubbo	Ben Furney Flour Mills	101 Brisbane Street	Lot 100, DP	Local	I31

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Dubbo	Dubbo Courthouse	135 Brisbane Street	Lot 7, DP 40398 and Lots 13 and 15, Section 4, DP 758361	Local	I32	
Dubbo	Dubbo Lands Office	142 Brisbane Street	Lot 3, DP 1128529	Local	I33	
Dubbo	Miss Bettys	144 Brisbane Street	Lot 1, DP 10863	Local	I34	
Dubbo	Holy Trinity Anglican Church	156 Brisbane Street	Lots 6 and 7, Section 10, DP 758361	Local	I35	
Dubbo	Commercial Hotel	161 Brisbane Street	Lot A, DP 164067	Local	I37	
Dubbo	Brotherhood House	162 Brisbane Street	Lot 5, Section 10, DP 758361	Local	I38	
Dubbo	"Westbury"	169 Brisbane Street	Lot 3, DP 507416	Local	I39	
Dubbo	"Rathgorrah"	193 Brisbane Street	Lot 1, DP 13679	Local	I40	
Dubbo	St Brigids Presbytery	198 Brisbane Street	Lot 6, Section 8, DP 758361	Local	I41	
Dubbo	St Brigids Catholic Church (former)	200 Brisbane Street	Lot 8, Section 8, DP 758361	Local	I42	
Dubbo	Victorian house	201 Brisbane Street	Lot 1, DP 794729	Local	I43	
Dubbo	"Aberdour"	203 Brisbane Street	Lot 1, DP 794604	Local	I44	
Dubbo	"Araluen"	234 Brisbane Street	Lot 1, DP 137398	Local	I45	
Dubbo	"Moirra"	236 Brisbane Street	Lot 1, DP 136745	Local	I46	
Dubbo	Edwardian house (paired with 270)	268 Brisbane Street	Lot 1, Section A, DP 9489	Local	I47	
Dubbo	Edwardian house (paired with 268)	270 Brisbane Street	Lot 2, Section A, DP 9489	Local	I48	
Dubbo	Convent of Mercy	41 Bultje Street	Lot 9, Section 8, DP 758361	Local	I49	

Dubbo	"Townit"	52 Bultje Street	Lot 5, 6604	DP	Local	I50
Dubbo	Dwelling house	81 Bultje Street	Lot 1, 718457	DP	Local	I51
Dubbo	Dwelling house	101 Bultje Street	Lot 3, DP 491 and Lot A, DP 360699		Local	I52
Dubbo	Dwelling house	104 Bultje Street	Lot A, 390552	DP	Local	I53
Dubbo	Federation house	105 Bultje Street	Lots 6 and 7, DP 491		Local	I54
Dubbo	"Suva"	106 Bultje Street	Lot 1, 225613	DP	Local	I55
Dubbo	Victorian house	108 Bultje Street	Lot 2, 225613	DP	Local	I56
Dubbo	Dwelling house	110 Bultje Street	Lot 3, 225613	DP	Local	I57
Dubbo	Dwelling house	112 Bultje Street	Lot 4, 225613	DP	Local	I58
Dubbo	"Dalkeith"	114 Bultje Street	Lot 5, 225613	DP	Local	I59
Dubbo	"Pretoria"	117 Bultje Street	Lot 4, 978043	DP	Local	I60
Dubbo	"Hazeldene"	122 Bultje Street	Lot 2, 579472	DP	Local	I61
Dubbo	"Mount Olive"	6 Bungle Gumbie Road	Lot 3, 250606	DP	Local	I62
Dubbo	Bungle Gumbie homestead (former)	50R Bungle Gumbie Road	Lot 156, 753233	DP	Local	I63
Dubbo	Old Buninyong School	49 Buninyong Road	Lot 302, 754308	DP	Local	I64
Dubbo	Terramungamine homestead	63L Buraway Road	Lot 8, 1205114	DP	Local	I65
Dubbo	Terramungamine woolshed	63L Buraway Road	Lot 8, 1205114	DP	Local	I66
Dubbo	Dwelling house	6 Cadell Street	Lot 12, 740060	DP	Local	I67
Dubbo	"Mayville"	40 Carrington Avenue	Lot 12, 2335	DP	Local	I68

Dubbo	N & N Chambers	20 Church Street	Lot 1, DP 198091	Local	I69
Dubbo	Former "Masonic Hall"	31 Church Street	Lot 12, DP 531603	Local	I70
Dubbo	Salvation Army Citadel	36 Church Street	Lot 1, DP 67318	Local	I71
Dubbo	"The Drop Inn" and Wesley Centre Uniting Church	64 Church Street	Lot A, DP 376141	Local	I72
Dubbo	Victorian cottage	86 Church Street	Lot 10, DP 13133	Local	I73
Dubbo	"The Sheiling"	44 and 46 Cobra Street	Lots A and B, DP 406488	Local	I74
Dubbo	Bungalow	78 Cobra Street	Lot 11, DP 16564	Local	I75
Dubbo	"Yandoya"	91 Cobra Street	Lot 3, Section 1, DP 6278	Local	I76
Dubbo	Edwardian residence	brick 117 Cobra Street	Lot 7, Section 1, DP 907	Local	I77
Dubbo	Edwardian house	121 Cobra Street	Lot A, DP 191927	Local	I78
Dubbo	Coolbaggie Hall	Collie Road	Lot 58, DP 754304	Local	I79
Dubbo	Dubbo City Regional Airport	4 Cooreena Road	Lot 10, DP 1089918	Local	I80
Dubbo	Stone house	7 Crum Avenue	Lot 1, DP 207464	Local	I81
Dubbo	"Lowana"	18 Dalton Street	Lot 31, DP 1053233	Local	I82
Dubbo	Dwelling house	38 Dalton Street	Lot G, DP 419151	Local	I267
Dubbo	Californian bungalow	54 Darling Street	Lot 3, DP 37494	Local	I83
Dubbo	Edwardian house	75 Darling Street	Lot 5, Section 14, DP 758361	Local	I84
Dubbo	Two storey terraces	82, 84 and 86 Darling Street	Lots 21, 22 and 23, Section 16, DP 595680	Local	I85

Dubbo	Railway cottage	106 Darling Street	Lot 4, DP 1006205	Local	I86
Dubbo	Police residence	111 Darling Street	Lot 11, DP 1090052	Local	I87
Dubbo	Fire Station (former)	116 Darling Street	Lot 1, DP 1038705	Local	I88
Dubbo	Headmaster's house (former)	179 Darling Street	Lot 12, Section 10, DP 758361	Local	I89
Dubbo	Dubbo Public School	181 Darling Street	Lot 1, DP 724331	Local	I90
Dubbo	Georgian cottage	207 Darling Street	Lot 1, DP 3138	Local	I91
Dubbo	Two-storey brick terrace housing (row)	209, 211, 213 and 215 Darling Street	Lots A, B, C and D, DP 435243	Local	I92
Dubbo	Victorian house	212 Darling Street	Lot C, DP 398000	Local	I93
Dubbo	Bungalow house	224 Darling Street	Lot 80, DP 555353	Local	I94
Dubbo	Bungalow	230 Darling Street	Lot 14, DP 540094	Local	I95
Dubbo	Edwardian home	233 Darling Street	Lot 1, DP 125286	Local	I96
Dubbo	Californian bungalow	331 Darling Street	Lot 102, DP 569156	Local	I97
Dubbo	"Dulcidene"	22 Dulcidene Road	Lot 211, DP 601766	Local	I98
Dubbo	Bungalow house	12 Dulhunty Avenue	Lot 20, DP 10150	Local	I99
Dubbo	Beni Church	Dunedoo Road	Lot 74, DP 754287	Local	I100
Dubbo	Beni Crossing	Dunedoo Road	Between Lot 7005, DP 1020226 and Lot 7002, DP 1019797	Local	I101
Dubbo	Timber bungalow	21 Erskine Street	Lot 1, DP 329002	Local	I104
Dubbo	Police residence (former)	28 Erskine Street	Lots 1, 2 and 3, SP 37281	Local	I105

Dubbo	Police station and residence (former)	49 Erskine Street	Lot 11, DP 1090052	Local	I106
Dubbo	Western Star Hotel	62 Erskine Street	Lot 513, DP 878055	Local	I107
Dubbo	Semi-detached house	68 Erskine Street	Lot 514, DP 878055	Local	I108
Dubbo	Pise house	24 Eulomogo Road	Lot 65, DP 754287	Local	I109
Dubbo	Stone cottage	120 Fitzroy Street	Lot 3, Section 1, DP 286	Local	I112
Dubbo	Timber cottage	146 Fitzroy Street	Lot 2, Section 2, DP 286	Local	I113
Dubbo	Californian bungalow	169 Fitzroy Street	Lot 10, DP 589	Local	I114
Dubbo	Cottage	222 Fitzroy Street	Lot 311, DP 115770	Local	I115
Dubbo	Shop building	225 Fitzroy Street	Lot 3, DP 11646	Local	I116
Dubbo	Cottage	239 Fitzroy Street	Lot 1, Section A, DP 2860	Local	I117
Dubbo	Residence and shop	251 Fitzroy Street	Lot 101, DP 1182508	Local	I118
Dubbo	Edwardian house	253 Fitzroy Street	Lot 100, DP 1182508	Local	I119
Dubbo	"Tutula"	261 Fitzroy Street	Lot A, DP 414981	Local	I120
Dubbo	"Ranelagh"	Gilgandra Road	Lot 518, DP 603598	Local	I121
Dubbo	"Tantallon"	Gilgandra Road	Lot 21, DP 715331	Local	I122
Dubbo	Cottage	41 Gipps Street	Lot 2, DP 669	Local	I123
Dubbo	Five terrace houses (row)	43-51 Gipps Street	Lots 1, 2, 3, 4 and 5, DP 226522	Local	I124
Dubbo	Dwelling house	119 Gipps Street	Lot C, DP 1165	Local	I125
Dubbo	Brick cottage	123 Gipps Street	Lot A, DP 1165	Local	I126
Dubbo	Three residences	125 Gipps Street	Lot 1, DP	Local	I127



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Dubbo	Town house	131 Gipps Street	Lot 100, DP 1084224	Local		I128
Dubbo	Modern bungalow	148 Gipps Street	Lot 3, DP 9051	Local		I129
Dubbo	Californian bungalow	155 Gipps Street	Lot 1, DP 321360	Local		I130
Dubbo	Brick house	178 Gipps Street	Lot 20, DP 1103857	Local		I131
Dubbo	"Belmont" house	Victorian 188 Gipps Street	Lot B, DP 398171	Local		I132
Dubbo	Cottage	25 Goode Street	Lot 1, DP 552872	Local		I133
Dubbo	"Holmwood"	Hennessy Road	Lot 302, DP 1123136	Local		I134
Dubbo	Communications bunker	24 Keswick Parkway	Lot 303, DP 1216045	Local		I135
Dubbo	3 Cottages	36, 38 and 40 Macleay Street	Lots 1, 2 and 3, DP 38299	Local		I136
Dubbo	Edwardian house	37 Macleay Street	Lot 6, DP 999302	Local		I137
Dubbo	Victorian house	52 Macleay Street	Lot 15, DP 1026106	Local		I138
Dubbo	Semi-detached building	68 and 70 Macleay Street	Lots A and B, DP 406931	Local		I139
Dubbo	Victorian timber cottage	72 Macleay Street	Lot 7, DP 469	Local		I140
Dubbo	Commercial offices	65 Macquarie Street	Lot 1, DP 903369 and Lot 1, DP 906665	Local		I141
Dubbo	"Macquarie Chambers"	69-73 Macquarie Street	Lot 3, DP 654867 and Lot 2, DP 654866	Local		I142
Dubbo	Westpac Bank (former Bank of NSW)	87 Macquarie Street	Lots 1, 2, 3, 4, 5, 6 and 7, DP 1099966	Local		I143
Dubbo	Old Dubbo Gaol	90 Macquarie Street	Lots 1, 4 and 6, and part Lot 2, DP 40398	State		I144

Dubbo	Post Office (former)	98 Macquarie Street	Lot 101, DP 833808	Local	I145
Dubbo	CBC Bank	110 Macquarie Street	Lot 1, DP 995606	State	I146
Dubbo	Federation shops (row)	117-129 Macquarie Street	Lots 1 and 2, DP 419052; Lot 1, DP 1159233 and Lots 1, 2 and 3, DP 25452	Local	I147
Dubbo	"Colonial Mutual"	116 Macquarie Street	Lot 1, DP 607846	State	I148
Dubbo	"Fishers Corner"	122-126 Macquarie Street	Lots 1, 2 and 3, DP 208042	Local	I149
Dubbo	"Commercial Union Assurance"	131 Macquarie Street	Lot 1, DP 1012065	Local	I150
Dubbo	"The Western Stores" (former)	146-162 Macquarie Street	Lot 5, Section 5, DP 758361 and Lot 1, DP 906696	Local	I151
Dubbo	Italianate commercial building	174 Macquarie Street	Lot 1, DP 660345	Local	I152
Dubbo	Commercial building	178 Macquarie Street	Lot 1, DP 631112	Local	I153
Dubbo	Shire building (former)	193 Macquarie Street	Lot 51, DP 591672	State	I154
Dubbo	"Kemwah" now Milestone Hotel	195 Macquarie Street	Lot 11, DP 601633	State	I155
Dubbo	Brick house	215 Macquarie Street	Lot 9, DP 475	Local	I156
Dubbo	Dubbo Museum (former)	230 Macquarie Street	Lot 11, DP 1046365	Local	I157
Dubbo	Brick house	302 Macquarie Street	Lot 14, Section A, DP 32693	Local	I158
Dubbo	"Lilimur"	315 Macquarie Street	Lot 10, DP 1100130	Local	I159
Dubbo	"Wiluna"	343 Macquarie Street	Lot 22, DP 815228	Local	I161
Dubbo	"Cardiff"	380 Macquarie Street	Lot 21, DP 595176	Local	I162

Dubbo	"Bruah"	75 Mendooran Road	Lot 35, 754296	DP	Local	I163
Dubbo	Haystack Pinnacle	160 Mendooran Road	Lot 11, 563544	DP	Local	I164
Dubbo	Cottage	4 Mitchell Street	Lot 3, 816639	DP	Local	I165
Dubbo	Cottage	6 Mitchell Street	Lot 2, 816639	DP	Local	I166
Dubbo	Cottage	13 Mitchell Street	Lot 15, 975591	DP	Local	I167
Dubbo	Brick house	29 Myall Street	Lot 6, 37776	DP	Local	I168
Dubbo	Edwardian house	34 Myall Street	Lot 12, 37456	DP	Local	I169
Dubbo	Semi-detached housing	51-53 Myall Street	Lots 4 and 5, DP 540998		Local	I170
Dubbo	Georgian cottage	160 Myall Street	Lot 5, 12828	DP	Local	I171
Dubbo	Dubbo Base Hospital	170 Myall Street	Lot 32, 747737	DP	Local	I172
Dubbo	"Bonnie-Rigg"	8 Nancarrow Street	Lot 4, 9744	DP	Local	I173
Dubbo	"Oxlea"	91 Narromine Road	Lot 41, 755094	DP	Local	I174
Dubbo	Dickygundi Inn	139 Narromine Road	Lot 102, 805732	DP	Local	I175
Dubbo	Minore Falls	Narromine Road	Lot 7007, 1020296	DP	Local	I176
Dubbo	Oasis Reserve	Oasis Road	Lot 97, 820726	DP	Local	I177
Dubbo	"Cootha"	21 Obley Road	Lot 9, 753233	DP	Local	I178
Dubbo	Dwelling	141L Obley Road	Lot 154, 1163936	DP	Local	I268
Dubbo	Wambangalang School	271 and 272 Obley Road	Lots 60 and 61, 753247	DP	Local	I181
Dubbo	"Miriam"	2 Old Dubbo Road	Lot 10, 1119436	DP	Local	I184

Dubbo	“Old Homestead”	Dubbo	29 Old Dubbo Road	Lot 31, DP 738069	Local	I185
Dubbo	Eumalga and “Serisier Vault”	Homestead	91 Old Dubbo Road	Lot 2, DP 1133976	Local	I186
Dubbo	Murrumbidgee House (former)	Coach	Old Dubbo Road	Lot 1, DP 559257 and Lot 32, DP 609278	Local	I187
Dubbo	Bril Bral Falls and River Crossing		Old Dubbo Road	Lot 7003, DP 1023334	Local	I188
Dubbo	RAAF Stores Depot		Palmer Street	Lot 11, DP 1050240	State	I191
Dubbo	“Cullenbura” shearing shed		188 Peak Hill Road	Lot 4411, DP 827891	Local	I192
Dubbo	Rendered cottage		1 Quinn Street	Lot 18, Section 2, DP 6277	Local	I193
Dubbo	Edwardian bungalow		7 Quinn Street	Lot 15, Section 2, DP 6277	Local	I194
Dubbo	Edwardian cottage		14 Quinn Street	Lot 13, DP 529558	Local	I196
Dubbo	Edwardian cottage		15 Quinn Street	Lot 2, Section 2, DP 6278	Local	I197
Dubbo	Bungalow		16 Quinn Street	Lot 1, DP 210658	Local	I198
Dubbo	Federation house		19 Quinn Street	Lot 4, Section 2, DP 6278	Local	I199
Dubbo	House		20 Quinn Street	Lot 10, Section 1, DP 6278	Local	I200
Dubbo	“Westcliff”		23 Quinn Street	Lot 6, Section 2, DP 6278	Local	I201
Dubbo	Californian bungalow		31 Quinn Street	Lot 7, DP 9051	Local	I202
Dubbo	Cottage		2 Roper Street	Lot 1, DP 1148881	Local	I203
Dubbo	House		12 Short Street	Lot 10, Section 41, DP 758361	Local	I204
Dubbo	Californian bungalow		13 Smith Street	Lot 21, Section A, DP	Local	I205

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Dubbo	House	16 Smith Street	Lot 1, Section D, DP 33637	Local		I206
Dubbo	Early Macquarie River Crossing	South Street, Sandy Beach	Adjoining Lot 24, DP 754308	Local		I207
Dubbo	House	13 Sterling Street	Lot C, DP 347439	Local		I208
Dubbo	House	22 Sterling Street	Lot 80, DP 669267	Local		I209
Dubbo	"Kamarrah"	56 Sterling Street	Lot 24, Section 3, DP 2047	Local		I210
Dubbo	Castlereagh Hotel	79 Talbragar Street	Lot 1, DP 1116282	Local		I212
Dubbo	Pastoral Hotel	112 Talbragar Street	Lot 2, DP 82915	Local		I213
Dubbo	Station Master's Residence (former)	Talbragar Street	Lot 2, DP 1006205	Local		I214
Dubbo	Dubbo Railway Station	Talbragar Street	Lot RAIL, DP 758361	State		I215
Dubbo	Drift Wells Park	Tamworth Street car Brisbane Street	Lot 51, DP 614390	Local		I216
Dubbo	Californian bungalow	27 Tamworth Street	Lot 3, DP 10150	Local		I217
Dubbo	House	39 Tamworth Street	Lot 91, DP 591302	Local		I218
Dubbo	Bungalow house	44 Tamworth Street	Lots 13 and 14, DP 249150	Local		I219
Dubbo	Bungalow	45 Tamworth Street	Lot 3, DP 15230	Local		I220
Dubbo	"Chesney"	47 Tamworth Street	Lot 4, DP 15230	Local		I221
Dubbo	"Waratah" (formerly "Barinya")	63 Tamworth Street	Lot 340, DP 718588	Local		I222
Dubbo	Californian bungalow/cottage	69 Tamworth Street	Lot 1, DP 323434	Local		I223
Dubbo	3 Cottages	73, 75 and 77 Tamworth Street	Lots 1, 2 and 3, DP 27802	Local		I224

Dubbo	Federation building	62 Taylor Street	Lot 11, DP 510310	Local	I225		
Dubbo	Georgian house	8 Thorby Avenue	Lot 1, DP 516023	Local	I227		
Dubbo	“Woonah Court”	46 Wingewarra Street	Lot 1, DP 13483	Local	I229		
Dubbo	St Andrews Church & Hall	72 Wingewarra Street	Lot 19, DP 1062953	Local	I230		
Dubbo	Cultural Centre (former Dubbo High School)	76 Wingewarra Street	Lot 4601, DP 1091311	Local	I231		
Dubbo	CWA Rooms	83 Wingewarra Street	Lot 1, DP 1135469	Local	I232		
Dubbo	Former house	93 Wingewarra Street	Lot 1, DP 350237	Local	I233		
Dubbo	Former house	95 Wingewarra Street	Lot 1, DP 668818	Local	I234		
Dubbo	Victorian house	133 Wingewarra Street	Lot 10, DP 872973	Local	I235		
Dubbo	Bungalow house	149 Wingewarra Street	Lot 1, DP 1541	Local	I236		
Dubbo	“Weeroona”	173 Wingewarra Street	Lot 1, Section 1, DP 10770	Local	I237		
Dubbo	Macquarie River Rail Bridge (west of railway station)	Other	Lot RAIL, DP 758361	State	I238		
Elong	Elong Cemetery	Elong General Cemetery	3587 Highway	Golden	Lot 7003, DP 93137; Lot 7302, DP 1162822	Local	I21
Euchareena	Nubrygyn Cemetery	Inn and Cemetery	2531 Road	Euchareena	Lot 1, DP 770849	State	I159
Euchareena	St Brigid’s Church (former)	Catholic	8 Road	Euchareena Tip	Lot 99, DP 756916	Local	I22
Euchareena	Euchareena Cemetery	General	65 Road	Marombah	Lots 7008 and 7009, DP 1020807; Lot 7301, DP 1142380	Local	I23
Euchareena	St Thomas Church	Anglican	7 Nubrygyn Street		Lot 90, DP 756916	Local	I24
Euchareena	Beehive Classroom, Euchareena Public		2 Walter Street		Lot 163, DP	Local	I25

	School			756916		
Eumungerie	Eumungerie church	Balladoran Street	Lot 1, Section 4, DP 758397	Local	I239	
Eumungerie	Cottage	Emu Street	Lot 1, Section 2, DP 758397	Local	I241	
Eumungerie	Old Harbour Lagoon, Old Granary, Cottages and Homestead	152-162 Settlers Road	Maiala Part Lots 8 and 9, DP 259748; Lot 51, DP 721786; Lots 11, 16 and 30, DP 754307 and Lot 55, DP 728744	Local	I246	
Eumungerie	Cemetery and Survey marker	Mogriguy Road	in Marker Road reserve adjoins Lot 7011, DP 94707	Local	I242	
Eumungerie	Old Cottage	Moonul Street	Lot 1, Section 8, DP 758397	Local	I243	
Eumungerie	Eumungerie Hall	Railway Street	Lot 4, Section 3, DP 758397	Local	I244	
Eumungerie	Bakers shop & cottage	Railway Street	Lot 3, Section 2, DP 758397	Local	I245	
Farnham	Farnham Post Office and out buildings	106 Farnham Road	Lot 106, DP 756866	Local	I26	
Farnham	Nicholls Farm Buildings	143 Farnham Road ("Farnham")	Lots 60 and 116, DP 756866	Local	I27	
Geurie	Scabbing Flat Bridge	Arthurville Road (across Macquarie River)	Road Reserve	Local	I28	
Geurie	Commercial premises and residence	37 Buckenbah Street	Lot B, DP 393815	Local	I29	
Geurie	Commercial premises (Geurie Garden Café/Alladins Cave)	55 Heritage Street	Buckenbah Lot 2, DP 1018066	Local	I30	
Geurie	St Matthew's Anglican Church	45 Chambers Street	Lot 8, Section 13, DP 758438	Local	I31	
Geurie	St Matthew's Anglican Rectory	46 Chambers Street	Lot 1, DP 1079411	Local	I32	

Geurie	Geurie Grandstand	78 Comobella Road (Geurie Showground)	Lots 95 and 171, DP 754313	Local	I33
Geurie	Holy Name Catholic Church	57 Jennings Street	Lot 6, Section 29, DP 758438	Local	I34
Geurie	Geurie Police Station, lock-up and house	58 Jennings Street	Lot 2, Section 22, DP 758438	Local	I35
Geurie	Spillsbury's house	37 Lime Street	Lot 5, Section 13, DP 758438	Local	I36
Geurie	Geurie General Cemetery	2043 Mitchell Highway	Lot 7017, DP 1030361; Lot 7013, DP 1030362	Local	I37
Geurie	Commercial premises (Geurie Antiques)	37 Mitchell Street	Lot B, DP 354405	Local	I38
Geurie	Geurie War Memorial Hall	36 Narragal Street	Lot 1, DP 1092993	Local	I39
Geurie	Geurie Public School	60-64 Narragal Street	Lots 2 and 5, Section 12, DP 758438; Lot 244, DP 821059	Local	I40
Geurie	Union Church and hall	82 Narragal Street	Lot 3, Section 11, DP 758438	Local	I41
Geurie	CBC Bank (former)	52 Wellington Street	Lot B, DP 405717	Local	I42
Geurie	Geurie Post Office	57 Wellington Street	Lot 3, DP 91197	Local	I43
Geurie	Cobborah Shire Building (former)	72 Wellington Street	Lot 1, Section 19, DP 758438	Local	I44
Gollan	Gollan Hall and War Memorial	36 Gollan Road	Lot 112, DP 754284; Lot 111, DP 754284	Local	I45
Goonoo Forest	Old fire monitoring platform	160 Mogriguy Forest Road near Mendoran Rd	Lot 7001, DP 1043651	Local	I247
Kerrs Creek	All Saints Anglican	331 Kerrs Creek	Lot 5, Section	Local	I46



	Church	Road	5, DP 758562		
Maryvale	Sandy Hollow to Maryvale railway line		Lots 1-4, 6 and 7, DP 109771; Lot 5, DP 109778; Lot 1, DP 182374; Lots 1-3, DP 189787; Lot 1, DP 189796; Lots 1 and 2, DP 190122; Lot 4, DP 190414; Lot 1, DP 190449; Lots 1 and 2, DP 191934; Lot 1, DP 430010; Lot 1, DP 430011; Lots 4-6, DP 430012; Lot 1, DP 430115; Lots 1-8, DP 430477; Lot 5, DP 431174; Lots 1 and 2, DP 431185; Lots 1-6, DP 431693; Lots 1-4, DP 431694; Lot 1, DP 434579; Lots 1-4, DP 450199	Local	I47
Montefiores	Wards Hotel (former)	Commercial 8 Gipps Street	Lot 1, DP 255223	Local	I48
Montefiores	Narrawa homestead	6916 Goolma Road ("Narrawa")	Lot 90, DP 2987	Local	I49
Montefiores	Keston homestead	6938 Goolma Road ("Keston")	Lots 1 and 2, DP 588075	Local	I50
Montefiores	Nanima homestead	7009 Goolma Road ("Nanima")	Lot 2, DP 806578	Local	I51
Montefiores	Strathraye homestead	7084 Goolma Road ("Strathraye")	Lot 201, DP 832147	Local	I52
Montefiores	Macquarie Farm— (former Wellington Police Station and barracks) and entrance	1 Lay Street ("Macquarie Farm")	Lot 1, DP 386348; Lot 272, DP 560497; Lot	Local	I53

	gates			48, DP 754318			
Montefiores	Last Duel Site Monument	10 Lay Street ("Teamsters Park")	Lot 7007, DP 1020648	Local	I54		
Montefiores	Macquarie Antiques Stragglers Inn Hotel	View (former)	4 Mitchell Highway	Lot 45, DP 551526	Local	I55	
Montefiores	Gobolion homestead	403 Mitchell Highway ("Gobolion")	Lot 1, DP 1103197; Lot 76, DP 754318	Local	I56		
Montefiores	The Lion of Waterloo Hotel	93 Montefiores Street	Lot 11, DP 816670	Local	I57		
Mount Arthur	Mount Arthur Reservoir (partially demolished)	100 Brennans Way	Lot 7304, DP 1134089	Local	I58		
Mount Arthur	Wellington Showground	29 Bushrangers Creek Road	Lot 1, DP 660722; Lot 1, DP 662549; Lots 13, 14, 22 and 23, DP 998687	Local	I59		
Mount Arthur	Glenrock homestead	66 Bushrangers Creek Road ("Glenrock")	Lots A and D, DP 159110	Local	I60		
Mount Arthur	Holy Family Catholic Cemetery ("Curra Creek Cemetery")	44 Renshaw McGirr Way	Lots 10, 38 and 146, DP 753238; Lot 7009, DP 1020635	Local	I61		
Mount Arthur	Warrengunyah homestead (formerly Whitwell)	200 Warrengunyah Road ("Warrengunyah")	Lot 1, DP 306996	Local	I62		
Mumbil	St Mary the Virgin Anglican Church	23 Apsley Crescent	Lot A, DP 313934	Local	I63		
Mumbil	Burrendong Arboretum	90 Tara Road	Lot 1, DP 168550; Lot 2, DP 728700; Lot 201, DP 756871; Lot 7005, DP 1024877; Lot 1, DP 1123925	Local	I64		
Neurea	Dalkeith homestead—house, stables, post	54 Kinghorn Street ("Dalkeith")	Lot 282, DP 753242	Local	I65		

			office, store and shed					
Neurea	Glenmore homestead		7844 Mitchell Highway ("Glenmore")	Lot 68, DP 753241	Local			I66
Neurea	Camelford Park		8745 Mitchell Highway ("Camelford Park")	Lot 1, DP 1098201	Local			I67
Neurea	Mountain homestead	View	646 Mountain Valley Road ("Mountain View")	Lot 8, DP 753230	Local			I68
Neurea	Mumbil Supply—pump houses	Water	724 Neurea Road ("Catombal Park")	Lot 51, DP 618206	Local			I69
Neurea	Neurea Union Church		8 Simpson Street	Lot 2, Section 4, DP 758772	Local			I70
North Yeoval	Yeoval Cemetery	General	68 Tremain Drive	Lot 7300, DP 1145965	Local			I71
Ponto	Old bridge remains		River Road	Road Reserve	Local			I72
Ponto	Terrabella homestead		918 Terrabella Road ("Terrabella")	Lot 142, DP 228567	Local			I73
Rawsonville	"Immarna"		12 Coolbaggie Road	Lot 362, DP 609785	Local			I248
Rawsonville	Rawsonville Memorial Hall	Soldiers	46 Rawsonville Road	Lot 163, DP 754303	Local			I249
Rawsonville	Rawsonville Cemetery		Rawsonville Road	Lots 90 and 91, DP 754303	Local			I250
Rawsonville	Rawsonville Bridge		Rawsonville Bridge Road	North of Lot 29, DP 258845	Local			I251
Rawsonville	Whylandra Crossing		Whylandra Crossing	North of Lot 7001, DP 1020560	Local			I228
Spicers Creek	Spicers Creek Cemetery		4057 Goolma Road	Lot 7002, DP 1020656; Lots 7301 and 7302, DP 1164794	Local			I74
Spicers Creek	Spicers Creek School residence	School	4101 Goolma Road	Lot 35, DP 754320	Local			I75
Spicers Creek	Glenwood homestead		2250 Twelve Mile Road ("Glenwood")	Lot 69, DP 750776	Local			I76

Stuart Town	Railway Gatekeeper's Cottage	27 Alexander Street	Lot 191, DP 809276	Local	I77
Stuart Town	Yee Lee's Store (former)	38 Alexander Street	Lot 115, DP 756886	Local	I78
Stuart Town	Crick's Store	1 Bell Street	Lot 72, DP 217685	Local	I79
Stuart Town	Boehme's Hall	21 Bell Street	Lot 323, DP 756886	Local	I80
Stuart Town	St John the Baptist Catholic Church	1 Liddell Street	Lot 14, DP 563909	Local	I81
Stuart Town	Stuart Town Railway Station Group	Main Western Railway	Railway Reserve	State	I82
Stuart Town	Post office (former Railway Hotel)	5 Molong Street	Lot 1, DP 131607	Local	I83
Stuart Town	Stuart Town School of Arts	32 Molong Street	Lots 4 and 5, Section 16, DP 758932	Local	I84
Stuart Town	Residence and artist studio (former Stuart Town Bakery)	37 Molong Street	Lot 4, Section 18, DP 758932	Local	I85
Stuart Town	Australia Hotel (former Carrington Hotel)	42 Molong Street	Lot 12, Section 16, DP 758932	Local	I86
Stuart Town	Stuart Town gold mining area and common	20 Mookerawa Road	Lot 7004, DP 1019744; Lot 338, DP 43506	Local	I87
Stuart Town	Stuart Town General Cemetery	49 Wallaroi Road	Lots 5 and 7, DP 756886; Lot 1, DP 1124896; Lots 7311-7313, DP 1142071	Local	I88
Stuart Town	St Michael and All the Angels Church and Bell A	33 Wellington Street	Lot 108, DP 756886	Local	I89
Terramungamine	Terramungamine homestead	63 Buraway Road	Lot 272, DP 883881	Local	I65
Terramungamine	Terramungamine woolshed	63 Buraway Road	Lot 272, DP 883881	Local	I66
Terramungamine	Coolbaggie Hall	Collie Road	Lot 58, DP 754304	Local	I79

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Terramungamine	"Dulcidene"	22 Dulcidene Road	Lot 211, DP 601766	Local	I98
Toongi	"Cranbrook" cottage, Blacksmith's shop, Shearer's quarters and outbuildings	177 Obley Road	Lots 1 and 2, DP 121964; Lot 1, DP 207722; Lot 33, DP 753244	Local	I180
Toongi	Carved tree (indigenous item)	Paddy's Creek Road	The Springs	Local	I190
Toongi	Cockleshell Corner	The Springs Road	Lot 23, DP 753252	Local	I6
Toongi	"Eulandool"	The Springs Road	Lot 1, DP 1040580	Local	I226
Toongi	"The Springs"	The Springs Road	Lot 4, DP 753236	Local	I189
Walmer	Goonoo homestead (formerly Ganoo)	2984 Renshaw McGirr Way ("Goonoo")	Lot 1, DP 770858	Local	I90
Wambangalang	"The Meadows"	Obley Road	Lot 1, DP 753247	Local	I183
Wambangalang	St John's Anglican Church	273 Obley Road	Lot 59, DP 753247	Local	I182
Wellington	John Fowler 7thp steam road locomotive Britstand grader and hopper wagon	9 Amaroo Dr (Wellington Council Depot)	Lot 1, DP 711298	State and Local	I91 (locomotive and grader and wagon)
Wellington	Federal Hotel	100 Arthur Street	Lot 8, DP 1506	Local	I92
Wellington	Wellington Primary School, Convict Bell C and Gould League elm tree	103 Arthur Street	Lot 6, Section 79, DP 759073	Local	I93
Wellington	St Andrews Presbyterian Church	105 Arthur Street	Lot 3, Section 79, DP 759073	Local	I94
Wellington	Macquarie Shire Council Chambers (former)	116 Arthur Street	Lot 1, DP 801842	Local	I95

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Wellington	Wellington Convict and Mission site—Maynggu Ganai	106–128 Street (and Barton Street)	Curtis Barton Street	Lot 1, DP 120160; Lots 1 and 2, DP 129997; Lot 355, DP 531300; Lots 49 and 50, DP 756920	State	I96
Wellington	Brewery and brewery stables (former)	7–9 Brewery Lane		Lots 6 and 7, Section 73, DP 759073	Local	I97
Wellington	Railway Bridge	Gobolion Street (across Macquarie River)		Railway Reserve	Local	I98
Wellington	Residence (former Bridge Hotel)	2 Lee Street		Lot 12, DP 538976	Local	I99
Wellington	Salvation Army Citadel	68 Lee Street		Lot 1, DP 69598	Local	I100
Wellington	Wellesley Lodge (Masonic Hall)	105 Lee Street		Lots 1 and 2, DP 998596	Local	I101
Wellington	Commercial premises and residence (former Tait's Bakery)	114 Lee Street		Lot 1, DP 196271	Local	I102
Wellington	Commercial premises (Don Wood Dental Surgery)	116–118 Lee Street		Lot 1, DP 799975	Local	I103
Wellington	Club House Hotel	135 Lee Street		Lot 2, DP 707635	Local	I104
Wellington	Old police station (former)	5 Maughan Street		Lot 1, DP 1067604	Local	I105
Wellington	Post office	19 Maughan Street		Lot 12, DP 771582	State	I106
Wellington	Courthouse	23 Maughan Street		Lot 5, Section 79, DP 759073	Local	I107
Wellington	TAFE building	39 Maughan Street		Lot 1, DP 861268	Local	I108
Wellington	Commercial premises	54 Maughan Street		Lot 3, DP 1110327	Local	I109
Wellington	Reinhard building	68 Maughan Street		Lot 92, DP 1226962	Local	I110
Wellington	Wellington silos	100A Maughan Street		Lot 1, DP 819895	Local	I111

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Wellington	Wellington District Hospital (former) (Hermitage Hill)	135 Maxwell Street	Lots 72, 243 and 285, DP 756920; Lot 1, DP 1102671	Local	II12
Wellington	Band Hall (former) including Christian bookshop, office, tobacco sign and Larum's Corner Group	1 Nanima Crescent	Lot 5, DP 1104354	Local	II13
Wellington	Fong Lee Group (former) (NJ Jewellers)	7A Nanima Crescent	Lot F, DP 408809	Local	II15
Wellington	Fong Lee Group (former) (commercial premises)	8 Nanima Crescent	Lot E, DP 408809	Local	II16
Wellington	Fong Lee Group (former) (St George Bank and Darrell England Real Estate)	9-10 Nanima Crescent	Lot D, DP 408809	Local	II17
Wellington	Fong Lee Group (former) (Health Sense Pharmacy)	12 Nanima Crescent	Lot C, DP 406054	Local	II18
Wellington	Cameron and Bell Parks	13A Nanima Crescent	Lot 9, Section 76, DP 759073; Lot 701, DP 1020780	Local	II19
Wellington	Quirk Baker Solicitors	25 Nanima Crescent	Lot 1, DP 935406	Local	II20
Wellington	ANZ Bank (former)	27 Nanima Crescent	Lot 13, DP 668177	Local	II21
Wellington	Commercial Bank of Australia (former) (Peter Milling & Co Real Estate)	30 Nanima Crescent	Lot A, DP 323745	Local	II22
Wellington	Western Stores (former)	33 Nanima Crescent	Lot 1, Section 77, DP 759073	Local	II23
Wellington	Bluestone kerb and guttering	Percy Street and Warne Street	Road Reserve	Local	II24
Wellington	Walker's Terrace (residential buildings)	21-27 Percy Street	Lot 1, DP 371395; Lot 2, DP 374263; Lot 1, DP 384732; Lot	Local	II25

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				1, DP 437676		
Wellington	St Ignatius Convent of Mercy	43 Percy Street	Lot 13, Section 4, DP 759073	Local		I126
Wellington	St Patrick's Catholic Church	45 Percy Street	Lots 11 and 12, Section 4, DP 759073	Local		I127
Wellington	Wellington Times office (former)	78A Percy Street	Lot 1, DP 999796	Local		I128
Wellington	Apsley Bowling Club (former) (Macquarie Library)	99 Percy Street	Lot 10, Section 76, DP 759073	Local		I129
Wellington	Golden Key (former) (Fountain View)	116 Percy Street	Lot A, DP 156623	Local		I130
Wellington	M.M. Co store (former) (Bag-a-Bargain store)	152 Percy Street	Lot 1, DP 69903	Local		I131
Wellington	Residence (former Butter Factory)	9 Raymond Street	Lot 12, DP 883877	Local		I132
Wellington	Letter receiver	Swift Street and Percy Street	Road Reserve	Local		I133
Wellington	Commercial premises (Bank of NSW and newsagent)	1 Swift Street	Lot 1, DP 223340	Local		I134
Wellington	National Australia Bank	2-14 Swift Street	Lot 1, DP 986888	Local		I135
Wellington	Swift House	20 Swift Street	Lot 1, DP 789245	Local		I136
Wellington	Macquarie Theatre	36 Swift Street	Lot 1, DP 1069741	Local		I137
Wellington	Mayfair Theatre (former) (Elliot's Pre-loved Goods)	52 Swift Street	Lot 1, DP 730554	Local		I138
Wellington	Wellington Auto Service (Dicko and Batho)	54 Swift Street	Lot 2, DP 730554	Local		I139
Wellington	Methodist Church (former)	55 Swift Street	Lot 3, DP 2352; Lot 13, Section 22, DP 759073	Local		I140
Wellington	Wellington Hotel	56-60 Swift Street	Lot 1, DP 708699	Local		I141

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Wellington	Wellington Railway Station, footbridge and timber manual railway crane	68-70 Swift Street	Lot 2, DP 1017045	Local	I142
Wellington	Wellington Baptist Church	77 Swift Street	Lot 4, DP 940307	Local	I143
Wellington	Blacks Camp	University Road	Lot 7017, DP 1020743; Lot 337, DP 728783	State	I144
Wellington	Letter receiver	Warne Street and Nanima Crescent	Road Reserve	Local	I145
Wellington	Commercial Hotel (former) (residential terraces)	12 Warne Street	Lot 2, DP 508621	Local	I146
Wellington	Fong Lee Warehouse and Ling's Residence (former)	29 Warne Street	Lot 5, DP 18002	Local	I147
Wellington	School (former) (Cactus Café)	33 Warne Street	Lot 10, Section 77, DP 759073	Local	I148
Wellington	Oxley Historical Museum (former Bank of NSW)	37 Warne Street	Lots 8 and 9, Section 77, DP 759073	Local	I149
Wellington	St John the Baptist Anglican Church	41 Warne Street	Lot 11, Section 10, DP 759073	Local	I150
Wellington	Kimbell's Kitchen	44 Warne Street	Lot 1, DP 995547	Local	I151
Wellington	St John the Baptist Anglican Rectory	61 Warne Street	Lot 5, DP 17390	Local	I152
Wellington	Narawah residence	64 Warne Street	Lot 1, DP 1137532	Local	I153
Wellington	Lome residence	66 Warne Street	Lot 15, Section 9, DP 759073	Local	I154
Wellington	Logiealmond residence	75 Warne Street	Lot 19, Section 23, DP 759073	Local	I155
Wellington	Wellington Fire Station and Convict Bell B	76 Warne Street	Lot 21, Section 9, DP 759073	Local	I156

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Wellington	Waterloo Drum		80 Whiteley Street ("Wellington High School")	Lot 16, Section 89, DP 759073	Local	I157
Wongarbron	"Mountain View"		82 Barbical Road	Lot 132, DP 583564	Local	I8
Wongarbron	Police residence (former)		15 Boberah Street	Lot 3, Section 31, DP 759109	Local	I252
Wongarbron	Crown Store (former)		31 Boberah Street	Lot 52, DP 570868	Local	I253
Wongarbron	Cottage Peppercorn and Craft Shop		35 Boberah Street (faces Gundong Street)	Lot 1, DP 1077714	Local	I254
Wongarbron	Wongarbron water supply and nature reserve		Derribong Street	Lot 206, DP 48387	Local	I255
Wongarbron	Wongarbron Hall		4 Gundong Street	Lot 16, DP 566808	Local	I256
Wongarbron	Post Office and General Store		5 Gundong Street	Lot 1, DP 772739	Local	I257
Wongarbron	Western Stores shopfront (former)		Gundong Street (faces Railway St)	Lot 17, DP 566808	Local	I258
Wongarbron	Soldiers Memorial and Wongarbron School		28 Railway Street	Lot 8, Section 30, DP 759109	Local	I259
Wongarbron	Cottage		37 Umangla Street	Lot 4, Section 24, DP 759109	Local	I260
Wongarbron	Wongarbron Cemetery		29 Veechs Road	Lot 7008, DP 1023343	Local	I261
Wongarbron	Braithwaite Dairy (former)		Westella Road	Lot 194, DP 754321	Local	I262
Wongarbron	"Hillview" Homestead (former)		Wongarbron River Road	Lot 640, DP 131521	Local	I264
Wongarbron	"Pine Avon"		6 Wongarbron River Road	Lot 1, DP 926569; Lot 12, DP 132180 and Lot 146, DP 754321	Local	I265
Wongarbron	Wongarbron Nature Reserve		Woodleys Road	Lot 54, DP 754321	Local	I266

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Wunluman	Zieria obcordata (threatened plant species)	"Bulbudgeree", 451 Uungula Road	Lot 127, DP 750778	Local	1158
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## Dictionary

(Clause 1.4)

**Aboriginal object** means any deposit, object or other material evidence (not being a handcraft made for sale) relating to the Aboriginal habitation of an area of New South Wales, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction, and includes Aboriginal remains.

**Aboriginal place of heritage significance** means an area of land, the general location of which is identified in an Aboriginal heritage study adopted by the Council after public exhibition and that may be shown on the Heritage Map, that is:

- (a) the site of one or more Aboriginal objects or a place that has the physical remains of pre-European occupation by, or is of contemporary significance to, the Aboriginal people. It may (but need not) include items and remnants of the occupation of the land by Aboriginal people, such as burial places, engraving sites, rock art, midden deposits, scarred and sacred trees and sharpening grooves, or
- (b) a natural Aboriginal sacred site or other sacred feature. It includes natural features such as creeks or mountains of long-standing cultural significance, as well as initiation, ceremonial or story places or areas of more contemporary cultural significance.

**Note.** The term may include (but is not limited to) places that are declared under section 84 of the *National Parks and Wildlife Act 1974* to be Aboriginal places for the purposes of that Act.

**acid sulfate soils** means naturally occurring sediments and soils containing iron sulfides (principally pyrite) or their precursors or oxidation products, whose exposure to oxygen leads to the generation of sulfuric acid (for example, by drainage or excavation).

**Acid Sulfate Soils Manual** means the manual by that name published by the Acid Sulfate Soils Management Advisory Committee and made publicly available.

**advertisement** has the same meaning as in the Act.

**Note.** The term is defined as a sign, notice, device or representation in the nature of an advertisement visible from any public place or public reserve or from any navigable water.

**advertising structure** has the same meaning as in the Act.

**Note.** The term is defined as a structure used or to be used principally for the display of an advertisement.

Advertising structures are a type of **signage**—see the definition of that term in this Dictionary.

**affordable housing** has the same meaning as in the Act.

**Note.** The term is defined as housing for very low income households, low income households or moderate income households, being such households as are prescribed by the regulations or as are provided for in an environmental planning instrument.

**agricultural produce industry** means a building or place used for the handling, treating, processing or packing, for commercial purposes, of produce from agriculture (including dairy products, seeds, fruit, vegetables or other plant material), and includes wineries, flour mills, cotton seed oil plants, cotton gins, feed mills, cheese and butter factories, and juicing or canning plants, but does not include a livestock processing industry.

**Note.** Agricultural produce industries are a type of **rural industry**—see the definition of that term in this Dictionary.

**agriculture** means any of the following:

- (a) aquaculture,
- (b) extensive agriculture,
- (c) intensive livestock agriculture,
- (d) intensive plant agriculture.

**Note.** Part 6 of the *Plantations and Reafforestation Act 1999* provides that exempt farm forestry within the meaning of that Act is not subject to the *Environmental Planning and Assessment Act 1979*.

**air transport facility** means an airport or a heliport that is not part of an airport, and includes associated communication and air traffic control facilities or structures.

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**airport** means a place that is used for the landing, taking off, parking, maintenance or repair of aeroplanes, and includes associated buildings, installations, facilities and movement areas and any heliport that is part of the airport.

**Note.** Airports are a type of **air transport facility**—see the definition of that term in this Dictionary.

**airstrip** means a single runway for the landing, taking off or parking of aeroplanes for private aviation only, but does not include an airport, heliport or helipad.

**amusement centre** means a building or place (not being part of a pub or registered club) used principally for playing:

- (a) billiards, pool or other like games, or
- (b) electronic or mechanical amusement devices, such as pinball machines, computer or video games and the like.

**animal boarding or training establishment** means a building or place used for the breeding, boarding, training, keeping or caring of animals for commercial purposes (other than for the agistment of horses), and includes any associated riding school or ancillary veterinary hospital.

**aquaculture** has the same meaning as in the *Fisheries Management Act 1994*.

**Note.** Aquaculture is a type of **agriculture**—see the definition of that term in this Dictionary.

**archaeological site** means a place that contains one or more relics.

**attached dwelling** means a building containing 3 or more dwellings, where:

- (a) each dwelling is attached to another dwelling by a common wall, and
- (b) each of the dwellings is on its own lot of land, and
- (c) none of the dwellings is located above any part of another dwelling.

**Note.** Attached dwellings are a type of **residential accommodation**—see the definition of that term in this Dictionary.

**attic** means any habitable space, but not a separate dwelling, contained wholly within a roof above the ceiling line of the storey immediately below, except for minor elements such as dormer windows and the like

**backpackers' accommodation** means a building or place that:

- (a) provides temporary or short-term accommodation on a commercial basis, and
- (b) has shared facilities, such as a communal bathroom, kitchen or laundry, and
- (c) provides accommodation on a bed or dormitory-style basis (rather than by room).

**Note.** Backpackers' accommodation is a type of **tourist and visitor accommodation**—see the definition of that term in this Dictionary.

**basement** means the space of a building where the floor level of that space is predominantly below ground level (existing) and where the floor level of the storey immediately above is less than 1 metre above ground level (existing).

**bed and breakfast accommodation** means an existing dwelling in which temporary or short-term accommodation is provided on a commercial basis by the permanent residents of the dwelling and where:

- (a) meals are provided for guests only, and
- (b) cooking facilities for the preparation of meals are not provided within guests' rooms, and
- (c) dormitory-style accommodation is not provided.

**Note.** See clause 5.4 for controls relating to the number of bedrooms for bed and breakfast accommodation. Bed and breakfast accommodation is a type of **tourist and visitor accommodation**—see the definition of that term in this Dictionary.

**bee keeping** means a building or place used for the keeping and breeding of bees for commercial purposes.

**Note.** Bee keeping is a type of **extensive agriculture**—see the definition of that term in this Dictionary.

**biodiversity** means biological diversity.

**biological diversity** has the same meaning as in the *Threatened Species Conservation Act 1995*.

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**Note.** The term is defined as follows:

**biological diversity** means the diversity of life and is made up of the following 3 components:

- (a) genetic diversity—the variety of genes (or units of heredity) in any population,
- (b) species diversity—the variety of species,
- (c) ecosystem diversity—the variety of communities or ecosystems.

**biosolids treatment facility** means a building or place used as a facility for the treatment of biosolids from a sewage treatment plant or from a water recycling facility.

**Note.** Biosolids treatment facilities are a type of **sewerage system**—see the definition of that term in this Dictionary.

**boarding house** means a building that:

- (a) is wholly or partly let in lodgings, and
- (b) provides lodgers with a principal place of residence for 3 months or more, and
- (c) may have shared facilities, such as a communal living room, bathroom, kitchen or laundry, and
- (d) has rooms, some or all of which may have private kitchen and bathroom facilities, that accommodate one or more lodgers,

but does not include backpackers' accommodation, a group home, hotel or motel accommodation, seniors housing or a serviced apartment.

**Note.** Boarding houses are a type of **residential accommodation**—see the definition of that term in this Dictionary.

**boat building and repair facility** means any facility (including a building or other structure) used primarily for the construction, maintenance or repair of boats, whether or not including the storage, sale or hire of boats, but does not include a marina or boat shed.

**boat launching ramp** means a structure designed primarily for the launching of trailer borne recreational vessels, and includes associated car parking facilities.

**boat shed** means a building or other structure used for the storage and routine maintenance of a boat or boats and that is associated with a private dwelling or non-profit organisation, and includes any skid used in connection with the building or other structure.

**brothel** has the same meaning as in the Act.

**Note.** This definition is relevant to the definitions of **home occupation (sex services)** and **sex services premises** in this Dictionary.

**building** has the same meaning as in the Act.

**Note.** The term is defined to include part of a building and any structure or part of a structure, but not including a manufactured home, a moveable dwelling or associated structure (or part of a manufactured home, moveable dwelling or associated structure).

**building height** (or **height of building**) means:

- (a) in relation to the height of a building in metres—the vertical distance from ground level (existing) to the highest point of the building, or
- (b) in relation to the RL of a building—the vertical distance from the Australian Height Datum to the highest point of the building,

including plant and lift overruns, but excluding communication devices, antennae, satellite dishes, masts, flagpoles, chimneys, flues and the like.

**building identification sign** means a sign that identifies or names a building and that may include the name of a building, the street name and number of a building, and a logo or other symbol but does not include general advertising of products, goods or services.

**Note.** Building identification signs are a type of **signage**—see the definition of that term in this Dictionary.

**building line** or **setback** means the horizontal distance between the property boundary or other stated boundary (measured at 90 degrees from the boundary) and:

- (a) a building wall, or
- (b) the outside face of any balcony, deck or the like, or

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(c) the supporting posts of a carport or verandah roof, whichever distance is the shortest.

**bulky goods premises** means a building or place the principal purpose of which is the sale, hire or display of bulky goods, being goods that are of such size or weight as to require:

- (a) a large area for handling, display or storage, and
- (b) direct vehicular access to the site of the building or place by members of the public for the purpose of loading or unloading such goods into or from their vehicles after purchase or hire,

and including goods such as floor and window supplies, furniture, household electrical goods, equestrian supplies and swimming pools, but does not include a building or place used for the sale of foodstuffs or clothing unless their sale is ancillary to the sale or hire or display of bulky goods.

**Note.** Bulky goods premises are a type of **retail premises**—see the definition of that term in this Dictionary.

**bush fire hazard reduction work** has the same meaning as in the *Rural Fires Act 1997*.

**Note.** The term is defined as follows:

**bush fire hazard reduction work** means:

- (a) the establishment or maintenance of fire breaks on land, and
- (b) the controlled application of appropriate fire regimes or other means for the reduction or modification of available fuels within a predetermined area to mitigate against the spread of a bush fire,

but does not include construction of a track, trail or road.

**bush fire prone land** has the same meaning as in the Act.

**Note.** The term is defined, in relation to an area, as land recorded for the time being as bush fire prone land on a map for the area certified as referred to in section 146 (2) of the Act.

**bush fire risk management plan** means a plan prepared under Division 4 of Part 3 of the *Rural Fires Act 1997* for the purpose referred to in section 54 of that Act.

**business identification sign** means a sign:

- (a) that indicates,
  - (i) the name of the person or business, and
  - (ii) the nature of the business carried on by the person at the premises or place at which the sign is displayed, and
- (b) that may include the address of the premises or place and a logo or other symbol that identifies the business,

but that does not contain any advertising relating to a person who does not carry on business at the premises or place.

**Note.** Business identification signs are a type of **signage**—see the definition of that term in this Dictionary.

**business premises** means a building or place at or on which:

- (a) an occupation, profession or trade (other than an industry) is carried on for the provision of services directly to members of the public on a regular basis, or
  - (b) a service is provided directly to members of the public on a regular basis,
- and includes a funeral home and, without limitation, premises such as banks, post offices, hairdressers, dry cleaners, travel agencies, internet access facilities, betting agencies and the like, but does not include an entertainment facility, home business, home occupation, home occupation (sex services), medical centre, restricted premises, sex services premises or veterinary hospital.

**Note.** Business premises are a type of **commercial premises**—see the definition of that term in this Dictionary.

**camping ground** means an area of land that has access to communal amenities and on which campervans or tents, annexes or other similar portable and lightweight temporary shelters are, or are to be, installed, erected or placed for short term use, but does not include a caravan park.

**canal estate development** means development that incorporates wholly or in part a constructed canal, or other waterway or waterbody, that is inundated by or drains to a natural waterway or natural waterbody by surface water or groundwater movement (not being works of drainage, or

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for the supply or treatment of water, that are constructed by or with the authority of a person or body responsible for those functions and that are limited to the minimal reasonable size and capacity to meet a demonstrated need for the works), and that either:

- (a) includes the construction of dwellings (which may include tourist and visitor accommodation) of a kind other than, or in addition to:
  - (i) dwellings that are permitted on rural land, and
  - (ii) dwellings that are used for caretaker or staff purposes, or
- (b) requires the use of a sufficient depth of fill material to raise the level of all or part of that land on which the dwellings are (or are proposed to be) located in order to comply with requirements relating to residential development on flood prone land.

**car park** means a building or place primarily used for the purpose of parking motor vehicles, including any manoeuvring space and access thereto, whether operated for gain or not.

**caravan park** means land (including a camping ground) on which caravans (or caravans and other moveable dwellings) are, or are to be, installed or placed.

**catchment action plan** has the same meaning as in the *Catchment Management Authorities Act 2003*.

**Note.** The term is defined as a catchment action plan of an authority that has been approved by the Minister under Part 4 of the *Catchment Management Authorities Act 2003*.

**cellar door premises** means a building or place that is used to sell wine by retail and that is situated on land on which there is a commercial vineyard, and where most of the wine offered for sale is produced in a winery situated on that land or is produced predominantly from grapes grown in the surrounding area.

**Note.** Cellar door premises are a type of **retail premises**—see the definition of that term in this Dictionary.

**cemetery** means a building or place used primarily for the interment of deceased persons or pets or their ashes, whether or not it contains an associated building for conducting memorial services.

**charter and tourism boating facility** means any facility (including a building or other structure) used for charter boating or tourism boating purposes, being a facility that is used only by the operators of the facility and that has a direct structural connection between the foreshore and the waterway, but does not include a marina.

**child care centre** means a building or place used for the supervision and care of children that:

- (a) provides long day care, pre-school care, occasional child care or out-of-school-hours care, and
- (b) does not provide overnight accommodation for children other than those related to the owner or operator of the centre,

but does not include:

- (c) a building or place used for home-based child care, or
- (d) an out-of-home care service provided by an agency or organisation accredited by the Children's Guardian, or
- (e) a baby-sitting, playgroup or child-minding service that is organised informally by the parents of the children concerned, or
- (f) a service provided for fewer than 5 children (disregarding any children who are related to the person providing the service) at the premises at which at least one of the children resides, being a service that is not advertised, or
- (g) a regular child-minding service that is provided in connection with a recreational or commercial facility (such as a gymnasium), by or on behalf of the person conducting the facility, to care for children while the children's parents are using the facility, or
- (h) a service that is concerned primarily with the provision of:
  - (i) lessons or coaching in, or providing for participation in, a cultural, recreational, religious or sporting activity, or

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- (ii) private tutoring, or
- (i) a school, or
- (j) a service provided at exempt premises (within the meaning of Chapter 12 of the *Children and Young Persons (Care and Protection) Act 1998*), such as hospitals, but only if the service is established, registered or licensed as part of the institution operating on those premises.

**classified road** has the same meaning as in the *Roads Act 1993*.

**Note.** The term is defined as follows:

**classified road** means any of the following:

- (a) a main road,
- (b) a highway,
- (c) a freeway,
- (d) a controlled access road,
- (e) a secondary road,
- (f) a tourist road,
- (g) a tolway,
- (h) a transitway,
- (i) a State work.

(See *Roads Act 1993* for meanings of these terms.)

**clearing native vegetation** has the same meaning as in the *Native Vegetation Act 2003*.

**Note.** The term is defined as follows:

**clearing native vegetation** means any one or more of the following:

- (a) cutting down, felling, thinning, logging or removing native vegetation,
- (b) killing, destroying, poisoning, ringbarking, uprooting or burning native vegetation.

(See Division 3 of Part 3 of the *Native Vegetation Act 2003* for the exclusion of routine agricultural management and other farming activities from constituting the clearing of native vegetation if the landholder can establish that any clearing was carried out for the purpose of those activities.)

**coastal foreshore** means land with frontage to a beach, estuary, coastal lake, headland, cliff or rock platform.

**coastal hazard** has the same meaning as in the *Coastal Protection Act 1979*.

**coastal lake** means a body of water specified in Schedule 1 to *State Environmental Planning Policy No 71—Coastal Protection*.

**coastal protection works** has the same meaning as in the *Coastal Protection Act 1979*.

**coastal waters of the State**—see section 58 of the *Interpretation Act 1987*.

**coastal zone** has the same meaning as in the *Coastal Protection Act 1979*.

**Note.** The term is defined as follows:

**coastal zone** means:

- (a) the area within the coastal waters of the State as defined in Part 10 of the *Interpretation Act 1987* (including any land within those waters), and
- (b) the area of land and the waters that lie between the western boundary of the coastal zone (as shown on the maps outlining the coastal zone) and the landward boundary of the coastal waters of the State, and
- (c) the seabed (if any) and the subsoil beneath, and the airspace above, the areas referred to in paragraphs (a) and (b).

The coastal zone consists of the area between the western boundary of the coastal zone shown on the maps outlining the coastal zone and the outermost boundary of the coastal waters of the State. The coastal waters of the State extend, generally, to 3 nautical miles from the coastline of the State.

**commercial premises** means any of the following:

- (a) business premises,
- (b) office premises,

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(c) retail premises.

**community facility** means a building or place:

- (a) owned or controlled by a public authority or non-profit community organisation, and
- (b) used for the physical, social, cultural or intellectual development or welfare of the community,

but does not include an educational establishment, hospital, retail premises, place of public worship or residential accommodation.

**community land** has the same meaning as in the *Local Government Act 1993*.

**correctional centre** means:

- (a) any premises declared to be a correctional centre by a proclamation in force under section 225 of the *Crimes (Administration of Sentences) Act 1999*, including any juvenile correctional centre or periodic detention centre, and
- (b) any premises declared to be a detention centre by an order in force under section 5 (1) of the *Children (Detention Centres) Act 1987*.

but does not include any police station or court cell complex in which a person is held in custody in accordance with any Act.

**Council** means the [name of the Council for the relevant local government area].

**crematorium** means a building in which deceased persons or pets are cremated, whether or not it contains an associated building for conducting memorial services.

**Crown reserve** means:

- (a) a reserve within the meaning of Part 5 of the *Crown Lands Act 1989*, or
- (b) a common within the meaning of the *Commons Management Act 1989*, or
- (c) lands within the meaning of the *Trustees of Schools of Arts Enabling Act 1902*,

but does not include land that forms any part of a reserve under Part 5 of the *Crown Lands Act 1989* provided for accommodation.

**curtilage**, in relation to a heritage item or conservation area, means the area of land (including land covered by water) surrounding a heritage item, a heritage conservation area, or building, work or place within a heritage conservation area, that contributes to its heritage significance.

**dairy (pasture-based)** means a dairy that is conducted on a commercial basis where the only restriction facilities present are milking sheds and holding yards and where cattle are constrained for no more than 10 hours in any 24 hour period (excluding during any period of drought or similar emergency relief).

**Note.** Dairies (pasture-based) are a type of **extensive agriculture**—see the definition of that term in this Dictionary.

**dairy (restricted)** means a dairy that is conducted on a commercial basis where restriction facilities (in addition to milking sheds and holding yards) are present and where cattle have access to grazing for less than 10 hours in any 24 hour period (excluding during any period of drought or similar emergency relief). It may comprise the whole or part of a restriction facility.

**Note.** Dairies (restricted) are a type of **intensive livestock agriculture**—see the definition of that term in this Dictionary.

**demolish**, in relation to a heritage item or an Aboriginal object, or a building, work, relic or tree within a heritage conservation area, means wholly or partly destroy, dismantle or deface the heritage item, Aboriginal object or building, work, relic or tree.

**depot** means a building or place used for the storage (but not sale or hire) of plant, machinery or other goods (that support the operations of an existing undertaking) when not required for use, but does not include a farm building.

**drainage** means any activity that intentionally alters the hydrological regime of any locality by facilitating the removal of surface or ground water. It may include the construction, deepening, extending, opening, installation or laying of any canal, drain or pipe, either on the land or in such a manner as to encourage drainage of adjoining land.

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**dual occupancy** means a dual occupancy (attached) or a dual occupancy (detached).

**Note.** Dual occupancies are a type of **residential accommodation**—see the definition of that term in this Dictionary.

**dual occupancy (attached)** means 2 dwellings on one lot of land that are attached to each other, but does not include a secondary dwelling.

**Note.** Dual occupancies (attached) are a type of **dual occupancy**—see the definition of that term in this Dictionary.

**dual occupancy (detached)** means 2 detached dwellings on one lot of land, but does not include a secondary dwelling.

**Note.** Dual occupancies (detached) are a type of **dual occupancy**—see the definition of that term in this Dictionary.

**dwelling** means a room or suite of rooms occupied or used or so constructed or adapted as to be capable of being occupied or used as a separate domicile.

**dwelling house** means a building containing only one dwelling.

**Note.** Dwelling houses are a type of **residential accommodation**—see the definition of that term in this Dictionary.

**earthworks** means excavation or filling.

**ecologically sustainable development** has the same meaning as in the Act.

**eco-tourist facility** means a building or place that:

- (a) provides temporary or short-term accommodation to visitors on a commercial basis, and
- (b) is located in or adjacent to an area with special ecological or cultural features, and
- (c) is sensitively designed and located so as to minimise bulk, scale and overall physical footprint and any ecological or visual impact.

It may include facilities that are used to provide information or education to visitors and to exhibit or display items.

**Note.** See clause 5.13 for requirements in relation to the granting of development consent for eco-tourist facilities.

Eco-tourist facilities are not a type of **tourist and visitor accommodation**—see the definition of that term in this Dictionary.

**educational establishment** means a building or place used for education (including teaching), being:

- (a) a school, or
- (b) a tertiary institution, including a university or a TAFE establishment, that provides formal education and is constituted by or under an Act.

**electricity generating works** means a building or place used for the purpose of making or generating electricity.

**emergency services facility** means a building or place (including a helipad) used in connection with the provision of emergency services by an emergency services organisation.

**emergency services organisation** means any of the following:

- (a) Ambulance Service of New South Wales,
- (b) Fire and Rescue NSW,
- (c) NSW Rural Fire Service,
- (d) NSW Police Force,
- (e) State Emergency Service,
- (f) New South Wales Volunteer Rescue Association Incorporated,
- (g) New South Wales Mines Rescue Brigade established under the *Coal Industry Act 2001*,
- (h) an accredited rescue unit within the meaning of the *State Emergency and Rescue Management Act 1989*.

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**entertainment facility** means a theatre, cinema, music hall, concert hall, dance hall and the like, but does not include a pub or registered club.

**environmental facility** means a building or place that provides for the recreational use or scientific study of natural systems, and includes walking tracks, seating, shelters, board walks, observation decks, bird hides or the like, and associated display structures.

**environmental protection works** means works associated with the rehabilitation of land towards its natural state or any work to protect land from environmental degradation, and includes bush regeneration works, wetland protection works, erosion protection works, dune restoration works and the like, but does not include coastal protection works.

**estuary** has the same meaning as in the *Water Management Act 2000*.

**Note.** The term is defined as follows:

**estuary** means:

- (a) any part of a river whose level is periodically or intermittently affected by coastal tides, or
- (b) any lake or other partially enclosed body of water that is periodically or intermittently open to the sea, or
- (c) anything declared by the regulations (under the *Water Management Act 2000*) to be an estuary, but does not include anything declared by the regulations (under the *Water Management Act 2000*) not to be an estuary.

**excavation** means the removal of soil or rock, whether moved to another part of the same site or to another site, but does not include garden landscaping that does not significantly alter the shape, natural form or drainage of the land.

**exhibition home** means a dwelling built for the purposes of the public exhibition and marketing of new dwellings, whether or not it is intended to be sold as a private dwelling after its use for those purposes is completed, and includes any associated sales or home finance office or place used for displays.

**exhibition village** means 2 or more exhibition homes and associated buildings and places used for house and land sales, site offices, advisory services, car parking, food and drink sales and other associated purposes.

**extensive agriculture** means any of the following.

- (a) the production of crops or fodder (including irrigated pasture and fodder crops) for commercial purposes,
- (b) the grazing of livestock for commercial purposes,
- (c) bee keeping,
- (d) a dairy (pasture-based).

**Note.** Extensive agriculture is a type of **agriculture**—see the definition of that term in this Dictionary.

**extractive industry** means the winning or removal of extractive materials (otherwise than from a mine) by methods such as excavating, dredging, tunnelling or quarrying, including the storing, stockpiling or processing of extractive materials by methods such as recycling, washing, crushing, sawing or separating, but does not include turf farming.

**Note.** Extractive industries are not a type of **industry**—see the definition of that term in this Dictionary.

**extractive material** means sand, soil, gravel, rock or similar substances that are not minerals within the meaning of the *Mining Act 1992*.

**farm building** means a structure the use of which is ancillary to an agricultural use of the landholding on which it is situated and includes a hay shed, stock holding yard, machinery shed, shearing shed, silo, storage tank, outbuilding or the like, but does not include a dwelling.

**farm stay accommodation** means a building or place that provides temporary or short-term accommodation to paying guests on a working farm as a secondary business to primary production.

**Note.** See clause 5.4 for controls relating to the number of bedrooms.

Farm stay accommodation is a type of **tourist and visitor accommodation**—see the definition of that term in this Dictionary.

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**feedlot** means a confined or restricted area that is operated on a commercial basis to rear and fatten cattle, sheep or other animals, fed (wholly or substantially) on prepared and manufactured feed, for the purpose of meat production or fibre products, but does not include a poultry farm, dairy or piggery.

**Note.** Feedlots are a type of *intensive livestock agriculture*—see the definition of that term in this Dictionary.

**fill** means the depositing of soil, rock or other similar extractive material obtained from the same or another site, but does not include:

- (a) the depositing of topsoil or feature rock imported to the site that is intended for use in garden landscaping, turf or garden bed establishment or top dressing of lawns and that does not significantly alter the shape, natural form or drainage of the land, or
- (b) the use of land as a waste disposal facility.

**filming** means recording images (whether on film or video tape or electronically or by other means) for exhibition or broadcast (such as by cinema, television or the internet or by other means), but does not include:

- (a) still photography, or
- (b) recording images of a wedding ceremony or other private celebration or event principally for the purpose of making a record for the participants in the ceremony, celebration or event, or
- (c) recording images as a visitor or tourist for non-commercial purposes, or
- (d) recording for the immediate purposes of a television program that provides information by way of current affairs or daily news.

**fish** has the same meaning as in the *Fisheries Management Act 1994*.

**Note.** The term is defined as follows:

**Definition of “fish”**

- (1) **Fish** means marine, estuarine or freshwater fish or other aquatic animal life at any stage of their life history (whether alive or dead).
- (2) **Fish** includes:
  - (a) oysters and other aquatic molluscs, and
  - (b) crustaceans, and
  - (c) echinoderms, and
  - (d) beachworms and other aquatic polychaetes.
- (3) **Fish** also includes any part of a fish.
- (4) However, **fish** does not include whales, mammals, reptiles, birds, amphibians or other things excluded from the definition by the regulations under the *Fisheries Management Act 1994*.

**flood mitigation work** means work designed and constructed for the express purpose of mitigating flood impacts. It involves changing the characteristics of flood behaviour to alter the level, location, volume, speed or timing of flood waters to mitigate flood impacts. Types of works may include excavation, construction or enlargement of any fill, wall, or levee that will alter riverine flood behaviour, local overland flooding, or tidal action so as to mitigate flood impacts.

**floor space ratio**—see clause 4.5.

**Floor Space Ratio Map** means the [*Name of local government area or other relevant name*] Local Environmental Plan [*Year*] Floor Space Ratio Map.

**food and drink premises** means premises that are used for the preparation and retail sale of food or drink (or both) for immediate consumption on or off the premises, and includes any of the following:

- (a) a restaurant or cafe,
- (b) take away food and drink premises,
- (c) a pub,
- (d) a small bar.

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**Note.** Food and drink premises are a type of **retail premises**—see the definition of that term in this Dictionary.

**forestry** has the same meaning as **forestry operations** has for the purposes of Part 5A of the *Forestry Act 2012*.

**Note.** The term is defined as follows:

**forestry operations** means:

- (a) logging operations, namely, the cutting and removal of timber from land for the purpose of timber production, or
- (b) the harvesting of forest products, or
- (c) on-going forest management operations, namely, activities relating to the management of land for timber production such as thinning and other silvicultural activities such as bee-keeping, grazing and bush fire hazard reduction, or
- (d) ancillary road construction, namely, the provision of roads and fire trails, and the maintenance of existing railways, to enable or assist in the above operations.

**freight transport facility** means a facility used principally for the bulk handling of goods for transport by road, rail, air or sea, including any facility for the loading and unloading of vehicles, aircraft, vessels or containers used to transport those goods and for the parking, holding, servicing or repair of those vehicles, aircraft or vessels or for the engines or carriages involved.

**function centre** means a building or place used for the holding of events, functions, conferences and the like, and includes convention centres, exhibition centres and reception centres, but does not include an entertainment facility.

**funeral home** means premises that are used to arrange, conduct and cater for funerals and memorial services, whether or not the premises include facilities for the short-term storage, dressing and viewing of bodies of deceased persons.

**Note.** Funeral homes are a type of **business premises**—see the definition of that term in this Dictionary.

**garden centre** means a building or place the principal purpose of which is the retail sale of plants and landscaping and gardening supplies and equipment. It may, if ancillary to the principal purpose for which the building or place is used, include a restaurant or cafe and the sale of any the following:

- (a) outdoor furniture and furnishings, barbecues, shading and awnings, pools, spas and associated supplies, and items associated with the construction and maintenance of outdoor areas,
- (b) pets and pet supplies,
- (c) fresh produce.

**Note.** Garden centres are a type of **retail premises**—see the definition of that term in this Dictionary.

**general industry** means a building or place (other than a heavy industry or light industry) that is used to carry out an industrial activity.

**Note.** General industries are a type of **industry**—see the definition of that term in this Dictionary.

**gross floor area** means the sum of the floor area of each floor of a building measured from the internal face of external walls, or from the internal face of walls separating the building from any other building, measured at a height of 1.4 metres above the floor, and includes:

- (a) the area of a mezzanine, and
- (b) habitable rooms in a basement or an attic, and
- (c) any shop, auditorium, cinema, and the like, in a basement or attic,

but excludes:

- (d) any area for common vertical circulation, such as lifts and stairs, and
- (e) any basement:
  - (i) storage, and
  - (ii) vehicular access, loading areas, garbage and services, and

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- (f) plant rooms, lift towers and other areas used exclusively for mechanical services or ducting, and
- (g) car parking to meet any requirements of the consent authority (including access to that car parking), and
- (h) any space used for the loading or unloading of goods (including access to it), and
- (i) terraces and balconies with outer walls less than 1.4 metres high, and
- (j) voids above a floor at the level of a storey or storey above.

**ground level (existing)** means the existing level of a site at any point.

**ground level (finished)** means, for any point on a site, the ground surface after completion of any earthworks (excluding any excavation for a basement, footings or the like) for which consent has been granted or that is exempt development.

**ground level (mean)** means, for any site on which a building is situated or proposed, one half of the sum of the highest and lowest levels at ground level (finished) of the outer surface of the external walls of the building.

**group home** means a permanent group home or a transitional group home.

**Note.** Group homes are a type of **residential accommodation**—see the definition of that term in this Dictionary.

**group home (permanent) or permanent group home** means a dwelling:

- (a) that is occupied by persons as a single household with or without paid supervision or care and whether or not those persons are related or payment for board and lodging is required, and
- (b) that is used to provide permanent household accommodation for people with a disability or people who are socially disadvantaged,

but does not include development to which *State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004* applies.

**Note.** Permanent group homes are a type of **group home**—see the definition of that term in this Dictionary.

**group home (transitional) or transitional group home** means a dwelling:

- (a) that is occupied by persons as a single household with or without paid supervision or care and whether or not those persons are related or payment for board and lodging is required, and
- (b) that is used to provide temporary accommodation for the relief or rehabilitation of people with a disability or for drug or alcohol rehabilitation purposes, or that is used to provide half-way accommodation for persons formerly living in institutions or temporary accommodation comprising refuges for men, women or young people,

but does not include development to which *State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004* applies.

**Note.** Transitional group homes are a type of **group home**—see the definition of that term in this Dictionary.

**hardware and building supplies** means a building or place the principal purpose of which is the sale or hire of goods or materials, such as household fixtures, timber, tools, paint, wallpaper, plumbing supplies and the like, that are used in the construction and maintenance of buildings and adjacent outdoor areas.

**Note.** Hardware and building supplies are a type of **retail premises**—see the definition of that term in this Dictionary.

**hazardous industry** means a building or place used to carry out an industrial activity that would, when carried out and when all measures proposed to reduce or minimise its impact on the locality have been employed (including, for example, measures to isolate the activity from existing or likely future development on other land in the locality), pose a significant risk in the locality:

- (a) to human health, life or property, or
- (b) to the biophysical environment.

**Note.** Hazardous industries are a type of **heavy industry**—see the definition of that term in this Dictionary.

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**hazardous storage establishment** means a building or place that is used for the storage of goods, materials or products and that would, when in operation and when all measures proposed to reduce or minimise its impact on the locality have been employed (including, for example, measures to isolate the building or place from existing or likely future development on other land in the locality), pose a significant risk in the locality:

- (a) to human health, life or property, or
- (b) to the biophysical environment.

**Note.** Hazardous storage establishments are a type of **heavy industrial storage establishment**—see the definition of that term in this Dictionary.

**headland** includes a promontory extending from the general line of the coastline into a large body of water, such as a sea, coastal lake or bay.

**health care professional** means any person registered under an Act for the purpose of providing health care.

**health consulting rooms** means premises comprising one or more rooms within (or within the curtilage of) a dwelling house used by not more than 3 health care professionals at any one time.

**Note.** Health consulting rooms are a type of **health services facility**—see the definition of that term in this Dictionary.

**health services facility** means a building or place used to provide medical or other services relating to the maintenance or improvement of the health, or the restoration to health, of persons or the prevention of disease in or treatment of injury to persons, and includes any of the following:

- (a) a medical centre,
- (b) community health service facilities,
- (c) health consulting rooms,
- (d) patient transport facilities, including helipads and ambulance facilities,
- (e) hospital.

**heavy industrial storage establishment** means a building or place used for the storage of goods, materials, plant or machinery for commercial purposes and that requires separation from other development because of the nature of the processes involved, or the goods, materials, plant or machinery stored, and includes any of the following:

- (a) a hazardous storage establishment,
- (b) a liquid fuel depot,
- (c) an offensive storage establishment.

**heavy industry** means a building or place used to carry out an industrial activity that requires separation from other development because of the nature of the processes involved, or the materials used, stored or produced, and includes:

- (a) hazardous industry, or
- (b) offensive industry.

It may also involve the use of a hazardous storage establishment or offensive storage establishment.

**Note.** Heavy industries are a type of **industry**—see the definition of that term in this Dictionary.

**Height of Buildings Map** means the [*Name of local government area or other relevant name*] Local Environmental Plan [*Year*] Height of Buildings Map.

**helipad** means a place not open to the public used for the taking off and landing of helicopters.

**heliport** means a place open to the public that is used for the taking off and landing of helicopters, whether or not it includes:

- (a) a terminal building, or
- (b) facilities for the parking, storage or repair of helicopters.

**Note.** Heliports are a type of **air transport facility**—see the definition of that term in this Dictionary.

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**heritage conservation area** means an area of land of heritage significance:

- (a) shown on the Heritage Map as a heritage conservation area, and
- (b) the location and nature of which is described in Schedule 5, and includes any heritage items situated on or within that area.

**heritage conservation management plan** means a document prepared in accordance with guidelines prepared by the Public Service agency responsible to the Minister administering the *Heritage Act 1977* that documents the heritage significance of an item, place or heritage conservation area and identifies conservation policies and management mechanisms that are appropriate to enable that significance to be retained.

**heritage impact statement** means a document consisting of:

- (a) a statement demonstrating the heritage significance of a heritage item or heritage conservation area, and
- (b) an assessment of the impact that proposed development will have on that significance, and
- (c) proposals for measures to minimise that impact.

**heritage item** means a building, work, place, relic, tree, object or archaeological site the location and nature of which is described in Schedule 5.

**Note.** An inventory of heritage items is also available at the office of the Council.

**Direction.** Heritage items must be shown on the Heritage Map.

**heritage management document** means:

- (a) a heritage conservation management plan, or
- (b) a heritage impact statement, or
- (c) any other document that provides guidelines for the ongoing management and conservation of a heritage item, Aboriginal object, Aboriginal place of heritage significance or heritage conservation area.

**Heritage Map** means the [*Name of local government area or other relevant name*] Local Environmental Plan [*Year*] Heritage Map.

**heritage significance** means historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic value.

**high technology industry** means a building or place predominantly used to carry out an industrial activity that involves any of the following:

- (a) electronic or micro-electronic systems, goods or components,
- (b) information technology (such as computer software or hardware),
- (c) instrumentation or instruments of a scientific, industrial, technological, medical or similar nature,
- (d) biological, pharmaceutical, medical or paramedical systems, goods or components,
- (e) film, television or multi-media technologies, including any post production systems, goods or components,
- (f) telecommunications systems, goods or components,
- (g) sustainable energy technologies,
- (h) any other goods, systems or components intended for use in a science or technology related field,

but does not include a building or place used to carry out an industrial activity that presents a hazard or potential hazard to the neighbourhood or that, because of the scale and nature of the processes involved, interferes with the amenity of the neighbourhood.

**Note.** High technology industries are a type of **light industry**—see the definition of that term in this Dictionary.

**highway service centre** means a building or place used to provide refreshments and vehicle services to highway users. It may include any one or more of the following:

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- (a) a restaurant or cafe,
- (b) take away food and drink premises,
- (c) service stations and facilities for emergency vehicle towing and repairs,
- (d) parking for vehicles,
- (e) rest areas and public amenities.

**home-based child care** means a dwelling used by a resident of the dwelling for the supervision and care of one or more children and that satisfies the following conditions:

- (a) the service is licensed within the meaning of the *Children and Young Persons (Care and Protection) Act 1998*,
- (b) the number of children (including children related to the carer or licensee) does not at any one time exceed 7 children under the age of 12 years, including no more than 5 who do not ordinarily attend school.

**home business** means a business that is carried on in a dwelling, or in a building ancillary to a dwelling, by one or more permanent residents of the dwelling and that does not involve:

- (a) the employment of more than 2 persons other than those residents, or
- (b) interference with the amenity of the neighbourhood by reason of the emission of noise, vibration, smell, fumes, smoke, vapour, steam, soot, ash, dust, waste water, waste products, grit or oil, traffic generation or otherwise, or
- (c) the exposure to view, from any adjacent premises or from any public place, of any unsightly matter, or
- (d) the exhibition of any signage (other than a business identification sign), or
- (e) the sale of items (whether goods or materials), or the exposure or offer for sale of items, by retail, except for goods produced at the dwelling or building.

but does not include bed and breakfast accommodation, home occupation (sex services) or sex services premises.

**Note.** See clause 5.4 for controls relating to the floor area used for a home business.

**home industry** means a dwelling (or a building ancillary to a dwelling) used by one or more permanent residents of the dwelling to carry out an industrial activity that does not involve any of the following:

- (a) the employment of more than 2 persons other than those residents,
- (b) interference with the amenity of the neighbourhood by reason of the emission of noise, vibration, smell, fumes, smoke, vapour, steam, soot, ash, dust, waste water, waste products, grit or oil, traffic generation or otherwise,
- (c) the exposure to view, from any adjacent premises or from any public place, of any unsightly matter,
- (d) the exhibition of any signage (other than a business identification sign),
- (e) the sale of items (whether goods or materials), or the exposure or offer for sale of items, by retail, except for goods produced at the dwelling or building.

but does not include bed and breakfast accommodation or sex services premises.

**Note.** See clause 5.4 for controls relating to the floor area used for a home industry.

Home industries are a type of **light industry**—see the definition of that term in this Dictionary.

**home occupation** means an occupation that is carried on in a dwelling, or in a building ancillary to a dwelling, by one or more permanent residents of the dwelling and that does not involve:

- (a) the employment of persons other than those residents, or
- (b) interference with the amenity of the neighbourhood by reason of the emission of noise, vibration, smell, fumes, smoke, vapour, steam, soot, ash, dust, waste water, waste products, grit or oil, traffic generation or otherwise, or

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- (c) the display of goods, whether in a window or otherwise, or
- (d) the exhibition of any signage (other than a business identification sign), or
- (e) the sale of items (whether goods or materials), or the exposure or offer for sale of items, by retail,

but does not include bed and breakfast accommodation, home occupation (sex services) or sex services premises.

**home occupation (sex services)** means the provision of sex services in a dwelling that is a brothel, or in a building that is a brothel and is ancillary to such a dwelling, by no more than 2 permanent residents of the dwelling and that does not involve:

- (a) the employment of persons other than those residents, or
- (b) interference with the amenity of the neighbourhood by reason of the emission of noise, traffic generation or otherwise, or
- (c) the exhibition of any signage, or
- (d) the sale of items (whether goods or materials), or the exposure or offer for sale of items, by retail,

but does not include a home business or sex services premises.

**horticulture** means the cultivation of fruits, vegetables, mushrooms, nuts, cut flowers and foliage and nursery products for commercial purposes, but does not include a plant nursery, turf farming or viticulture.

**Note.** Horticulture is a type of **intensive plant agriculture**—see the definition of that term in this Dictionary.

**hospital** means a building or place used for the purpose of providing professional health care services (such as preventative or convalescent care, diagnosis, medical or surgical treatment, psychiatric care or care for people with disabilities, or counselling services provided by health care professionals) to people admitted as in-patients (whether or not out-patients are also cared for or treated there), and includes ancillary facilities for (or that consist of) any of the following:

- (a) day surgery, day procedures or health consulting rooms,
- (b) accommodation for nurses or other health care workers,
- (c) accommodation for persons receiving health care or for their visitors,
- (d) shops, kiosks, restaurants or cafes or take away food and drink premises,
- (e) patient transport facilities, including helipads, ambulance facilities and car parking,
- (f) educational purposes or any other health-related use,
- (g) research purposes (whether or not carried out by hospital staff or health care workers or for commercial purposes),
- (h) chapels,
- (i) hospices,
- (j) mortuaries.

**Note.** Hospitals are a type of **health services facility**—see the definition of that term in this Dictionary.

**hostel** means premises that are generally staffed by social workers or support providers and at which:

- (a) residential accommodation is provided in dormitories, or on a single or shared basis, or by a combination of them, and
- (b) cooking, dining, laundering, cleaning and other facilities are provided on a shared basis.

**Note.** Hostels are a type of **residential accommodation**—see the definition of that term in this Dictionary.

**hotel or motel accommodation** means a building or place (whether or not licensed premises under the *Liquor Act 2007*) that provides temporary or short-term accommodation on a commercial basis and that:

- (a) comprises rooms or self-contained suites, and

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- (b) may provide meals to guests or the general public and facilities for the parking of guests' vehicles,

but does not include backpackers' accommodation, a boarding house, bed and breakfast accommodation or farm stay accommodation.

**Note.** Hotel or motel accommodation is a type of **tourist and visitor accommodation**—see the definition of that term in this Dictionary.

**industrial activity** means the manufacturing, production, assembling, altering, formulating, repairing, renovating, ornamenting, finishing, cleaning, washing, dismantling, transforming, processing, recycling, adapting or servicing of, or the research and development of, any goods, substances, food, products or articles for commercial purposes, and includes any storage or transportation associated with any such activity.

**industrial retail outlet** means a building or place that:

- (a) is used in conjunction with an industry or rural industry, and
- (b) is situated on the land on which the industry or rural industry is located, and
- (c) is used for the display or sale (whether by retail or wholesale) of only those goods that have been manufactured on the land on which the industry or rural industry is located,

but does not include a warehouse or distribution centre.

**Note.** See clause 5.4 for controls relating to the retail floor area of an industrial retail outlet.

**industrial training facility** means a building or place used in connection with vocational training in an activity (such as forklift or truck driving, welding or carpentry) that is associated with an industry, rural industry, extractive industry or mining, but does not include an educational establishment, business premises or retail premises.

**industry** means any of the following:

- (a) general industry,
- (b) heavy industry,
- (c) light industry,

but does not include:

- (d) rural industry, or
- (e) extractive industry, or
- (f) mining.

**information and education facility** means a building or place used for providing information or education to visitors, and the exhibition or display of items, and includes an art gallery, museum, library, visitor information centre and the like.

**intensive livestock agriculture** means the keeping or breeding, for commercial purposes, of cattle, poultry, pigs, goats, horses or other livestock that are fed wholly or substantially on externally-sourced feed, and includes any of the following:

- (a) dairies (restricted),
- (b) feedlots,
- (c) piggeries,
- (d) poultry farms,

but does not include extensive agriculture, aquaculture or the operation of facilities for drought or similar emergency relief.

**Note.** Intensive livestock agriculture is a type of **agriculture**—see the definition of that term in this Dictionary.

**intensive plant agriculture** means any of the following:

- (a) the cultivation of irrigated crops for commercial purposes (other than irrigated pasture or fodder crops),
- (b) horticulture,

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- (c) turf farming.
- (d) viticulture.

**Note.** Intensive plant agriculture is a type of **agriculture**—see the definition of that term in this Dictionary.

**jetty** means a horizontal decked walkway providing access from the shore to the waterway and is generally constructed on a piered or piled foundation.

**kiosk** means premises that are used for the purposes of selling food, light refreshments and other small convenience items such as newspapers, films and the like.

**Note.** See clause 5.4 for controls relating to the gross floor area of a kiosk.

Kiosks are a type of **retail premises**—see the definition of that term in this Dictionary.

**Land Application Map** means the [Name of local government area or other relevant name] Local Environmental Plan [Year] Land Application Map.

**Land Reservation Acquisition Map** means the [Name of local government area or other relevant name] Local Environmental Plan [Year] Land Reservation Acquisition Map.

**Land Zoning Map** means the [Name of local government area or other relevant name] Local Environmental Plan [Year] Land Zoning Map.

**landscaped area** means a part of a site used for growing plants, grasses and trees, but does not include any building, structure or hard paved area.

**landscaping material supplies** means a building or place used for the storage and sale of landscaping supplies such as soil, gravel, potting mix, mulch, sand, railway sleepers, screenings, rock and the like.

**Note.** Landscaping material supplies are a type of **retail premises**—see the definition of that term in this Dictionary.

**light industry** means a building or place used to carry out an industrial activity that does not interfere with the amenity of the neighbourhood by reason of noise, vibration, smell, fumes, smoke, vapour, steam, soot, ash, dust, waste water, waste products, grit or oil, or otherwise, and includes any of the following:

- (a) high technology industry,
- (b) home industry.

**Note.** Light industries are a type of **industry**—see the definition of that term in this Dictionary.

**liquid fuel depot** means premises used for the bulk storage of petrol, oil, petroleum or other inflammable liquid for wholesale distribution and at which no retail trade is conducted.

**Note.** Liquid fuel depots are a type of **heavy industrial storage establishment**—see the definition of that term in this Dictionary.

**livestock processing industry** means a building or place used for the commercial production of products derived from the slaughter of animals (including poultry) or the processing of skins or wool of animals and includes abattoirs, knackereries, tanneries, woolscours and rendering plants.

**Note.** Livestock processing industries are a type of **rural industry**—see the definition of that term in this Dictionary.

**Lot Size Map** means the [Name of local government area or other relevant name] Local Environmental Plan [Year] Lot Size Map.

**maintenance**, in relation to a heritage item, Aboriginal object or Aboriginal place of heritage significance, or a building, work, archaeological site, tree or place within a heritage conservation area, means ongoing protective care, but does not include the removal or disturbance of existing fabric, alterations (such as carrying out extensions or additions) or the introduction of new materials or technology.

**marina** means a permanent boat storage facility (whether located wholly on land, wholly on a waterway or partly on land and partly on a waterway), and includes any of the following associated facilities:

- (a) any facility for the construction, repair, maintenance, storage, sale or hire of boats,
- (b) any facility for providing fuelling, sewage pump-out or other services for boats,

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- (c) any facility for launching or landing boats, such as slipways or hoists,
- (d) any car parking or commercial, tourist or recreational or club facility that is ancillary to the boat storage facility,
- (e) any berthing or mooring facilities.

**market** means an open-air area, or an existing building, that is used for the purpose of selling, exposing or offering goods, merchandise or materials for sale by independent stall holders, and includes temporary structures and existing permanent structures used for that purpose on an intermittent or occasional basis.

**Note.** Markets are a type of **retail premises**—see the definition of that term in this Dictionary.

**mean high water mark** means the position where the plane of the mean high water level of all ordinary local high tides intersects the foreshore, being 1.44m above the zero of Fort Denison Tide Gauge and 0.515m Australian Height Datum.

**medical centre** means premises that are used for the purpose of providing health services (including preventative care, diagnosis, medical or surgical treatment, counselling or alternative therapies) to out-patients only, where such services are principally provided by health care professionals. It may include the ancillary provision of other health services.

**Note.** Medical centres are a type of **health services facility**—see the definition of that term in this Dictionary.

**mezzanine** means an intermediate floor within a room.

**mine** means any place (including any excavation) where an operation is carried on for mining of any mineral by any method and any place on which any mining related work is carried out, but does not include a place used only for extractive industry.

**mine subsidence district** means a mine subsidence district proclaimed under section 15 of the *Mine Subsidence Compensation Act 1961*.

**mining** means mining carried out under the *Mining Act 1992* or the recovery of minerals under the *Offshore Minerals Act 1999*, and includes:

- (a) the construction, operation and decommissioning of associated works, and
- (b) the rehabilitation of land affected by mining

**Note.** Mining is not a type of **industry**—see the definition of that term in this Dictionary.

**mixed use development** means a building or place comprising 2 or more different land uses.

**mooring** means a detached or freestanding apparatus located on or in a waterway and that is capable of securing a vessel, but does not include a mooring pen.

**mooring pen** means an arrangement of freestanding piles or other restraining devices designed or used for the purpose of berthing a vessel.

**mortuary** means premises that are used, or intended to be used, for the receiving, preparation, embalming and storage of bodies of deceased persons pending their interment or cremation.

**moveable dwelling** has the same meaning as in the *Local Government Act 1993*.

**Note.** The term is defined as follows:

**moveable dwelling** means:

- (a) any tent, or any caravan or other van or other portable device (whether on wheels or not), used for human habitation, or
- (b) a manufactured home, or
- (c) any conveyance, structure or thing of a class or description prescribed by the regulations (under the *Local Government Act 1993*) for the purposes of this definition.

**multi dwelling housing** means 3 or more dwellings (whether attached or detached) on one lot of land, each with access at ground level, but does not include a residential flat building.

**Note.** Multi dwelling housing is a type of **residential accommodation**—see the definition of that term in this Dictionary.

**native fauna** means any animal-life that is indigenous to New South Wales or is known to periodically or occasionally migrate to New South Wales, whether vertebrate (including fish) or invertebrate and in any stage of biological development, but does not include humans.

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**native flora** means any plant-life that is indigenous to New South Wales, whether vascular or non-vascular and in any stage of biological development, and includes fungi and lichens, and marine vegetation within the meaning of Part 7A of the *Fisheries Management Act 1994*.

**native vegetation** has the same meaning as in the *Native Vegetation Act 2003*.

**Note.** The term is defined as follows:

**Meaning of "native vegetation"**

- (1) **Native vegetation** means any of the following types of indigenous vegetation:
  - (a) trees (including any sapling or shrub, or any scrub),
  - (b) understorey plants,
  - (c) groundcover (being any type of herbaceous vegetation),
  - (d) plants occurring in a wetland.
- (2) Vegetation is **indigenous** if it is of a species of vegetation, or if it comprises species of vegetation, that existed in the State before European settlement.
- (3) **Native vegetation** does not include any mangroves, seagrasses or any other type of marine vegetation to which section 205 of the *Fisheries Management Act 1994* applies.

**navigable waterway** means any waterway that is from time to time capable of navigation and is open to or used by the public for navigation, but does not include flood waters that have temporarily flowed over the established bank of a watercourse.

**neighbourhood shop** means premises used for the purposes of selling general merchandise such as foodstuffs, personal care products, newspapers and the like to provide for the day-to-day needs of people who live or work in the local area, and may include ancillary services such as a post office, bank or dry cleaning, but does not include restricted premises.

**Note.** See clause 5.4 for controls relating to the retail floor area of neighbourhood shops.

Neighbourhood shops are a type of **shop**—see the definition of that term in this Dictionary.

**nominated State heritage item** means a heritage item that

- (a) has been identified as an item of State significance in a publicly exhibited heritage study adopted by the Council, and
- (b) the Council has, by notice in writing to the Heritage Council, nominated as an item of potential State significance.

**non-potable water** means water that does not meet the standards or values for drinking water recommended from time to time by the National Health and Medical Research Council.

**NSW Coastal Policy** means the publication titled *NSW Coastal Policy 1997: A Sustainable Future for the New South Wales Coast*, published by the Government.

**offensive industry** means a building or place used to carry out an industrial activity that would, when carried out and when all measures proposed to reduce or minimise its impact on the locality have been employed (including, for example, measures to isolate the activity from existing or likely future development on other land in the locality), emit a polluting discharge (including, for example, noise) in a manner that would have a significant adverse impact in the locality or on existing or likely future development on other land in the locality.

**Note.** Offensive industries are a type of **heavy industry**—see the definition of that term in this Dictionary.

**offensive storage establishment** means a building or place that is used for the storage of goods, materials or products and that would, when all measures proposed to reduce or minimise its impact on the locality have been employed (including, for example, measures to isolate the building or place from existing or likely future development on other land in the locality), emit a polluting discharge (including, for example, noise) in a manner that would have a significant adverse impact in the locality or on existing or likely future development on other land in the locality.

**Note.** Offensive storage establishments are a type of **heavy industrial storage establishment**—see the definition of that term in this Dictionary.

**office premises** means a building or place used for the purpose of administrative, clerical, technical, professional or similar activities that do not include dealing with members of the public at the building or place on a direct and regular basis, except where such dealing is a minor activity (by appointment) that is ancillary to the main purpose for which the building or place is used.

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**Note.** Office premises are a type of **commercial premises**—see the definition of that term in this Dictionary.  
**open cut mining** means mining carried out on, and by excavating, the earth's surface, but does not include underground mining.

**operational land** has the same meaning as in the *Local Government Act 1993*.

**parking space** means a space dedicated for the parking of a motor vehicle, including any manoeuvring space and access to it, but does not include a car park.

**passenger transport facility** means a building or place used for the assembly or dispersal of passengers by any form of transport, including facilities required for parking, manoeuvring, storage or routine servicing of any vehicle that uses the building or place.

**people who are socially disadvantaged** means:

- (a) people who are disadvantaged because of their alcohol or drug dependence, extreme poverty, psychological disorder or other similar disadvantage, or
- (b) people who require protection because of domestic violence or upheaval.

**people with a disability** means people of any age who, as a result of having an intellectual, psychiatric, sensory, physical or similar impairment, or a combination of such impairments, either permanently or for an extended period, have substantially limited opportunities to enjoy full and active lives.

**place of public worship** means a building or place used for the purpose of religious worship by a congregation or religious group, whether or not the building or place is also used for counselling, social events, instruction or religious training.

**plant nursery** means a building or place the principal purpose of which is the retail sale of plants that are grown or propagated on site or on an adjacent site. It may include the on-site sale of any such plants by wholesale and, if ancillary to the principal purpose for which the building or place is used, the sale of landscape and gardening supplies and equipment and the storage of these items.

**Note.** Plant nurseries are a type of **retail premises**—see the definition of that term in this Dictionary.

**port facilities** means any of the following facilities at or in the vicinity of a designated port within the meaning of section 47 of the *Ports and Maritime Administration Act 1995*:

- (a) facilities for the embarkation or disembarkation of passengers onto or from any vessels, including public ferry wharves,
- (b) facilities for the loading or unloading of freight onto or from vessels and associated receival, land transport and storage facilities,
- (c) wharves for commercial fishing operations,
- (d) refuelling, launching, berthing, mooring, storage or maintenance facilities for any vessel,
- (e) sea walls or training walls,
- (f) administration buildings, communication, security and power supply facilities, roads, rail lines, pipelines, fencing, lighting or car parks.

**potable water** means water that meets the standards or values for drinking water recommended from time to time by the National Health and Medical Research Council.

**private open space** means an area external to a building (including an area of land, terrace, balcony or deck) that is used for private outdoor purposes ancillary to the use of the building.

**property vegetation plan** has the same meaning as in the *Native Vegetation Act 2003*.

**Note.** The term is defined as follows:

**property vegetation plan** means a property vegetation plan that has been approved under Part 4 of the *Native Vegetation Act 2003*.

**pub** means licensed premises under the *Liquor Act 2007* the principal purpose of which is the retail sale of liquor for consumption on the premises, whether or not the premises include hotel or motel accommodation and whether or not food is sold or entertainment is provided on the premises.

**Note.** Pubs are a type of **food and drink premises**—see the definition of that term in this Dictionary.

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**public administration building** means a building used as offices or for administrative or other like purposes by the Crown, a statutory body, a council or an organisation established for public purposes, and includes a courthouse or a police station.

**public authority** has the same meaning as in the Act.

**public land** has the same meaning as in the *Local Government Act 1993*.

**Note.** The term is defined as follows:

**public land** means any land (including a public reserve) vested in or under the control of the council, but does not include:

- (a) a public road, or
- (b) land to which the *Crown Lands Act 1989* applies, or
- (c) a common, or
- (d) land subject to the *Trustees of Schools of Arts Enabling Act 1902* or
- (e) a regional park under the *National Parks and Wildlife Act 1974*.

**public reserve** has the same meaning as in the *Local Government Act 1993*.

**public utility undertaking** means any of the following undertakings carried on or permitted to be carried on by or by authority of any Public Service agency or under the authority of or in pursuance of any Commonwealth or State Act:

- (a) railway, road transport, water transport, air transport, wharf or river undertakings,
- (b) undertakings for the supply of water, hydraulic power, electricity or gas or the provision of sewerage or drainage services,

and a reference to a person carrying on a public utility undertaking includes a reference to a council, electricity supply authority, Public Service agency, corporation, firm or authority carrying on the undertaking.

**rainwater tank** means a tank designed for the storage of rainwater gathered on the land on which the tank is situated.

**recreation area** means a place used for outdoor recreation that is normally open to the public, and includes:

- (a) a children's playground, or
- (b) an area used for community sporting activities, or
- (c) a public park, reserve or garden or the like,

and any ancillary buildings, but does not include a recreation facility (indoor), recreation facility (major) or recreation facility (outdoor).

**recreation facility (indoor)** means a building or place used predominantly for indoor recreation, whether or not operated for the purposes of gain, including a squash court, indoor swimming pool, gymnasium, table tennis centre, health studio, bowling alley, ice rink or any other building or place of a like character used for indoor recreation, but does not include an entertainment facility, a recreation facility (major) or a registered club.

**recreation facility (major)** means a building or place used for large-scale sporting or recreation activities that are attended by large numbers of people whether regularly or periodically, and includes theme parks, sports stadiums, showgrounds, racecourses and motor racing tracks.

**recreation facility (outdoor)** means a building or place (other than a recreation area) used predominantly for outdoor recreation, whether or not operated for the purposes of gain, including a golf course, golf driving range, mini-golf centre, tennis court, paint-ball centre, lawn bowling green, outdoor swimming pool, equestrian centre, skate board ramp, go-kart track, rifle range, water-ski centre or any other building or place of a like character used for outdoor recreation (including any ancillary buildings), but does not include an entertainment facility or a recreation facility (major).

**Reduced Level (RL)** means height above the Australian Height Datum, being the datum surface approximating mean sea level that was adopted by the National Mapping Council of Australia in May 1971.

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**registered club** means a club that holds a club licence under the *Liquor Act 2007*.

**relic** has the same meaning as in the *Heritage Act 1977*.

**Note.** The term is defined as follows:

**relic** means any deposit, artefact, object or material evidence that:

- (a) relates to the settlement of the area that comprises New South Wales, not being Aboriginal settlement, and
- (b) is of State or local heritage significance.

**research station** means a building or place operated by a public authority for the principal purpose of agricultural, environmental, fisheries, forestry, minerals or soil conservation research, and includes any associated facility for education, training, administration or accommodation.

**residential accommodation** means a building or place used predominantly as a place of residence, and includes any of the following:

- (a) attached dwellings,
- (b) boarding houses,
- (c) dual occupancies,
- (d) dwelling houses,
- (e) group homes,
- (f) hostels,
- (g) multi dwelling housing,
- (h) residential flat buildings,
- (i) rural workers' dwellings,
- (j) secondary dwellings,
- (k) semi-detached dwellings,
- (l) seniors housing,
- (m) shop top housing,

but does not include tourist and visitor accommodation or caravan parks.

**residential care facility** means accommodation for seniors or people with a disability that includes:

- (a) meals and cleaning services, and
- (b) personal care or nursing care, or both, and
- (c) appropriate staffing, furniture, furnishings and equipment for the provision of that accommodation and care.

but does not include a dwelling, hostel, hospital or psychiatric facility.

**Note.** Residential care facilities are a type of **seniors housing**—see the definition of that term in this Dictionary.

**residential flat building** means a building containing 3 or more dwellings, but does not include an attached dwelling or multi dwelling housing.

**Note.** Residential flat buildings are a type of **residential accommodation**—see the definition of that term in this Dictionary.

**resource recovery facility** means a building or place used for the recovery of resources from waste, including works or activities such as separating and sorting, processing or treating the waste, composting, temporary storage, transfer or sale of recovered resources, energy generation from gases and water treatment, but not including re-manufacture or disposal of the material by landfill or incineration.

**Note.** Resource recovery facilities are a type of **waste or resource management facility**—see the definition of that term in this Dictionary.

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**respite day care centre** means a building or place that is used for the care of seniors or people who have a disability and that does not provide overnight accommodation for people other than those related to the owner or operator of the centre.

**restaurant or cafe** means a building or place the principal purpose of which is the preparation and serving, on a retail basis, of food and drink to people for consumption on the premises, whether or not liquor, take away meals and drinks or entertainment are also provided.

**Note.** Restaurants or cafes are a type of **food and drink premises**—see the definition of that term in this Dictionary.

**restricted premises** means premises that, due to their nature, restrict access to patrons or customers over 18 years of age, and includes sex shops and similar premises, but does not include a pub, hotel or motel accommodation, home occupation (sex services) or sex services premises.

**restriction facilities** means facilities where animals are constrained for management purposes, including milking sheds, pads, feed stalls, holding yards and paddocks where the number of livestock exceeds the ability of vegetation to recover from the effects of grazing in a normal growing season, but does not include facilities for drought or similar emergency relief.

**retail premises** means a building or place used for the purpose of selling items by retail, or hiring or displaying items for the purpose of selling them or hiring them out, whether the items are goods or materials (or whether also sold by wholesale), and includes any of the following:

- (a) bulky goods premises,
- (b) cellar door premises,
- (c) food and drink premises,
- (d) garden centres,
- (e) hardware and building supplies,
- (f) kiosks,
- (g) landscaping material supplies,
- (h) markets,
- (i) plant nurseries,
- (j) roadside stalls,
- (k) rural supplies,
- (l) shops,
- (m) timber yards,
- (n) vehicle sales or hire premises,

but does not include highway service centres, service stations, industrial retail outlets or restricted premises.

**Note.** Retail premises are a type of **commercial premises**—see the definition of that term in this Dictionary.

**road** means a public road or a private road within the meaning of the *Roads Act 1993*, and includes a classified road.

**roadside stall** means a place or temporary structure used for the retail sale of agricultural produce or hand crafted goods (or both) produced from the property on which the stall is situated or from an adjacent property.

**Note.** See clause 5.4 for controls relating to the gross floor area of roadside stalls.

Roadside stalls are a type of **retail premises**—see the definition of that term in this Dictionary.

**rural industry** means the handling, treating, production, processing, storage or packing of animal or plant agricultural products for commercial purposes, and includes any of the following:

- (a) agricultural produce industries,
- (b) livestock processing industries,
- (c) composting facilities and works (including the production of mushroom substrate),

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- (d) sawmill or log processing works,
- (e) stock and sale yards,
- (f) the regular servicing or repairing of plant or equipment used for the purposes of a rural enterprise.

**Note.** Rural industries are not a type of *industry*—see the definition of that term in this Dictionary.

**rural supplies** means a building or place used for the display, sale or hire of stockfeeds, grains, seed, fertilizers, veterinary supplies and other goods or materials used in farming and primary industry production.

**Note.** Rural supplies are a type of *retail premises*—see the definition of that term in this Dictionary.

**rural worker's dwelling** means a building or place that is additional to a dwelling house on the same lot and that is used predominantly as a place of residence by persons employed, whether on a long-term or short-term basis, for the purpose of agriculture or a rural industry on that land.

**Note.** Rural workers' dwellings are a type of *residential accommodation*—see the definition of that term in this Dictionary.

**sawmill or log processing works** means a building or place used for handling, cutting, chipping, pulping or otherwise processing logs, baulks, branches or stumps, principally derived from surrounding districts, into timber or other products derived from wood.

**Note.** Sawmill or log processing works are a type of *rural industry*—see the definition of that term in this Dictionary.

**school** means a government school or non-government school within the meaning of the *Education Act 1990*.

**Note.** Schools are a type of *educational establishment*—see the definition of that term in this Dictionary.

**secondary dwelling** means a self-contained dwelling that:

- (a) is established in conjunction with another dwelling (the *principal dwelling*), and
- (b) is on the same lot of land as the principal dwelling, and
- (c) is located within, or is attached to, or is separate from, the principal dwelling.

**Note.** See clause 5.4 for controls relating to the total floor area of secondary dwellings.

Secondary dwellings are a type of *residential accommodation*—see the definition of that term in this Dictionary

**self-storage units** means premises that consist of individual enclosed compartments for storing goods or materials (other than hazardous or offensive goods or materials).

**Note.** Self-storage units are a type of *storage premises*—see the definition of that term in this Dictionary.

**semi-detached dwelling** means a dwelling that is on its own lot of land and is attached to only one other dwelling.

**Note.** Semi-detached dwellings are a type of *residential accommodation*—see the definition of that term in this Dictionary.

**seniors housing** means a building or place that is:

- (a) a residential care facility, or
- (b) a hostel within the meaning of clause 12 of *State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004*, or
- (c) a group of self-contained dwellings, or
- (d) a combination of any of the buildings or places referred to in paragraphs (a)–(c),

and that is, or is intended to be, used permanently for:

- (e) seniors or people who have a disability, or
- (f) people who live in the same household with seniors or people who have a disability, or
- (g) staff employed to assist in the administration of the building or place or in the provision of services to persons living in the building or place,

but does not include a hospital.

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**Note.** Seniors housing is a type of **residential accommodation**—see the definition of that term in this Dictionary.

**service station** means a building or place used for the sale by retail of fuels and lubricants for motor vehicles, whether or not the building or place is also used for any one or more of the following:

- (a) the ancillary sale by retail of spare parts and accessories for motor vehicles,
- (b) the cleaning of motor vehicles,
- (c) installation of accessories,
- (d) inspecting, repairing and servicing of motor vehicles (other than body building, panel beating, spray painting, or chassis restoration),
- (e) the ancillary retail selling or hiring of general merchandise or services or both.

**serviced apartment** means a building (or part of a building) providing self-contained accommodation to tourists or visitors on a commercial basis and that is regularly serviced or cleaned by the owner or manager of the building or part of the building or the owner's or manager's agents.

**Note.** Serviced apartments are a type of **tourist and visitor accommodation**—see the definition of that term in this Dictionary.

**sewage reticulation system** means a building or place used for the collection and transfer of sewage to a sewage treatment plant or water recycling facility for treatment, or transfer of the treated waste for use or disposal, including associated:

- (a) pipelines and tunnels, and
- (b) pumping stations, and
- (c) dosing facilities, and
- (d) odour control works, and
- (e) sewage overflow structures, and
- (f) vent stacks.

**Note.** Sewage reticulation systems are a type of **sewerage system**—see the definition of that term in this Dictionary.

**sewage treatment plant** means a building or place used for the treatment and disposal of sewage, whether or not the facility supplies recycled water for use as an alternative water supply.

**Note.** Sewage treatment plants are a type of **sewerage system**—see the definition of that term in this Dictionary.

**sewerage system** means any of the following:

- (a) biosolids treatment facility,
- (b) sewage reticulation system,
- (c) sewage treatment plant,
- (d) water recycling facility,
- (e) a building or place that is a combination of any of the things referred to in paragraphs (a)–(d).

**sex services** means sexual acts or sexual services in exchange for payment.

**sex services premises** means a brothel, but does not include home occupation (sex services).

**shop** means premises that sell merchandise such as groceries, personal care products, clothing, music, homewares, stationery, electrical goods or the like or that hire any such merchandise, and includes a neighbourhood shop, but does not include food and drink premises or restricted premises.

**Note.** Shops are a type of **retail premises**—see the definition of that term in this Dictionary.

**shop top housing** means one or more dwellings located above ground floor retail premises or business premises.

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**Note.** Shop top housing is a type of **residential accommodation**—see the definition of that term in this Dictionary.

**signage** means any sign, notice, device, representation or advertisement that advertises or promotes any goods, services or events and any structure or vessel that is principally designed for, or that is used for, the display of signage, and includes any of the following:

- (a) an advertising structure,
- (b) a building identification sign,
- (c) a business identification sign,

but does not include a traffic sign or traffic control facilities.

**site area** means the area of any land on which development is or is to be carried out. The land may include the whole or part of one lot, or more than one lot if they are contiguous to each other, but does not include the area of any land on which development is not permitted to be carried out under this Plan.

**Note.** The effect of this definition is varied by clause 4.5 for the purpose of the determination of permitted floor space area for proposed development.

**site coverage** means the proportion of a site area covered by buildings. However, the following are not included for the purpose of calculating site coverage:

- (a) any basement,
- (b) any part of an awning that is outside the outer walls of a building and that adjoins the street frontage or other site boundary,
- (c) any eaves,
- (d) unenclosed balconies, decks, pergolas and the like.

**small bar** means a small bar within the meaning of the *Liquor Act 2007*.

**Note.** Small bars are a type of **food and drink premises**—see the definition of that term in this Dictionary.

**spa pool** has the same meaning as in the *Swimming Pools Act 1992*.

**Note.** The term is defined to include any excavation, structure or vessel in the nature of a spa pool, flotation tank, tub or the like.

**stock and sale yard** means a building or place that is used on a commercial basis for the purpose of offering livestock or poultry for sale and that may be used for the short-term storage and watering of stock.

**Note.** Stock and sale yards are a type of **rural industry**—see the definition of that term in this Dictionary.

**storage premises** means a building or place used for the storage of goods, materials, plant or machinery for commercial purposes and where the storage is not ancillary to any industry, business premises or retail premises on the same parcel of land, and includes self-storage units, but does not include a heavy industrial storage establishment or a warehouse or distribution centre.

**storey** means a space within a building that is situated between one floor level and the floor level next above, or if there is no floor above, the ceiling or roof above, but does not include:

- (a) a space that contains only a lift shaft, stairway or meter room, or
- (b) a mezzanine, or
- (c) an attic.

**swimming pool** has the same meaning as in the *Swimming Pools Act 1992*.

**Note.** The term is defined as follows:

**swimming pool** means an excavation, structure or vessel:

- (a) that is capable of being filled with water to a depth of 300 millimetres or more, and
- (b) that is solely or principally used, or that is designed, manufactured or adapted to be solely or principally used, for the purpose of swimming, wading, paddling or any other human aquatic activity,

and includes a spa pool, but does not include a spa bath, anything that is situated within a bathroom or anything declared by the regulations made under the *Swimming Pools Act 1992* not to be a swimming pool for the purposes of that Act.

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**take away food and drink premises** means premises that are predominantly used for the preparation and retail sale of food or drink (or both) for immediate consumption away from the premises.

**Note.** Take away food and drink premises are a type of **food and drink premises**—see the definition of that term in this Dictionary.

**telecommunications facility** means:

- (a) any part of the infrastructure of a telecommunications network, or
- (b) any line, cable, optical fibre, fibre access node, interconnect point equipment, apparatus, tower, mast, antenna, dish, tunnel, duct, hole, pit, pole or other structure in connection with a telecommunications network, or
- (c) any other thing used in or in connection with a telecommunications network.

**telecommunications network** means a system, or series of systems, that carries, or is capable of carrying, communications by means of guided or unguided electromagnetic energy, or both.

**temporary structure** has the same meaning as in the Act.

**Note.** The term is defined as follows:

**temporary structure** includes a booth, tent or other temporary enclosure (whether or not part of the booth, tent or enclosure is permanent), and also includes a mobile structure.

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

**timber yard** means a building or place the principal purpose of which is the sale of sawn, dressed or treated timber, wood fibre boards or similar timber products. It may include the cutting of such timber, boards or products to order and the sale of hardware, paint, tools and materials used in conjunction with the use and treatment of timber.

**Note.** Timber yards are a type of **retail premises**—see the definition of that term in this Dictionary.

**tourist and visitor accommodation** means a building or place that provides temporary or short-term accommodation on a commercial basis, and includes any of the following:

- (a) backpackers' accommodation,
- (b) bed and breakfast accommodation,
- (c) farm stay accommodation,
- (d) hotel or motel accommodation,
- (e) serviced apartments,

but does not include:

- (f) camping grounds, or
- (g) caravan parks, or
- (h) eco-tourist facilities.

**transport depot** means a building or place used for the parking or servicing of motor powered or motor drawn vehicles used in connection with a business, industry, shop or passenger or freight transport undertaking.

**truck depot** means a building or place used for the servicing and parking of trucks, earthmoving machinery and the like.

**turf farming** means the commercial cultivation of turf for sale and the removal of turf for that purpose.

**Note.** Turf farming is a type of **intensive plant agriculture**—see the definition of that term in this Dictionary.

**underground mining** means:

- (a) mining carried out beneath the earth's surface, including bord and pillar mining, longwall mining, top-level caving, sub-level caving and auger mining, and
- (b) shafts, drill holes, gas and water drainage works, surface rehabilitation works and access pits associated with that mining (whether carried out on or beneath the earth's surface),

but does not include open cut mining.

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**vehicle body repair workshop** means a building or place used for the repair of vehicles or agricultural machinery, involving body building, panel building, panel beating, spray painting or chassis restoration.

**vehicle repair station** means a building or place used for the purpose of carrying out repairs to, or the selling and fitting of accessories to, vehicles or agricultural machinery, but does not include a vehicle body repair workshop or vehicle sales or hire premises.

**vehicle sales or hire premises** means a building or place used for the display, sale or hire of motor vehicles, caravans, boats, trailers, agricultural machinery and the like, whether or not accessories are sold or displayed there.

**Note.** Vehicle sales or hire premises are a type of **retail premises**—see the definition of that term in this Dictionary.

**veterinary hospital** means a building or place used for diagnosing or surgically or medically treating animals, whether or not animals are kept on the premises for the purpose of treatment.

**viticulture** means the cultivation of grapes for use in the commercial production of fresh or dried fruit or wine.

**Note.** Viticulture is a type of **intensive plant agriculture**—see the definition of that term in this Dictionary.

**warehouse or distribution centre** means a building or place used mainly or exclusively for storing or handling items (whether goods or materials) pending their sale, but from which no retail sales are made.

**waste disposal facility** means a building or place used for the disposal of waste by landfill, incineration or other means, including such works or activities as recycling, resource recovery and other resource management activities, energy generation from gases, leachate management, odour control and the winning of extractive material to generate a void for disposal of waste or to cover waste after its disposal.

**Note.** Waste disposal facilities are a type of **waste or resource management facility**—see the definition of that term in this Dictionary.

**waste or resource management facility** means any of the following:

- (a) a resource recovery facility,
- (b) a waste disposal facility,
- (c) a waste or resource transfer station,
- (d) a building or place that is a combination of any of the things referred to in paragraphs (a)–(c).

**waste or resource transfer station** means a building or place used for the collection and transfer of waste material or resources, including the receipt, sorting, compacting, temporary storage and distribution of waste or resources and the loading or unloading of waste or resources onto or from road or rail transport.

**Note.** Waste or resource transfer stations are a type of **waste or resource management facility**—see the definition of that term in this Dictionary.

**water recreation structure** means a structure used primarily for recreational purposes that has a direct structural connection between the shore and the waterway, and may include a pier, wharf, jetty or boat launching ramp.

**water recycling facility** means a building or place used for the treatment of sewage effluent, stormwater or waste water for use as an alternative supply to mains water, groundwater or river water (including, in particular, sewer mining works), whether the facility stands alone or is associated with other development, and includes associated:

- (a) retention structures, and
- (b) treatment works, and
- (c) irrigation schemes.

**Note.** Water recycling facilities are a type of **sewerage system**—see the definition of that term in this Dictionary.

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**water reticulation system** means a building or place used for the transport of water, including pipes, tunnels, canals, pumping stations, related electricity infrastructure, dosing facilities and water supply reservoirs.

**Note.** Water reticulation systems are a type of **water supply system**—see the definition of that term in this Dictionary.

**water storage facility** means a dam, weir or reservoir for the collection and storage of water, and includes associated monitoring or gauging equipment.

**Note.** Water storage facilities are a type of **water supply system**—see the definition of that term in this Dictionary.

**water supply system** means any of the following:

- (a) a water reticulation system,
- (b) a water storage facility,
- (c) a water treatment facility,
- (d) a building or place that is a combination of any of the things referred to in paragraphs (a)–(c).

**water treatment facility** means a building or place used for the treatment of water (such as a desalination plant or a recycled or reclaimed water plant) whether the water produced is potable or not, and includes residuals treatment, storage and disposal facilities, but does not include a water recycling facility.

**Note.** Water treatment facilities are a type of **water supply system**—see the definition of that term in this Dictionary.

**waterbody** means a waterbody (artificial) or waterbody (natural).

**waterbody (artificial) or artificial waterbody** means an artificial body of water, including any constructed waterway, canal, inlet, bay, channel, dam, pond, lake or artificial wetland, but does not include a dry detention basin or other stormwater management construction that is only intended to hold water intermittently.

**waterbody (natural) or natural waterbody** means a natural body of water, whether perennial or intermittent, fresh, brackish or saline, the course of which may have been artificially modified or diverted onto a new course, and includes a river, creek, stream, lake, lagoon, natural wetland, estuary, bay, inlet or tidal waters (including the sea).

**watercourse** means any river, creek, stream or chain of ponds, whether artificially modified or not, in which water usually flows, either continuously or intermittently, in a defined bed or channel, but does not include a waterbody (artificial).

**waterway** means the whole or any part of a watercourse, wetland, waterbody (artificial) or waterbody (natural).

**wetland** means:

- (a) natural wetland, including marshes, mangroves, backwaters, billabongs, swamps, sedgelands, wet meadows or wet heathlands that form a shallow waterbody (up to 2 metres in depth) when inundated cyclically, intermittently or permanently with fresh, brackish or salt water, and where the inundation determines the type and productivity of the soils and the plant and animal communities, or
- (b) artificial wetland, including marshes, swamps, wet meadows, sedgelands or wet heathlands that form a shallow waterbody (up to 2 metres in depth) when inundated cyclically, intermittently or permanently with water, and are constructed and vegetated with wetland plant communities.

**wharf or boating facilities** means a wharf or any of the following facilities associated with a wharf or boating that are not port facilities:

- (a) facilities for the embarkation or disembarkation of passengers onto or from any vessels, including public ferry wharves,
- (b) facilities for the loading or unloading of freight onto or from vessels and associated receipt, land transport and storage facilities,

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- (c) wharves for commercial fishing operations,
- (d) refuelling, launching, berthing, mooring, storage or maintenance facilities for any vessel,
- (e) sea walls or training walls,
- (f) administration buildings, communication, security and power supply facilities, roads, rail lines, pipelines, fencing, lighting or car parks.

*wholesale supplies* means a building or place used for the display, sale or hire of goods or materials by wholesale only to businesses that have an Australian Business Number registered under the *A New Tax System (Australian Business Number) Act 1999* of the Commonwealth.

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