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REVIEW OF ENVIRONMENTAL FACTORS

PART 5 ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

Proposed Intersection Upgrade Works Macs Reef Road & Bungendore Road Bywong, NSW

Queanbeyan Palerang Regional Council

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1 Introduction

1.1 Proposal identification

Queanbeyan Palerang Regional Council (Council) is responsible for the provision and maintenance of local road infrastructure in this Local Government Area as part of their responsibilities to their ratepayers and road users more generally.

Council has identified that the subject intersection is in need of a series of improvements to improve its safe operation for road users and improve traffic flow.

Bungendore Road is a key arterial road connecting the village of Bungendore to districts to the north and west including to the Federal Highway. Macs Reef Road is an important link road that intersects with Bungendore Road at the subject site, it delivers traffic more directly with the north west, the City of Canberra to Bungendore and the Coast. It is a key thoroughfare for residents of Canberra to access the South Coast district of NSW and at peak periods can become very busy. Council has been successful in gaining through the Australian Government Black Spot Programme to undertake the works.

Works include the following treatments and actions;

- Traffic management, during works traffic will continue to use the existing roadway managed around active work areas
- Installation of flexible barriers and raised islands with additional stop and give-way signs
- New Channelised right turn from Bungendore Road to replace Auxiliary Right-turn
- Left turn deceleration/slip lane, Channelised Right-turn
- Installation of concrete median and splitter islands
- Drainage reconstruction as required
- Installation of street lighting
- Asphalt concrete resurfacing of wearing surfaces
- Rehabilitation of site including removal of temporary erosion control structures & all waste materials and ensuring site is not subject to accelerated erosion.

The proposal location and study area are identified on Map 1-1 of this report. The study area includes the site of the works and adjoining lands to the extent that they may be impacted by the works.

The environment is characterised by busy rural arterial roads, surrounding lands are agricultural paddocks, native vegetation is scattered in the landscape and sparse the road reserve

1.2 Purpose of the report

This Review of Environmental Factors (REF) has been prepared by Macrozamia Environmental on behalf of Council under Part 5 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). For these works Council is the proponent and the determining authority under this Act.

The purpose of the REF is to describe the proposal, to assess, quantify and document the possible impacts of the proposal on the environment, and to detail

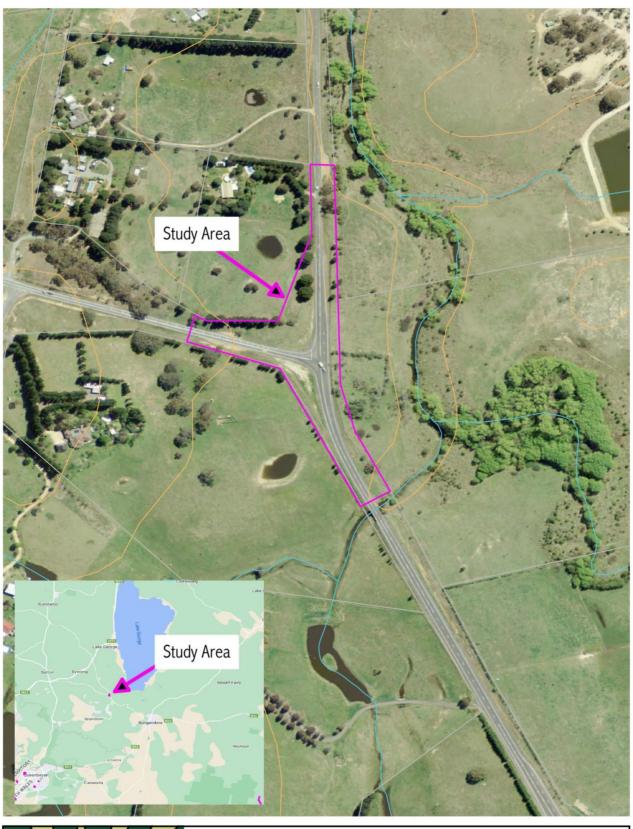
ameliorative measures to be implemented at the time of works and maintained after works have been completed in order for the proposal to have a minimal and acceptable environmental impact.

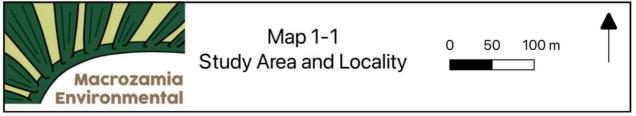
This REF considers the study area to be the site of the proposed works and immediately adjoining lands to the extent that they could potentially be impacted, including the site of the works area. Map 1-1 in this report shows this area.

The description of the proposed works and associated environmental impacts have been undertaken in context of clause 171 of the *Environmental Planning and Assessment Regulation 2021*, the *Biodiversity Conservation Act 2016* (BC Act), and the *Commonwealth Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). In doing so, the REF helps to fulfil the requirements of Section 5.5 (Duty to consider environmental impact) of the EP&A Act; that Council examines and takes into account to the fullest extent possible, all matters affecting or likely to affect the environment by reason of the activity.

The findings of the REF will be considered by the consent authority when assessing:

- Whether the proposal is likely to have a significant impact on the environment and therefore the necessity for an environmental impact statement to be prepared and approval to be sought from the Minister for Planning under Part 5 of the EP&A Act
- The significance of any impact on threatened species as defined by the BC Act and/or NSW Fisheries Management Act 1994 (FM Act)
- The potential impact on Aboriginal Objects or places protected by the National Parks and Wildlife Act 1974 (NP&W Act)
- The potential for the proposal to significantly impact a matter of national environmental significance or other Commonwealth matter and the need to make a referral to the Australian Government Department of the Environment for a decision by the Commonwealth Minister for the Environment on whether assessment and approval is required under the EPBC Act.





2 Need and options considered

2.1 Strategic and community need for the proposal

The proposed works are needed to improve the safety and flow of traffic using the intersection. At peak periods the intersection can be heavily used particularly with traffic from Canberra driving to and from the South Coast of NSW.

By making improvements to road infrastructure, Council are contributing to their cumulative programme of supporting the local community's needs, improving road user safety and the reliability of the road network. By undertaking the works Council are providing value for money to ratepayers while meeting their duty to provide and maintain adequate, safe facilities to the community.

2.2 Proposal objectives

The objectives of the proposal are to:

- Improve road user safety and comfort
- Improve traffic flow and efficiency
- Improve the quality of the road thereby reducing the frequency of required maintenance.

2.3 Alternatives and options considered

Council have considered the options to 'do nothing', to 'undertake the works as proposed'.

The 'do nothing' option must be considered for public infrastructure projects. In this case Council found that doing nothing would fail to address safety and traffic flow concerns relating to the existing road design.

The proposed option meets all the objectives of the project without undue cost to Council.

As funding has been allocated for the project through the Australian Government Black Spot Programme Council is now obliged to deliver the project.

Having regard to the above considerations it is determined that the works proposed by Council would provide the best value for money and greatest long-term benefit for the community.

3 Description of the proposal

3.1 The proposal

Council is proposing to upgrade the subject intersection to improve traffic flow and safety of road users, road design is to be improved incorporating a new channelised right turn from Bungendore Road & left turn deceleration/slip lane.

Street lighting, flexible barriers and raised islands with additional stop and give-way signs will be installed and raised concrete median and splitter islands.

It is intended that works will be completed in one stage in the 2025 – 2026 financial year, the timeframe for works is expected to be up to 12 weeks though this may be impacted by Council's operational schedule and weather conditions.

The following summarises the activities involved;

- Completion of design and planning approvals/ licences and permits as required
- Implementation of traffic management plan and closing of the road
- Site preparation, including construction of access pads/ tracks, and temporary erosion and sediment controls
- Clearing and grubbing as required
- Formation construction as required
- Reconstruction of drainage structures as required
- Construction of cast in place road structures including median and splitter islands
- Asphalt concrete resurfacing of wearing surfaces
- Installation of road furniture including flexible barriers, stop and give-way signs street lighting and line marking
- Decommissioning and removal of temporary works including erosion and sediment controls
- Post construction works including clean-up and site rehabilitation.

3.2 Stockpile & work compound sites

Works compounds are used to store construction materials, machinery and chemicals that are typically used during road construction projects.

Suitable stockpile & works compound areas occur in the road reserve on the south side of Macs Reef Road. Controls need to be designed to prevent contamination of receiving waters from runoff from any stockpile area or compound. In the establishment and management of works compounds and stockpile areas the following general criteria must be complied with:

- 1. Be in areas previously cleared of native vegetation
- 2. Not be located in areas subject to flooding, outside the 1 in 10 year Average Recurrence Interval (ARI)
- 3. Be provided with erosion and sediment controls prior to occupation
- 4. Drainage controls including diversion drains and perimeter banks, and the bunding of liquid storage areas must be installed prior to the compounds being occupied and must be maintained and renewed as necessary during the construction period to ensure their effectiveness

- 5. Not unduly interfere with the business or other economic activities in the area
- 6. Allow access that is safe to use for site workers
- 7. Be restored at the completion of the occupation
- 8. Preference should be given to re-occupying previously established works compound sites, stockpile sites or other highly disturbed areas
- 9. Concrete trucks must not be washed out outside a suitably designed, designated concreate washout bund
- 10. The works compound should be securely fenced against theft and vandalism if considered necessary by the Project Manager
- 11. Plant and machinery should be secured against theft/ vandalism and unauthorised access when not in use
- 12. All chemicals stored on-site should be stored in a lockable storage facility with a floor and bund that is able to contain at least 110% of the volume of the largest container stored in it
- 13. Materials for the cleaning up of any chemical spills such as hydrocarbon absorbent booms (for use in waterways) and loose absorbent material would be kept at the works compound. Fire extinguishers of a type appropriate to the materials stored at the compound would also be kept on site
- 14. No fuels would be stored at the works compound. Plant and equipment should be refuelled from refuelling trucks on-site, or at a contractor's depot off-site. Refuelling and other machinery maintenance would be undertaken in specially designated bunded areas designed to enable any spilled fuels and oils to be contained on-site and cleaned up.

3.3 Project activities

3.3.1 Work methodology

Works will be completed in one stage as follows;

Preliminary activities

- Undertake environmental assessment & obtain licences or approvals as required
- Identify/ locate services as required
- Complete and commence implementation of Construction Environmental Management Plan (CEMP)
- Complete Erosion and Sediment Control Plan (ESCP)
- Complete Traffic Management Plan (TMP)
- Complete project inductions

Site establishment and installation of traffic controls

- Installation of traffic controls in accordance with the traffic management plan
- Marking of the limit of works
- Installation of erosion and sediment controls in accordance with the ESCP and environmental specifications prescribed for the proposal and licence conditions if required
- Establishment of stockpile/ compound site

Road works

- Clearing and grubbing as required
- Construction of formation shoulders and drainage structures
- Construction of cast in place concrete structures
- Asphalt concrete resurfacing of wearing surfaces
- Installation of road furniture and line marking

Post construction works

- Soil stabilisation & maintenance of erosion and sediment controls
- Rehabilitation of erosion and sediment controls in the event of failure, replacement of any reserved topsoils and revegetation with grasses of the works compound site including replacement of trees
- Removal of traffic controls.

3.3.2 Construction hours and duration

The proposed works would be undertaken within the following working hours:

- Monday Friday: 7:00am to 6:00pm
- Saturday: 7:00am to 5:00pm
- Sunday and Public Holidays: no work.

It is anticipated the works will commence in the 2025-2026 financial year and be completed within 12 weeks, however, weather conditions and competing priorities of Council may alter this timeframe

3.3.3 Plant and equipment

Machinery to be used will consist of:

- Light vehicles
- Medium/ heavy ridged trucks
- Plant trailer
- Excavator
- Water carts for dust suppression
- Hand tools.

There may be a need to bring in other machinery as the need arises.

3.3.4 Earthworks

Earthworks will be required as follows;

- Construction of access pads/ tracks for stockpile area and sediment management structures
- Clearing and grubbing of the project area
- Stockpiling of aggregates and topsoil
- Reshaping of road formation, batters and drainage construction.

Generally balanced earthworks will negate the need to import material.

3.3.5 Source and quantity of materials

- Fuels and oils for the machinery and equipment
- Cast in place formwork and reinforcing

- Concrete
- Gravel for road surface.

Materials will be sourced from local suppliers and demand is not expected to create a shortage of any materials available to the local economy.

3.3.6 Traffic management and access

Bungendore Road is a key arterial road connecting the village of Bungendore to districts to the north and west including to the Federal Highway. Macs Reef Road is an important link road that intersects with Bungendore Road at the subject site, it delivers traffic more directly with the north west, the City of Canberra to Bungendore and the Coast. It is a key Thorofare for residence of Canberra to access the South Coast district of NSW and at peak periods can become very busy.

Subject roads are also used generally for traffic accessing the rural areas to the northwest of Bungendore

A Traffic Management Plan (TMP) must be prepared in accordance with Council's policies and procedures. Advisory signs will alert road users to the works for 2 weeks prior to works commencement advising delays may be experienced and that a detour will be in place.

Contractor must ensure that the work site is maintained in a safe and secure state with consideration of cyclist traffic incorporate appropriate signage and barriers as required.

3.4 Ancillary facilities

Construction of the proposal would require one stockpile/ compound site. There are suitable lands in the road reserve to develop these temporary facilities on the south side of Macs Reef Road.

Any sites to be used for ancillary facilities will be located by Contractor in accordance with criteria identified in section 3.2 of this REF and within the study area of this REF. If these facilities are to be constructed outside the study area of this REF an assessment of the proposed area will be required.

3.5 Property acquisition and land access

Works occur on Council owned and managed road reserve, no access to or obstruction of access to private lands will be required.

4 Statutory and planning framework

4.1 Local Environmental Plans

4.1.1 Queanbeyan-Palerang Regional Local Environmental Plan 2022 (LEP)

Under this instrument the project area is zoned C4 Environmental Living, the objectives of this zone are as follows;

C4 Environmental Living;

- To provide for low-impact residential development in areas with special ecological, scientific or aesthetic values.
- To ensure that residential development does not have an adverse effect on those values.
- To encourage development that is visually compatible with the landscape.
- To minimise the impact of development on the natural environment.
- To ensure development does not unreasonably increase the demand for public services or public facilities.

The works proposed are consistent with the objectives of this zone and roads are permitted with consent in C4 Environmental Living.

Clause 5.10 Heritage Conservation

The objectives of this clause are as follows

- (a) to conserve the environmental heritage of the Queanbeyan-Palerang Regional local government area,
- (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.

Heritage matters have been considered through this REF process.

The LEP lists no local heritage items in the vicinity of the project area.

The Aboriginal Heritage Information Management System (AHIMS) identifies no Aboriginal sites or Aboriginal places in the vicinity of the project area.

Heritage matters are addressed in section 6.6 of this report.

Part 6 Additional local provisions

7.2 Terrestrial Biodiversity

The whole of the project area are mapped as 'Biodiversity' on the Terrestrial Biodiversity Map, as such the following clause applies;

- (3) In deciding whether to grant development consent for development on land to which this clause applies, the consent authority must consider—
 - (a) whether the development is likely to have—
 - (i) any adverse impact on the condition, ecological value and significance of the fauna and flora on the land, and

- (ii) any adverse impact on the importance of the vegetation on the land to the habitat and survival of native fauna. and
- (iii) any potential to fragment, disturb or diminish the biodiversity structure, function and composition of the land, and
- (iv) 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.

Biodiversity matters have been addressed at Section 6.2 of this REF, the proposed works have been designed to avoid adverse environmental impact.

Other additional local provisions

The project site is not mapped by other additional local provisions maps including *Drinking Water Catchment, Flood Planning* and *Riparian Lands and Watercourses*.

4.2 State Environmental Planning Policies

4.2.1 State Environmental Planning Policy (Transport and Infrastructure) 2021

Chapter 2 of the State Environmental Planning Policy (Transport and Infrastructure) SEPP (T&ISEPP) aims to facilitate the effective delivery of infrastructure across the State by—

- (a) improving regulatory certainty and efficiency through a consistent planning regime for infrastructure and the provision of services, and
- (b) providing greater flexibility in the location of infrastructure and service facilities, and
- (c) allowing for the efficient development, redevelopment or disposal of surplus government owned land, and
- (d) identifying the environmental assessment category into which different types of infrastructure and services development fall (including identifying certain development of minimal environmental impact as exempt development), and
- (e) identifying matters to be considered in the assessment of development adjacent to particular types of infrastructure development, and
- (f) providing for consultation with relevant public authorities about certain development during the assessment process or prior to development commencing, and
- (g) providing opportunities for infrastructure to demonstrate good design outcomes.

Division 1 of Chapter 2 of the T&ISEPP makes provisions for public authorities to consult with local Councils and other public authorities prior to the commencement of certain types of development. Consultation, including consultation as required by T&ISEPP (where applicable), is discussed in Section 5 of this REF.

4.2.2 State Environmental Planning Policy (Resilience and Hazards) 2021

Chapter 4 Remediation of land

- (1) The object of this Chapter is to provide for a Statewide planning approach to the remediation of contaminated land.
- (2) In particular, this Chapter 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—
 - (a) by specifying when consent is required, and when it is not required, for a remediation work, and
 - (b) by specifying certain considerations that are relevant in rezoning land and in determining development applications in general and development applications for consent to carry out a remediation work in particular, and
 - (c) by requiring that a remediation work meet certain standards and notification requirements.

A consent authority must not consent to the carrying out of any development on land unless:

- it has considered whether the land is contaminated, and
- if the land is contaminated, it is satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation) for the purpose for which the development is proposed to be carried out, and
- if the land requires remediation to be made suitable for the purpose for which the development is proposed to be carried out, it is satisfied that the land will be remediated before the land is used for that purpose.

Contaminated land was considered on this site, signs of previous land uses such as sheep dips, waste materials, signs of past structures or land fill were considered, and none found. Additionally, the NSW EPA online search tool for contaminated land was used which found no contaminated sites on this database in the vicinity of the works.

Due to an absence of any signs of potentially contaminating activities in the past no further investigation under this SEPP was considered necessary. However, if any signs of contaminated land are revealed during works, works must cease and the potential for contaminated land to be considered guided by actions in this SEPP.

4.2.3 State Environmental Planning Policy (Biodiversity and Conservation) 2021

The State Environmental Planning Policy (Biodiversity and Conservation) 2021 (BC SEPP) consolidates several repealed SEPPs that help to manage conservation of biodiversity.

Chapter 4

Chapter 4 Koala habitat protection 2021 of the BC SEPP applies to this project due to its zoning.

This Chapter aims to encourage the conservation and management of areas of natural vegetation that provide habitat for koalas to support a permanent free-living population over their present range and reverse the current trend of koala population decline.

Under Section 4.9, Development assessment process—no approved koala plan of management for land;

- (2) Before a Council may grant consent to a development application for consent to carry out development on the land, the Council must assess whether the development is likely to have any impact on koalas or koala habitat.
- (3) If the Council is satisfied that the development is likely to have low or no impact on koalas or koala habitat, the council may grant consent to the development application.
- (4) If the council is satisfied that the development is likely to have a higher level of impact on koalas or koala habitat, the council must, in deciding whether to grant consent to the development application, take into account a koala assessment report for the development.

It would be unlikely for Koalas to occur on the subject site due to an absence of trees.

The proposed development does not remove any koala habitat and will therefore not impact any possible future occurrence of koalas.

4.3 Other relevant legislation

4.3.1 Environmental Planning and Assessment Act 1979 & Environmental Planning and Assessment Regulation 2021

The Environmental Planning and Assessment Act 1979 (EP&A Act) supports a range of objects that encourage appropriate development across the state. It meets varied outcomes associated with promotion of social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources and economically and environmentally sustainable development.

The Environmental Planning and Assessment Regulation 2021 (The Regulation) is a Statutory Instrument that supports the EP&A Act.

Clause 171 of Part 8 of The Regulation provides a list of factors to be taken into account when consideration is being given to the likely impact of an activity on the environment. Section 8 of this REF addresses these factors describing the nature of any impacts.

4.3.2 Biodiversity Conservation Act 2016

The purpose of the Biodiversity Conservation Act 2016 (BC Act) is to maintain a healthy, productive and resilient environment for the greatest well-being of the community, now and into the future, consistent with the principles of ecologically sustainable development. Specifically, it aims to conserve biodiversity at bioregional and state scales, providing mechanisms to assess extinction risk of species and ecological communities, and identify key threatening processes to biodiversity values, support biodiversity conservation on private land, avoid, minimise and offset the impacts of proposed developments and land use changes on biodiversity and an offset scheme providing a market based offset trading economy.

The BC Act provides a clearing threshold, Biodiversity Values Map and test of significance triggers to determine the necessity for the impacts on biodiversity of a development to be assessed using the BC Act's Biodiversity Assessment Methodology (BAM) through a Biodiversity Development Assessment Report (BDAR). While assessment under the BAM is optional for Part V proposals the potential to impact matters protected under the BC Act have been considered.

Sections 7.2 and 7.3 of the BC Act considers the likelihood of impact on threatened matters and the requirement for further assessment. If there is a chance of an impact on a BC Act listed matter a test of Significance is required to determine the significance of the impact. If this assessment establishes that there is a likelihood for a significant impact on threatened species, populations and their habitat or on ecological communities further assessment through a BDAR would be undertaken.

Given the low occurrence of native vegetation and habitats on the project area b

Biodiversity matters have been addressed at Section 6.2 of this REF, the proposed works have been designed to avoid adverse environmental impact.

4.3.3 Fisheries Management Act 1994

The FM Act aims to conserve, develop and share the fishery resources of NSW for the benefit of present and future generations. In particular, the objects of this Act are to:

- Conserve fish stocks and key fish habitats
- Conserve threatened species, populations and ecological communities of fish and marine vegetation
- Promote ecologically sustainable development, including the conservation of biological diversity.

The FM Act identifies threatened aquatic species, populations and ecological communities and requires an Assessment of significance for potential significant impacts to any of these entities. Any potential significant impact triggers the need for a test of significance.

Impacts to listed fish have been considered along with terrestrial matters.

4.3.4 Heritage Act 1977 & National Parks and Wildlife Act 1974

The NSW *Heritage Act 1977* (Heritage Act) is a statutory tool designed to conserve the cultural heritage of NSW and used to regulate development impacts on the State's heritage assets. This Act details the statutory requirements for protecting historic buildings and places and includes any place, building, work, relic, movable object, or precinct, which may be of historic, scientific, cultural, social, archaeological, natural or aesthetic value.

The *National Parks and Wildlife Act 1974* (NPW Act) is the primary legislation for the protection of some aspects of Aboriginal cultural heritage in NSW. Under section 86 of the NPW Act, it is an offence to 'harm' an Aboriginal object. 'Harm' means any act or omission that:

- Destroys, defaces, damages or desecrates the object
- Moves the object from the land on which it had been situated, or
- Causes or permits the object to be harmed.

No state heritage matters have been identified in proximity to the works, heritage issues are addressed in Section 6.7 of this REF.

4.4 Commonwealth legislation

4.4.1 Environment Protection and Biodiversity Conservation Act 1999

Under the EPBC Act a referral is required to the Australian Government for proposed 'actions that have the potential to significantly impact on matters of national environmental significance or the environment of Commonwealth land.

The EPBC Act identifies nine matters of national environmental significance being:

• World Heritage properties

- National heritage places
- Wetlands of international importance (Ramsar wetlands)
- Threatened species and ecological communities
- Migratory species
- Commonwealth marine areas
- Nuclear actions
- Great Barrier Reef Marine Park
- Water impacts from coal seam gas and large coal mining actions.

An assessment of the above matters has been undertaken and has concluded that none of these matters require further consideration due either to the absence of items of significance or relevance and the absence of suitable habitats for migratory and threatened flora and fauna and ecological communities. Any potentially occurring commonwealth listed biodiversity matters have been considered along with other biodiversity matters in this REF and the attached Biodiversity Assessment.

4.5 Confirmation of statutory position

By adopting the requirements of the T&ISEPP, the proposal may be carried out without the need for development consent. The proposal is subject to environmental impact assessment under Part 5 of the EP&A Act. Queanbeyan-Palerang Regional Council is the proponent and determining authority for the proposal.

5 Stakeholder and community consultation

5.1 Landowners and community

The project site occurs in a rural district, the local community is composed of those living and working in the rural environment largely in agriculture and home industry. The community is heavily reliant on the road network for transport in the absence of alternatives such as public transport, the remoteness of the community from urban centres also makes alternatives such as walking or cycling impractical. Consequently, the road network is essential to enable the community to access work, shopping, school and other economic activities and social commitments.

Adjoining landholders are all primary production enterprises, these businesses also heavily rely on the road network for productivity of their operations.

Road users from the nearby city of Canberra are major users of the road particularly at peak periods to access the South Coast.

It is essential that Council engage with the community and adjoining landholders to adequately manage disruptions to these stakeholders and their day to day activities. Council must have in place a complaint handling process enabling concerned members of the community to contact Council in relation to the project and discuss their concerns.

Given the improvement to traffic flow efficiency and road safety that the project will result in, it is expected that the proposal will not be contentious in the community. The proposal will result in minor traffic disruptions for a short period of time, over a period of 12 weeks.

5.2 Aboriginal community involvement

It is possible that artefacts important to the Aboriginal community could be found in the project area during works, if suspected finds are made Council will invite the Local Aboriginal Land Council to comment on the works.

5.3 T&ISEPP consultation

Chapter 2 Division 1 of T&ISEPP require that public authorities undertake consultation with Councils and other public authorities, when proposing to carry out development without consent. Table 5-1 of this report lists these items and assesses whether these are relevant to the proposal.

Table 5-1 T&ISEPP Chapter 2 Division 1 Consultation Factors

Item	Response		
Clause 2.10 Consultation with councils—development with impacts on council-related infrastructure or services			
A substantial impact on stormwater management services provided by a Council	Not applicable – the proposal would not involve substantial impacts to a stormwater system. The road design does allow for drainage and appropriate dispersal of water this is consistent with the existing design of the road.		
Likely to generate traffic to an extent that will strain the capacity of the road system in a local government area.	While many truck movements would be required during the construction phase, they would be managed to limit impacts. Given the scale of the proposal, it is unlikely the capacity of the road system would be strained.		
Involves connection to, and a substantial impact on the capacity of, any part of a sewerage system owned by a Council.	Not applicable – the proposal would not involve connection to or impacts to a sewerage system.		
Involves connection to, and use of a substantial volume of water from, any part of a water supply system owned by a Council	Not applicable – the proposal would not involve connection to or substantial use of water from a Council-owned water supply system.		
Involves the installation of a temporary structure on, or the enclosing of, a public place that is under a Council's management or control that is likely to cause a disruption to pedestrian or vehicular traffic that is not minor or inconsequential.	There will be some disruption to vehicular traffic during construction, through traffic management on Bungendore Road and Macs Reef Road This impact is considered to be minor and manageable, neither road will be closed and traffic will not be held up for periods exceeding 10 minutes at a time.		
Involves excavation that is not minor or inconsequential of the surface of, or a footpath adjacent to, a road for which a Council is the roads authority under the Roads Act 1993 (if the public authority that is carrying out the development, or on whose behalf it is being carried out, is not responsible for the maintenance of the road or footpath).	The proposal would involve minor excavation of existing road surfaces. Council is the proponent and relevant road authority for the roads affected by the proposal.		
Clause 2.11 Consultation with councils—development with impacts on local heritage			
(1) This section applies to development carried out by or on behalf of a public	Not applicable – the proposal does not affect any local heritage items or		

authority if the development—

- (a) is likely to affect the heritage significance of a local heritage item, or of a heritage conservation area, that is not also a State heritage item, in a way that is more than minor or inconsequential, and
- (b) is development that this Chapter provides may be carried out without consent.
- (2) A public authority, or a person acting on behalf of a public authority, must not carry out development to which this section applies unless the authority or the person has—
- (a) had an assessment of the impact prepared, and
- (b) given written notice of the intention to carry out the development, with a copy of the assessment and a scope of works, to the council for the area in which the heritage item or heritage conservation area (or the relevant part of such an area) is located, and
- (c) taken into consideration any response to the notice that is received from the council within 21 days after the notice is given.

heritage conservation areas.

Clause 2.12 Consultation with councils—development with impacts on flood liable land

- (1) In this section, flood liable land means land that is susceptible to flooding by the probable maximum flood event, identified in accordance with the principles set out in the manual entitled Floodplain Development Manual: the management of flood liable land published by the New South Wales Government and as in force from time to time.
- (2) A public authority, or a person acting on behalf of a public authority, must not carry out, on flood liable land, development that this Chapter provides may be carried out without consent and that will change flood patterns other than to a minor extent unless the authority or person has—
- (a) given written notice of the intention to

Not applicable - the proposal will not be carried out on any flood liable land.

carry out the development (together with a scope of works) to the council for the area in which the land is located, and

(b) taken into consideration any response to the notice that is received from the council within 21 days after the notice is given.

Clause 2.13 Consultation with State Emergency Service—development with impacts on flood liable land

- (1) A public authority, or a person acting on behalf of a public authority, must not carry out development on flood liable land that may be carried out without development consent under a relevant provision unless the authority or person has—
- (a) given written notice of the intention to carry out the development (together with a scope of works) to the State Emergency Service, and
- (b) taken into consideration any response to the notice that is received from the State Emergency Service within 21 days after the notice is given.
- (2) Any of the following provisions in Part 2.3 is a relevant provision—
- (a) Division 1 (Air transport facilities),
- (b) Division 2 (Correctional centres and correctional complexes),
- (c) Division 6 (Emergency services facilities and bush fire hazard reduction),
- (d) Division 10 (Health services facilities),
- (e) Division 14 (Public administration buildings and buildings of the Crown),
- (f) Division 15 (Railways),
- (g) Division 16 (Research and monitoring stations).
- (h) Division 17 (Roads and traffic),
- (i) Division 20 (Stormwater management systems).
- (3) This section does not apply in relation to the carrying out of minor alterations or additions to, or the demolition of, a building, emergency works or routine maintenance.
- (4) In this section, flood liable land means land that is susceptible to flooding by the probable maximum flood event, identified in accordance with the principles set out in the manual entitled Floodplain Development Manual: the management of flood liable land

Not applicable, none of these circumstances apply to the proposed road upgrade works

published by the New South Wales Government and as in force from time to time.

2.14 Consultation with councils—development with impacts on certain land within the coastal zone

- (1) This section applies to development on land that is within a coastal vulnerability area and is inconsistent with a certified coastal management program that applies to that land.
- (2) A public authority, or a person acting on behalf of a public authority, must not carry out development to which this section applies, which this Chapter provides may be carried out without development consent, unless the authority or person has—
- (a) given written notice of the intention to carry out the development to the council for the local government area in which the land is located, and
- (b) taken into consideration any response to the notice that is received from the council within 21 days after the notice is given.

Not applicable, works do not occur in a coastal environment

2.15 Consultation with public authorities other than councils

- (1) A public authority, or a person acting on behalf of a public authority, must not carry out specified development that this Chapter provides may be carried out without consent unless the authority or person has—
- (a) given written notice of the intention to carry out the development (together with a scope of works) to the specified authority in relation to the development, and
- (b) taken into consideration any response to the notice that is received from that authority within 21 days after the notice is given.
- (2) For the purposes of subsection (1), the following development is specified development and the following authorities are specified authorities in relation to that development—
- (a) development adjacent to land reserved under the National Parks and Wildlife Act 1974 or to land acquired under Part 11 of that Act—the Office of

Not applicable, none of these circumstances apply to the proposed road upgrade works.

Environment and Heritage,

- (b) development on land in Zone E1 National Parks and Nature Reserves or in a land use zone that is equivalent to that zone, other than land reserved under the National Parks and Wildlife Act 1974—the Office of Environment and Heritage,
- (c) development comprising a fixed or floating structure in or over navigable waters—Transport for NSW.
- (d) development that may increase the amount of artificial light in the night sky and that is on land within the dark sky region as identified on the dark sky region map—the Director of the Observatory,
- (e) development on defence communications facility buffer land within the meaning of clause 5.15 of the Standard Instrument—the Secretary of the Commonwealth Department of Defence.
- (f) development on land in a mine subsidence district within the meaning of the Mine Subsidence Compensation Act 1961—the Mine Subsidence Board.

In relation to the above Clauses it is important to note Clause 2.17 Exceptions;

- (1) Sections 2.10–2.15 do not apply with respect to development to the extent that—
- (a) they would require notice of the intention to carry out the development to be given to a council or public authority from whom an approval is required in order for the development to be carried out lawfully, or
- (b) they would require notice to be given to a council or public authority with whom the public authority that is carrying out the development, or on whose behalf it is being carried out, has an agreed consultation protocol that applies to the development, or
- (c) they would require notice to be given to a council or public authority that is carrying out the development or on whose behalf it is being carried out, or
- (d) the development is exempt development or complying development under any environmental planning instrument (including this Chapter), or
- (e) the development comprises emergency works, or
- (f) the development is carried out in accordance with a code of practice approved by the Minister for the purposes of this section and published in the Gazette.

5.4 Government and utility consultation

NSW Department of Planning and Environment (Environment and Heritage)

Council will consult with EES if unforeseen heritage (including Aboriginal Heritage) or biodiversity issues are raised during works.

5.5 Ongoing or future consultation

Council will engage with the local community, the Aboriginal Community and Government Agencies as required during the works if unforeseen issues arise.

6 Environmental assessment

All potential environmental impacts associated with the construction and operation of the proposal, given its scale and use, are addressed below as required under Clause 171, Part 8 Infrastructure and environmental impact assessment, of the Environmental Planning and Assessment Regulation 2021.

6.1 Traffic

6.1.1 Existing environment

The existing traffic is that serviced a rural arterial road and an important link road to it. Bungendore Road provides access between the village of Bungendore and districts to the north and west including to the Federal Highway. Macs Reef Road is an important link that intersects with Bungendore Road at the subject site, it delivers traffic more directly to the north west and the City of Canberra to Bungendore and the Coast. It is a key thoroughfare for residents of Canberra to access the South Coast district of NSW and at peak periods can become very busy.

6.1.2 Potential impacts

Construction

Traffic impacts during construction will be the management of traffic using Bungendore and Macs Reef Roads. Traffic will be slowed and diverted around active work areas. Traffic will not be stopped for more than 10 minutes at a time. these impacts will be intermittent throughout the construction period of up to 12 weeks.

Operation

The proposal is designed to improve road user safety and comfort and allow for the road to be used as a detour route during the Honeysuckle Bridge construction. Any increases in traffic at the project site during operation would be due to ordinary growth in the region, rather than as a result of the proposal.

The proposal would provide operational benefits with respect to increased safety, road network performance & reliability and reduced maintenance costs.

6.1.3 Safeguards and management measures

Impact	Environmental safeguards	Responsibility	Timing
Traffic and access	A TMP must be prepared and controls established at the site in accordance with Contractor policies.	Contractor	Pre- construction
Access impacts	Works must not disrupt property or business access.	Contractor	Construction

6.2 **Biodiversity**

6.2.1 Existing environment

The majority of the project area is cleared and has been operated as a roadway for many years, vegetation persists in most of the road reserve particularly common exotic grasses, typically *Phalaris aquatica*.

In the landscape high conservation value vegetation occurs, much of this extends into the road reserves of Macs Reef Road and Bungendore Road including Grassy Boxgum Woodlands and in some cases their derived grasslands. This community

forms the Critically Endangered Ecological Community White Box - Yellow Box - Blakely's Red Gum Grassy Woodland and Derived Native Grassland in the NSW North Coast, New England Tableland, Nandewar, Brigalow Belt South, Sydney Basin, South Eastern Highlands, NSW South Western Slopes, South East Corner and Riverina Bioregions.

Snowgum trees also occur nearby which are also part of a Critically Endangered Ecological Community; Werriwa Tablelands Cool Temperate Grassy Woodland in the South Eastern Highlands and South East Corner Bioregions.

Neither of these Critically Endangered Ecological Communities occur in the project area. Vegetation present is exotic grassland dominated by pasture grasses. No trees or high conservation value vegetation will be impacted.

6.2.2 Direct Impacts

The proposal's impacts to vegetation will be to accommodate road widening and drainage improvement. This will impact an insignificant area of exotic grassland.

A very small area of exotic woody vegetation will require removal to accommodate signage and lighting for the works. The impact on tree removal has been considered through an Arboricultural Impact Assessment dated August 2024 and prepared by Homewood Consulting Pty Ltd. Figure 1 from this report is copied below, trees numbered 1 and 2 require removal to accommodate proposed lighting and a third requires removal to accommodate the fenceline which is beign altered for road widening. All impacted trees are exotic Pinus Radiata (Radiata Pine) and offer minimal value to biodiversity.



Figure 1: Sample of trees surveyed (Treeplotter, August 2024)

Figure 1 from Arboricultural Impact Assessment dated August 2024 and prepared by *Homewood Consulting Pty Ltd*. Showing trees surveyed by that assessment.

Along with these three radiata pine trees, several exotic Hawthorn *Crataegus monogyna* shrubs will be removed on the eastern side of the existing intersection. While these exotics will provide some habitat value to small native birds there is an abundance of this habitat in the local area and fauna using the shrubs subject to removal are not at risk of impact.

No other trees or shrubs will be removed.

Works are not near a watercourse and will not risk impacting fish as defined by the Fisheries Management Act 1994.

6.2.3 Indirect Impacts

There is a risk that plant and equipment used for the works may transport weed material along the site or from other sites and that if the site is not rehabilitated after works that erosion may become accelerated due to changes in surface-water flows. Mitigation measures provided in this REF address these risks.

6.2.4 Cumulative Impacts

Cumulative impacts have been considered as part of this assessment. Council aims to continually improve the condition of assets under its management. This programme improves safety for the community as well as reducing maintenance costs associated.

While construction impacts can affect local biodiversity to an extent, the cumulative environmental impact of improving and maintaining assets is generally positive.

6.2.5 Safeguards and mitigation measures

To minimise or eliminate potential adverse impacts on flora and fauna and to ensure that the project does not have a negative impact on biodiversity the following controls are recommended:

Impact	Environmental safeguards	Responsibility	Timing
Weed invasion	In order to manage the risk of indirect impacts of invasive species establishing in the project area, a weed management plan will be prepared and implemented to ensure the project does not increase the occurrence of weed species on the site or adjoining land the plan will incorporate the following practices;	Contractor	Pre- construction & Post- construction
	Plant and equipment will be cleaned prior to entering any part of the site ensuring no mud/ soil or vegetation material is imported into the area		
	The site manager will ensure that procedures are in place to ensure plant and equipment entering the site are clean and free of mud, soil and vegetation material.		
	A weed management plan will be prepared and implemented to ensure the project does not increase the occurrence of weed species on the site or adjoining land.		

6.3 Soil and water

6.3.1 Existing environment

The proposed works occur in the Yass River sub-catchment of the Murrumbidgee catchment. Runoff from the project area flows eventually to Burrinjuck Dam an important irrigation water supply reservoir.

Soils on the site are generally stable, protected by vegetation and stable slopes.

6.3.2 Potential impacts

Construction impacts

There is potential for disturbances to soils through establishment of site compound and stockpile areas, excavations, vehicle and plant movement and vegetation removal. Exposed soils if unmanaged will be placed at risk of accelerated erosion and therefore sedimentation of receiving waters.

As works are minor and high in the catchment the consequences of impacts are minor on downstream reservoirs, however, receiving waters will be at risk of impact if sediment laden runoff enters waterways. There is also a risk of oil spillage from broken hydraulic lines on plant and equipment. It is important to manage these risks to minimise the chances of them occurring and to be prepared in the event of a situation that may result in water pollution.

Works are not close to a watercourse requiring a permit under the Fisheries Management Act 1994.

Operation impacts

Sealing of the road surfaces will reduce sedimentation impacts on receiving waters.

6.3.3 Safeguards and mitigation measures

Impact	Environmental safeguards	Responsibility	Timing
Soil and Water Management	 An Erosion and Sediment Control Plan (ESCP) will be prepared to mitigate impacts during construction including the following:	Contractor	Pre-Construction

Impact	Environmental safeguards	Responsibility	Timing
Water and soil pollution	 A spill management plan must be developed which includes measures for refuelling, maintenance of machinery and response and notification procedures. It must also include the following measures: Machinery must be regularly checked to ensure there is no oil, fuel or other liquids leaking from the machinery, including daily checks of machinery and equipment to be used for construction. A spill kit including boom must be stored on onsite at all times to manage any potential accident spills. Where possible, re-fuelling of vehicles and equipment will be undertaken in an impervious bunded area at the compound site, located 50 metres from any creek or drainage line. When re-fuelling remote from compound, trained staff will observe at all times and tanks will have an automatic cut off when full and vehicles will carry a temporary bund and spill kit. If a spill occurs, follow the Environmental Incident Classification and Management Procedure and notify the Environmental Officer as soon as practicable. 	Contractor	Pre-construction & During construction

6.4 Noise and vibration

6.4.1 Existing environment

The project site occurs in an rural area with widespread rural residential development. The greatest source of noise and vibration currently in the vicinity is the traffic using the local road network. Several dwellings occur within 300m of the project area.

6.4.2 Potential impacts

Construction noise impacts

Given the nature of the works noise generated is not expected to impact dwellings.

There is very low risk that works may cause discomfort for those residing in the area. Noise generated by the works is not likely to impact businesses or economic activities.

Construction vibration impacts

Vibration emitted by road construction is unlikely to impact the comfort of nearby landholders or cause damage to architectural structures.

Operational noise & vibration impacts

Works will result in noise and vibration impacts to sensitive receivers being reduced due to improved quality of the road travel surface.

6.4.3 Safeguards and mitigation measures

Impact	Environmental safeguards	Responsibility	Timing
Work hours	Works to be carried out during normal work hours (i.e. 7am to 6pm Monday to Friday; 7am to 5pm Saturdays).	Contractor	Construction

6.5 Air quality

6.5.1 Existing environment

The existing air quality is high being a rural environment with minimal development. Traffic using local roads emit exhaust gases and generate dust intermittently interrupting air quality for relatively short periods of time.

6.5.2 Potential impacts

Construction

Earthworks, construction activities and vehicle movements will generate dust. This impact is very minor and insignificant if managed through current best practice.

Operation

The improvement of the road infrastructure is likely to result in improved air quality as the road travel surface and drainage will be in better condition and road design will improve traffic flow.

6.5.3 Safeguards and mitigation measures

Impact	Environmental safeguards	Responsibility	Timing
Air pollution	Dust suppression measures (including watering and covering exposed areas) are to be used to minimise or prevent air pollution and dust.	Contractor	Construction
	Vehicles will be maintained to manufacturer's requirements and regular checks are to be made to ensure they are operating efficiently.		
	Vehicles transporting waste or other materials that may produce		

Impact	Environmental safeguards	Responsibility	Timing
	odours or dust are to be covered during transportation.		

6.6 Heritage

6.6.1 Existing environment

An AHIMS search was undertaken which identifies no Aboriginal sites or places in the vicinity of the project area, included at Appendix 2.

The Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales 2010 has been followed and summarised below, the generic due diligence process is shown in the flow diagram at Appendix 2.

Step 1; Will the activity disturb the ground surface or any culturally modified trees?

Yes, road works will require minor disturbance of the ground surface for sealing and drainage maintenance.

Step 2; Are there any:

- a) relevant confirmed site records or other associated landscape feature information on AHIMS? and/or
- b) any other sources of information of which a person is already aware? and/or
- c) landscape features that are likely to indicate presence of Aboriginal objects?

No.

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?

Yes, works will be restricted to existing road surfaces, and drainage structures.

AHIP application not necessary. Proceed with caution. If any Aboriginal objects are found stop work and notify DECCW. If human remains are found, stop work, secure the site and notify the NSW Police and DECCW.

The result of this due diligence process is that an Aboriginal Heritage Impact Permit is not required.

No listed heritage items occur in the vicinity of the project area.

There is potential for other items or artefacts of cultural significance to be present in the study area reflecting the long occupation of the land by European and Aboriginal communities.

6.6.2 Potential impacts

No impacts to Aboriginal or non-Aboriginal heritage are expected however safeguards below will address nearby AHIMS records and unexpected finds.

6.6.3 Safeguards and mitigation measures

Impact	Environmental safeguards	Responsibility	Timing
Unexpected Aboriginal heritage	 Any work crews employed in ground disturbing works within the study area must be made aware of the legislative protection of Aboriginal sites and objects at the induction and toolbox talks and will be recorded. All site staff are to be advised that it is an offence under the NPW Act to harm an Aboriginal object without appropriate approval. If objects are encountered which are suspected to be of Aboriginal heritage value work is to stop and Council will seek advice from a representative of the Local Aboriginal Land Council and an archaeologist with expertise in Aboriginal heritage. The recommendations provided by any subsequent archaeological assessment should be implemented as part of the project. 	Contractor	Continuous
Unexpected heritage	If historical artefacts that become evident during excavation, work in the immediate vicinity should cease until an investigation is undertaken with guidance from Council's heritage advisor.	Contractor	Continuous

6.7 Land use and socio-economic

6.7.1 Existing environment

The economic environment of this area is largely driven by agricultural production, a sparse population lives in the district that imports most of its products and services from the nearby rural centres of Bungendore and Queanbeyan. Road transport is critical to the maintenance of the economic environment of the local community.

6.7.2 Potential impacts

The potential to disrupt traffic using Bungendore and Macs Reef Roads is the only potential negative impact on the local economy. This is likely to be minor, short term and will not significantly impact any industry or business.

No access to a business or residence will be impeded during construction.

6.7.3 Safeguards and mitigation measures

Impact	Environmental safeguards	Responsibility	Timing
Changes in local access and traffic movement	 Road closures will be minimised as far as practical Detours will be adequately sign posted during road closure. 	Contractor	Construction and operation
Complaints	Complaints received are to be recorded and attended to promptly in accordance with Council's complaints handling procedures.	Contractor	Construction

6.8 Waste and resource management

Waste management would be undertaken in accordance with the *Waste Avoidance* and *Resource Recovery Act 2001*. The objectives of this Act that are applicable to the proposal are:

- (a) to encourage the most efficient use of resources and to reduce environmental harm in accordance with the principles of ecologically sustainable development,
- (b) to ensure that resource management options are considered against a hierarchy of the following order:
 - (i) avoidance of unnecessary resource consumption,
 - (ii) resource recovery (including reuse, reprocessing, recycling and energy recovery),
 - (iii) disposal,
- (c) to provide for the continual reduction in waste generation,
- (d) to minimise the consumption of natural resources and the final disposal of waste by encouraging the avoidance of waste and the reuse and recycling of waste,
- (e) to assist in the achievement of the objectives of the Protection of the Environment Operations Act 1997.

6.8.1 Waste sources

The proposed works would generate general rubbish waste from works crews and vegetation from clearing and pruning works.

General waste would be temporarily stored on site prior to disposal at an appropriately licensed waste facility.

Waste vegetation will be chipped onsite and any excess used in other Council or community projects.

6.8.2 Safeguards and mitigation measures

Impact	Environmental safeguards	Responsibility	Timing
Production of packaging materials and other	The resource management hierarchy must be followed at all times throughout the proposal: avoid resource consumption → recover recyclable materials for	Contractor	Construction

Impact	Environmental safeguards	Responsibility	Timing
construction waste	reuse → dispose material unable to be recycled		
Waste on site	Waste material, other than vegetation and tree mulch, must not be left on site once the works have been completed	Contractor	Construction
	Working areas must be maintained, kept free of rubbish and cleaned up at the end of each working day		
	Waste timber will be stored at Councils depot for reuse in Council or community projects		
Production of solid putrescibles waste	Proper bins (with lids) must be available for the temporary storage of putrescible waste within the site compound and then disposed of by a licensed contractor	Contractor	Construction

6.9 Cumulative impacts

It is a requirement under Part 8 Infrastructure and Environmental Impact Assessment of the Environmental Planning and Assessment Regulation 2021 to take into account any cumulative environmental impacts with other existing or likely future activities. Cumulative impacts relate to the combined potential effects of different impact areas of the proposal as well as the potential interaction with other proposals in the local area.

6.9.1 Potential impacts

As this is a minor and beneficial proposal it is considered unlikely to be contributing in any significant way to any cumulative impacts.

6.10 Summary of beneficial effects

The proposal is expected to improve traffic safety and flow. This will provide benefits to the local community and value for money for ratepayers.

6.11 Summary of adverse effects

Construction works will require temporary traffic disruptions and amenity impacts to the site. These impacts are minor and considered acceptable given the benefits the proposal will generate.

7 Environmental management

7.1 Environmental management plans

Numerous safeguards and mitigation measures have been provided by this REF that manage potential adverse impacts of the proposal. Whilst these measures are implemented and incorporated into the detailed design and applied during the construction and operation of the proposal any impacts are considered acceptable given the benefit of the proposal.

A Construction Environmental Management Plan (CEMP) including an Erosion and Sediment Control Plan (ESCP) will be prepared that specifies safeguards and mitigation measures provided by this REF. This CEMP, and any activity/ contractor specific appendices will provide a framework that clearly identifies the implementation of these measures including responsible officers and monitoring and review processes.

The CEMP and any appendices will be certified by the Council Environment Officer or project manager prior to construction commencement. Plans will be working documents, subject to ongoing change and updated as necessary to respond to changing conditions.

7.2 Summary of safeguards and management measures

Environmental safeguards outlined in this document will be implemented during the project. These safeguards will minimise any potential adverse impacts arising from the proposed works on the surrounding environment. The safeguards and management measures are summarised in Table 7-1 of this report and must be kept on the site during works, this may be via incorporation into the CEMP.

Table 7-1 Summary of safeguards and mitigation measures.

No.	Impact	Environmental safeguards	Responsibility	Timing
1	General	 All environmental safeguards must be incorporated within the following: Construction Environmental Management Plan Detailed design stage Contract specifications for the proposal Contractor's Environmental Management Plan 	Contractor	Pre- construction
2	General	 All businesses and residences likely to be affected by the proposed works must be notified at least five working days prior to the commencement of the proposed activities. 	Contractor	Pre- construction
3	Traffic and access	A TMP must be prepared (in accordance with Roads and Maritime <i>Traffic Control at Work Sites Manual</i> (RTA, 2010) and Roads and Maritime QA Specification G10) and controls established at the site in accordance with Roads and Maritime's <i>Traffic Controls at Work Sites</i> .	Contractor	Pre- construction
4	Traffic delays	 Road users must be advised of the proposed work signage in the vicinity of the works. Detours will be adequately sign posted during road closure. 	Contractor	Pre- construction & Construction
5	Access impacts	Residents in the vicinity of the works are to be notified of the proposed works at least two weeks prior to commencement of works.	Contractor	Pre- construction
6	Weed invasion	In order to manage the risk of indirect impacts of invasive species establishing in the project area, a weed management plan will be prepared and implemented to ensure the project does not increase the occurrence of weed species on the site or adjoining land the plan will incorporate the following practices; • Plant and equipment will be cleaned prior to entering any part of the site ensuring no mud/ soil or vegetation material is imported into the area The site manager will ensure that procedures are in place to ensure plant and equipment entering the site are clean and free of mud, soil and vegetation material.	Contractor	Pre- construction

No.	Impact	Environmental safeguards	Responsibility	Timing
7	Soil and Water Management	 An Erosion and Sediment Control Plan (ESCP) will be prepared to mitigate impacts during construction including the following: Erosion and sedimentation controls are to be installed prior to construction. Disturbed areas are to be progressively stabilised Erosion and sedimentation controls are to be checked and maintained on a regular basis (including clearing of sediment from behind barriers) and records kept and provided on request. Erosion and sediment control measures are not to be removed until the works are complete and areas are stabilised. Work areas are to be stabilised progressively during the works. 	Contractor	Pre- construction, Construction & Post- construction
8	Water and soil pollution	 A spill management plan must be developed which includes measures for refuelling, maintenance of machinery and response and notification procedures. It must also include the following measures: Machinery must be regularly checked to ensure there is no oil, fuel or other liquids leaking from the machinery, including daily checks of machinery and equipment to be used for construction. A spill kit including boom must be stored on onsite at all times to manage any potential accident spills. Where possible, re-fuelling of vehicles and equipment will be undertaken in an impervious bunded area at the compound site, located 50 metres from any creek or drainage line. When re-fuelling remote from compound, trained staff will observe at all times and tanks will have an automatic cut off when full and vehicles will carry a temporary bund and spill kit. If a spill occurs, follow the Environmental Incident Classification and Management Procedure and notify the Environmental Officer as soon as practicable. 	Contractor	Pre-construction, Construction & Post- construction

No.	Impact	Environmental safeguards	Responsibility	Timing
9	Construction noise and	Works to be carried out during normal work hours (i.e. 7am to 6pm Monday to Friday; 7am to 5pm Saturdays).	Contractor	Pre- construction
	vibration	 A complaints register is to be established. All complaints received during the works will be recorded into the register. Complaints will be responded to promptly. 		
		Noise monitoring would be undertaken at any sensitive receivers which lodge a noise complaint, and methods of reducing noise levels to an acceptable level will be investigated.		
		Construction works must be carried out in accordance with Roads and Maritime Environmental Noise Management Manual (G36 Specification).		
		Noise impacts are to be minimised in accordance with Practice Note 7 in the RTA's Environmental Noise Management Manual and RTA's Environmental fact sheet No. 2- Noise management and Night Works.		
10	Air pollution	Dust suppression measures (including watering and covering exposed areas) are to be used to minimise or prevent air pollution and dust.	Contractor	Construction
		Vehicles will be maintained to manufacturer's requirements and regular checks are to be made to ensure they are operating efficiently.		
		Vehicles transporting waste or other materials that may produce odours or dust are to be covered during transportation.		
11	Aboriginal heritage	Any work crews employed in ground disturbing works within the study area must be made aware of the legislative protection of Aboriginal sites and objects at the induction and toolbox talks and will be recorded.	Contractor	Continuous
		All site staff are to be advised that it is an offence under the NPW Act to harm an Aboriginal object without appropriate approval.		
		If objects are encountered which are suspected to be of Aboriginal heritage value work is to stop and Council will seek advice from a representative of the Local Aboriginal Land Council and an archaeologist with expertise in Aboriginal heritage. The recommendations provided by any subsequent archaeological assessment should be implemented as part of the project.		

No.	Impact	Environmental safeguards	Responsibility	Timing
12	Unexpected heritage	If historical artefacts that become evident during excavation, work in the immediate vicinity should cease until an investigation is undertaken with guidance from Council's heritage advisor.	Contractor	Continuous
13	Changes in local access and traffic movement	Road closures will be minimised as far as practical.	Contractor	Construction and operation
14	Complaints	Complaints received are to be recorded and attended to promptly in accordance with Council's complaints handling procedures.	Council	Construction
15	Production of packaging materials and other construction waste	The resource management hierarchy must be followed at all times throughout the proposal: avoid resource consumption → recover recyclable materials for reuse → dispose material unable to be recycled.	Contractor	Construction
16	Waste on site	 Waste material, other than vegetation and tree mulch, must not be left on site once the works have been completed. Working areas must be maintained, kept free of rubbish and cleaned up at the end of each working day Waste timber will be stored at Councils depot for reuse in Council or community projects 	Contractor	Construction
17	Production of solid putrescibles waste	Proper bins (with lids) must be available for the temporary storage of putrescible waste within the site compound and then disposed of by a licensed contractor.	Contractor	Construction

7.3 Licensing and approvals

No licences or approvals have been identified as being necessary for this proposal. If the scope of works were to change, this requirement may change.

8 CI171 Review of environmental factors

In addition to the requirements of the *Is an EIS required?* guideline as detailed earlier in this document, the following factors, provided in clause 171 of the Environmental Planning and Assessment Regulation 2021, have also been considered to assess the likely impacts of the proposal on the environment.

Factor	Impact	
a. The environmental impact on a community?		
The proposal would improve infrastructure and services/ economic activity for the community.	Long term positive	
b. The transformation of a locality?		
The proposal is maintenance to existing assets and will not cause significant transformation.	Nil	
c. The environmental impact on the ecosystems of the locality?		
The proposal will not significantly impact terrestrial ecosystems.	Nil	
d. Reduction of the aesthetic, recreational, scientific or other environmental quality or value of a locality?		
The proposal would have a short-term impact of visual amenity during construction however no long term impacts are likely.	Minor short term	
e. Any effects on a locality, place or building having aesthetic, anthropological, archaeological, architectural, cultural, historical, scientific or social significance or other special value for present or future generations?	Nil	
The proposal is unlikely to impact these anthropological factors.		
f. The impact on the habitat of protected fauna (within the meaning of the <i>National Parks and Wildlife Act 1974</i>)?	Nil	
No impact.		
g. The endangering of any species of animal, plant or other form of life, whether living on land, in water or in the air?	Nil	
The proposal would not endanger any species of animal, plant or other form of life.	INII	
h. Long-term effects on the environment?		
The proposal would not significantly change the environment, long term effects will be positive, due to improved road integrity.	Positive	
i. Degradation of the quality of the environment?	Minor short term	
Short term amenity will be affected, no long-term degradation.		

Factor	Impact
j. Risk to the safety of the environment? The proposal would pose minimal risk to the safety of the environment. Recommendations in this report ameliorate residual risk.	Manageable
k. Reduction in the range of beneficial uses of the environment?There would be no reduction in the range of beneficial uses of the environment.	Nil
I. Pollution of the environment? The proposal would be likely to result in short term air quality and noise impacts. These would be managed accordingly and are considered short term and minor.	Minor short-term negative
 m. Environmental problems associated with the disposal of waste? Waste generated is minor and managed within Council's existing services. 	Nil
n. Increased demands on resources (natural or otherwise) that are, or are likely to become, in short supply? The proposal is unlikely to result in materials becoming in short supply, fuel use will be consistent with existing requirements of Council.	Nil
o. Cumulative environmental effect with other existing or likely future activities? The proposal will have insignificant cumulative effects.	Nil
 p. Impact on coastal processes and coastal hazards, including those under projected climate change conditions? As the site is not in a coastal area there would be no impact on coastal processes and coastal hazards, including those under projected climate change conditions. 	Nil
(q) applicable local strategic planning statements, regional strategic plans or district strategic plans made under the Act, Division 3.1	Nil
(r) other relevant environmental factors.	Nil

9 Conclusion

This proposal has been assessed under Part 5 of the EP&A Act REF process. It has examined and taken into account to the fullest extent practical all matters affecting or likely to affect the environment by reason of the proposed activity. This has included consideration of impacts on threatened species, populations and ecological communities and their habitats, critical habitat, other protected fauna and native vegetation. The REF has also considered soil and water impacts, Aboriginal and non-Aboriginal heritage impacts and a range of socio economic and amenity impacts.

From the assessment of the biophysical, socio-economic and legislative environment above it is concluded that there is likely to be no significant impact on the environment if this proposal proceeds incorporating recommendations provided by this REF.

- No significant impacts on terrestrial biodiversity are likely, recommendations in this report manage residual risk.
- No significant impacts on heritage values are likely, recommendations in this report manage residual risk.
- Potential pollution impacts on air, soils and water are manageable through current best practices
- The proposal has the potential to cause minor short term visual and noise impacts during construction. These are considered acceptable and manageable impacts

Environmental impacts of the proposal are not likely to be significant and therefore it is not necessary for an environmental impact statement to be prepared and approval to be sought for the proposal from the Minister for Planning under Part 5.1 of the EP&A Act. The proposal is unlikely to affect threatened species, populations or ecological communities or their habitats, within the meaning of the BC Act or FM Act, therefore a Species Impact Statement is not required.

The proposal is also unlikely to affect Commonwealth land or have an impact on any matters of national environmental significance and therefore referral to the Commonwealth Environment Minster for approval is not required.

10 Certification

This review of environmental factors provides a true and fair review of the proposal in relation to its potential effects on the environment. It addresses to the fullest extent possible all matters affecting or likely to affect the environment as a result of the proposal.

Patrick Guinane

Environmental Consultant

Macrozamia Environmental

Date: 17 April 2025

I have examined this review of environmental factors and accept the review of environmental factors on behalf of Queanbeyan Palerang Regional Council.

Sanyay Perumal	treyton proctor
Name Sanjay Perumal	Name Treyton Proctor
Project Manager	Design Coordinator
Queanbeyan Palerang Regional Council	Queanbeyan Palerang Regional Council
17 April 2025 11:08 AM AEST	17 April 2025 2:13 PM AEST
Date:	Date:

Authorising Managers Approval

Luceille Yeomans

Name _____

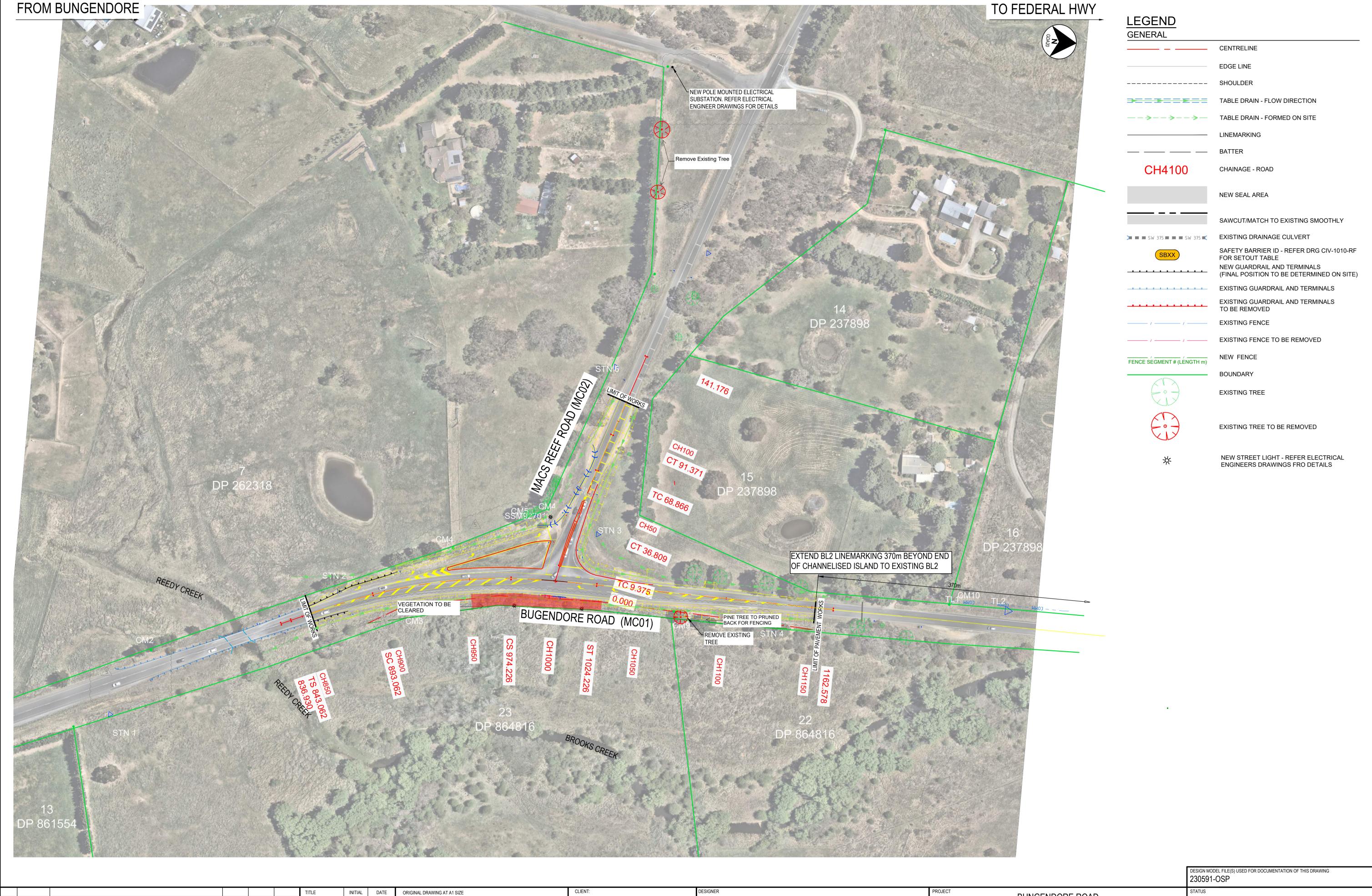
Title ____Principal Planner - Development Assessment

Queanbeyan Palerang Regional Council

17 April 2025 | 2:46 PM AEST Date:

Appendix 1 – Works Tender Plans

Queanbeyan Palerang Regional Council



| 4 | 25.04.24 | ISSUED FOR TENDER | SWC | M.C. | M.C. | DESIGNER | SWC | M.C. | M.C. | DESIGNER | SWC | M.C. | M.C. | M.C. | DESIGNER | SWC | M.C. | M.C. | M.C. | DESIGNER | SWC | M.C. | M.C. | M.C. | DESIGNER | SWC | M.C. | M.C. | M.C. | DESIGNER | SWC | M.C. | M.C. | M.C. | DESIGNER | SWC | M.C. | M.C. | M.C. | DESIGNER | SWC | M.C. | M.C. | M.C. | DESIGNER | SWC | M.C. | M.C. | M.C. | DESIGNER | SWC | M.C. | M.C. | M.C. | DESIGNER | SWC | M.C. | M.C. | M.C. | DESIGNER | SWC | M.C. | M.C. | M.C. | DESIGNER | SWC | M.C. | M.C. | M.C. | DESIGNER | SWC | M.C. | M.C. | M.C. | DESIGNER | SWC | M.C. | M.C. | M.C. | DESIGNER | SWC | M.C. | M.C. | DESIGNER | SWC | M.C. | M.C. | M.C. | DESIGNER | SWC | M.C. | DESIGNER | SWC | M.C. | DESIGNER | SWC | M.C. | M.C. | DESIGNER | SWC | DESIGNER | SWC | DESIGNER | SWC | M.C. | DESIGNER | SWC | DESIG

15.04.25 ISSUED FOR CONSTRUCTION

20.09.24 FINAL BATTER 1IN2.5, ELEC, SAFETY BARRIERS

CES M.C.

T.P.

PRAFTING CHECK

 SWC
 22.02.24

 CES
 22.02.24

 SWC
 22.02.24

 SWC
 22.02.24

 SWC
 SWC

 SWC
 SWC

 T.P.
 22.02.24

 CO-ORDINATE SYSTEM: MGA2020 Zone 55
 HEIGHT DATUM: A.H.D.71





BUNGENDORE ROAD
BUNGENDORE AND MACS REEF ROAD INTERSECTION UPGRADES
SAFETY UPGRADE
OVERALL SITE PLAN

ISSUED FOR CONSTRUCTIO			
	VOLUME	TfNSW REGISTRATION No	
	PHASE	DRAWING No	REV
	IFT	230591-CIV-1001-OV	Α

Appendix 2 – AHIMS Search Results & Due Diligence Chart

Client Service ID: 845116

Date: 30 November 2023

Macrozamia Environmental

473 Tathra Road

Kalaru New South Wales 2550

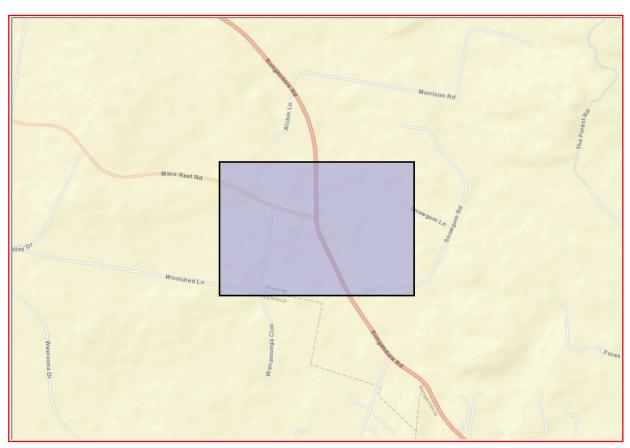
Attention: Pat Guinane

Email: pat@macrozamia.com.au

Dear Sir or Madam:

AHIMS Web Service search for the following area at Lat, Long From: -35.2119, 149.3583 - Lat, Long To: -35.2031, 149.3737, conducted by Pat Guinane on 30 November 2023.

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



A search of Heritage NSW AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

0 Aboriginal places have been declared in or near the above location.*

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

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

Important information about your AHIMS search

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

ABN 34 945 244 274

Email: ahims@environment.nsw.gov.au

Web: www.heritage.nsw.gov.au

• This search can form part of your due diligence and remains valid for 12 months.