

Camp Road Structure Plan

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1. BACKGROUND AND INTENT

The Employment Lands Strategy, adopted by Dubbo Regional Council on 11 March 2019, included several recommendations with respect of the Camp Road precinct. One such recommendation was to prepare and finalise a Structure Plan to provide overarching guidance for the future development of this precinct.

The role of the Structure Plan is as follows:

- To identify and recognise high level environmental constraints to development, including areas containing remnant vegetation.
- To identify the need for and the provision of buffer areas from tourist uses within the precinct and from rural land to the south.
- To consider the overall future vehicular access and movement network throughout the precinct.
- To ensure any development in the precinct does not impact the integrity and operations of existing tourist activities, including the Taronga Western Plains Zoo.
- To consider implications associated with the possibility of a future Distributor Road through the precinct connecting the Newell Highway to the Southern Distributor Road and ultimately the Mitchell Highway.
- To consider how dwelling houses could be planned for within the precinct, having regard to the objectives of the SP3 Tourist zone and the proximity of the land to the Taronga Western Plains Zoo.
- To ensure the precinct does not develop to a large lot residential density.
- To consider the most appropriate lot density having regard to identified constraints, buffer areas, future development in the precinct and the role of Camp Road.

The location of the Camp Road Precinct in respect of Dubbo is shown in Figure 1.



Figure 1. Location of Camp Road Precinct

2. TOPOGRAPHY

The precinct contains three (3) distinct clusters of vegetation as shown in Figure 2. These clusters are predominantly comprised of Western Grey Box Woodland, Black Cypress Pine Woodland as well as native grasses.

The precinct contains several watercourses, all intermittent, un-named watercourses. The watercourses are predominantly 1st and 2nd order streams with a 3rd and 4th order on the eastern portion of the precinct. Numerous dams are located on these watercourses.

An overview of the vegetation and watercourses within the precinct are shown on Figure 2.

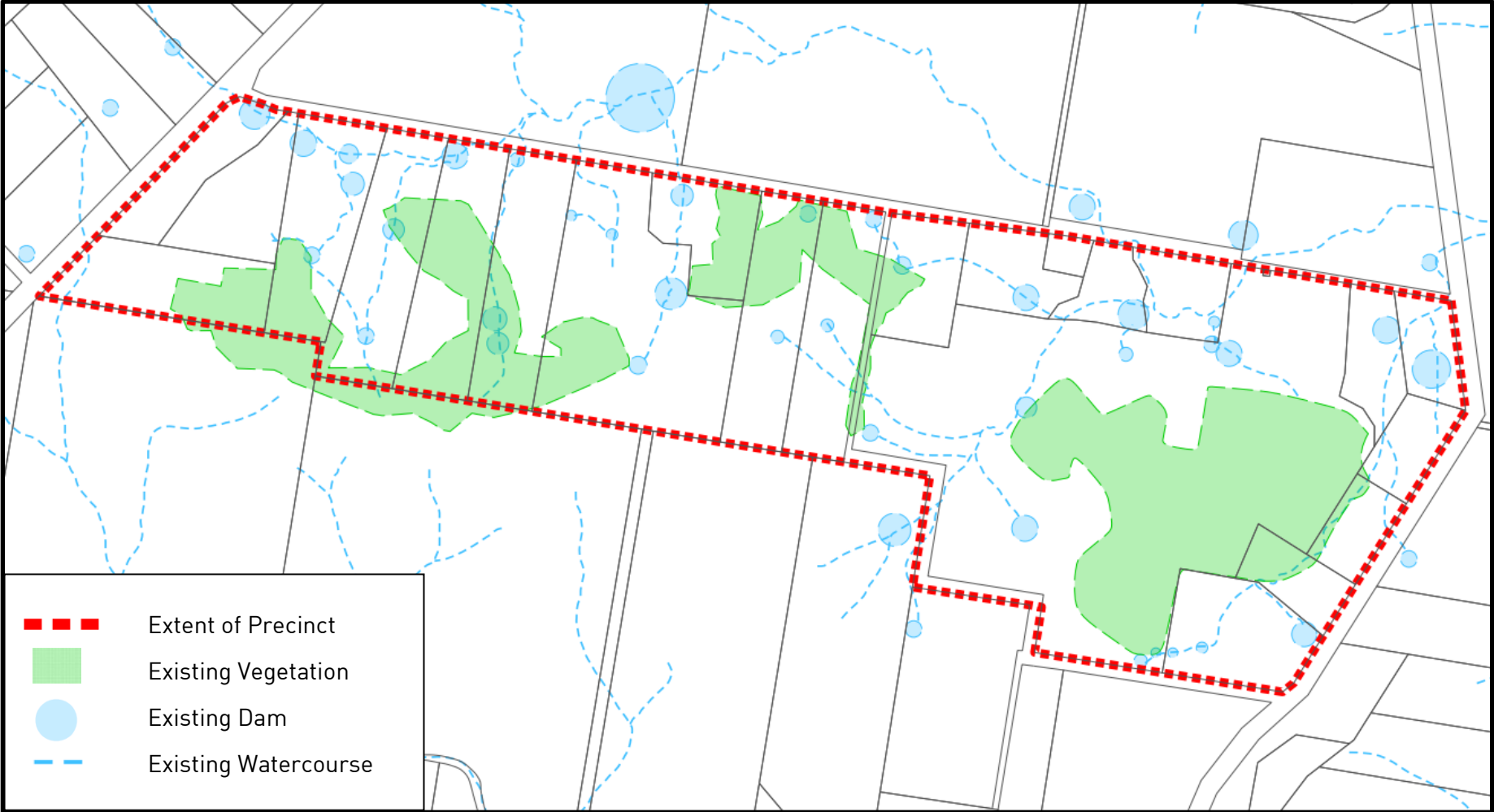


Figure 2. Existing vegetation and watercourses



3. BUFFER AREAS

Development within the Precinct will be guided by three distinct buffer areas. These includes:

- A 50 metre buffer to the land zoned RU1 Primary Production to the south;
- A 50 metre buffer to the existing viticulture use;
- A 100 metre buffer to the southern extent of the existing function centre development.

The proposed buffer areas are shown in Figures 6, 7 and 8.

The buffer areas apply to new residential development. Existing development, such as dwellings, located within the buffer areas are not prohibited from operating or undertaking further alterations or additions, subject to relevant planning approvals.

i) Vineyard

The existing viticulture use is a low-scale operation which hand-pick and hand-spray rather than utilise commercial scale machinery. Given the limited size of the vineyard, it is highly unlikely that aerial spraying would be adopted in the future. Analysis of prevailing winds has been undertaken and is shown in Figures 3 and 4. Based on this analysis, morning winds are most likely to be from south to north and east and west with afternoon winds most likely north west to north east or west to east.

Department of Primary Industries suggests that 3-10km/h is the ideal safe wind speed for spraying. Considering prevailing winds, spraying of vines is able to be undertaken whereby minimal impacts could occur on adjoining properties to the south and west based on wind direction and speed. However, the use of mitigating measures would be required to ensure land use conflict is minimised.

Noting that the viticulture use is of a smaller scale, the equipment used, is fully developed upon the site with minimal opportunities to further intensify and prevailing winds, it is considered that the NSW Department of Primary Industries standard buffer of 250 metres could be reduced with the use of mitigation measures. In this case, it is considered that a 50 metre buffer with the use of a 30m wide vegetated planting screen to be located within the buffer area, such as the example shown in Figure 5, would be appropriate to ensure land use conflict is minimised into the future.

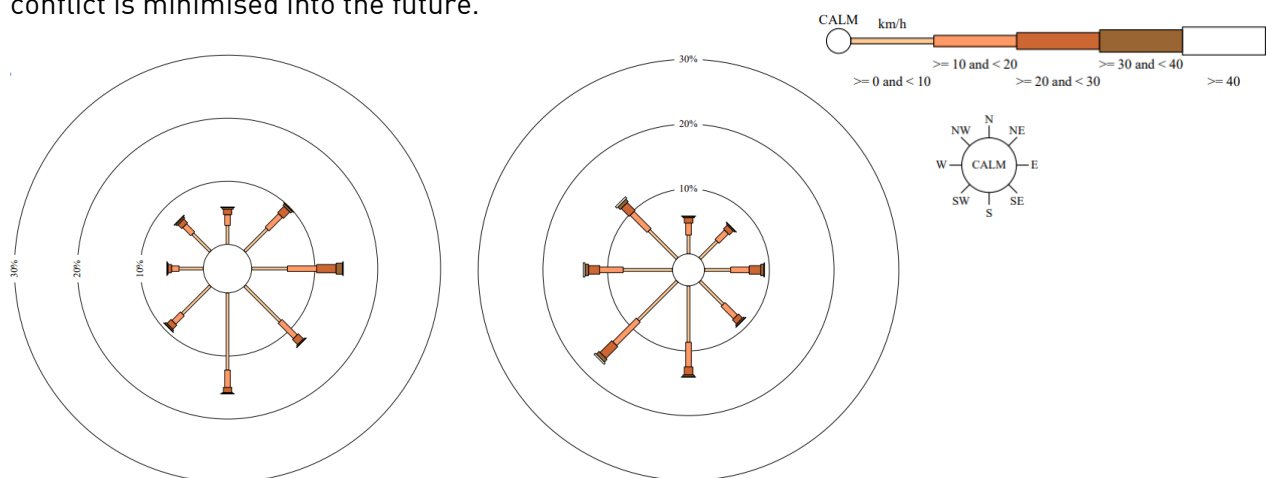


Figure 3. Wind Rose (9am)

Figure 4. Wind Rose (3pm)

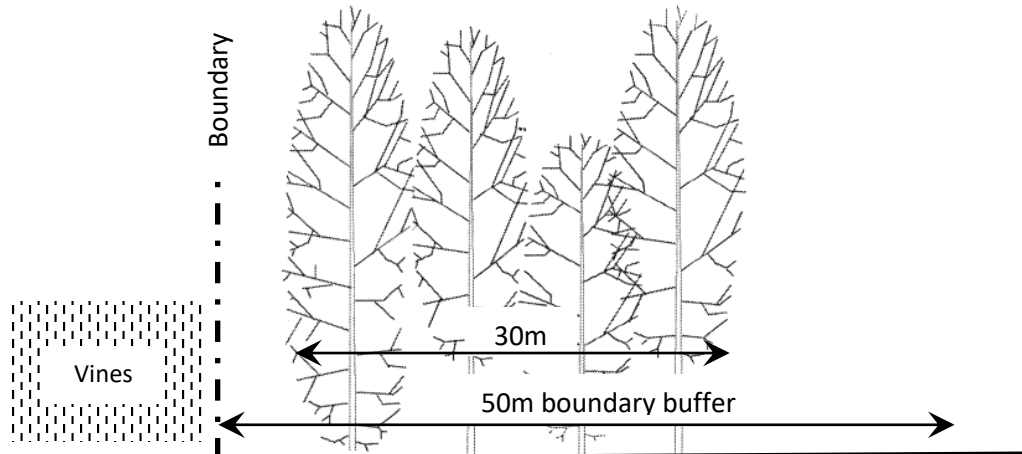


Figure 5. Example of buffer adjoining southern boundary of the vineyard

ii) Observatory

The observatory has the potential to be impacted by local light sources, from both tourist and dwelling development. With the proposed 50 metre buffer from the viticulture use, the observatory would be located approximately 220 metres north and 330 metres east of any new development opportunities. To assist with minimising light pollution on the observatory, the following should be considered:

- Vegetation planting to provide a screen within the 50 metre buffer as shown in Figures 5 and 6;
- Limiting outdoor lighting fixtures to two (2) per dwelling with lights covered so as not to protrude past 30 degrees horizontal;
- Outdoor lighting fixtures use motion sensors;
- No street lights on Camp Road or in the precinct; and
- No sky lights in any future dwellings.

It is noted that the Dark Sky Planning Guidelines applies to the former Dubbo City Council LGA. However, these guidelines seek to protect the night sky for the Siding Springs Observatory located in Coonabarabran. Additional measures such as those noted above are required to provide localised controls for the protection of the continued operation of the Observatory.

iii) Agriculture

The land immediately south of the precinct is zoned RU1 Primary Production. The land has historically undertaken the grazing of stock on native grasses. The topography of the land within the south-western portion of the precinct contains rock on steeper hills with dense vegetation, which is not conducive to high levels of agricultural output. Some of this area has been marked 'non-grazing area' based on the topography and advice from land owners in the area that minimal native grasses grow in this area as a result of the rock.

Buffers act to separate uses which have the potential to result in land use conflict including noise, odour or visual impacts. A 50m buffer is proposed along the southern boundary of the precinct. Given the identification of the lower quality grazing area and the existing dwellings located along the boundary, there is unlikely to be any increased land use conflict along this section.

Given the identification of the 'non-grazing area', the 50 metre buffer should apply from where the agricultural (stock grazing) use occurs, whereby the precinct is only minimally impacted. It is therefore considered appropriate to apply a 15 metre setback being a standard setback from the Dubbo Development Control Plan 2013. This will apply to new development only and provide a suitable separation distance ensuring land use conflict is minimised.

iv) Watercourses

The precinct contains several watercourses. Future development will need to consider potential requirements for buffers from these watercourses as outlined in the NSW Natural Resource Regulator's "Guidelines for Controlled Activities on Waterfront Land". These buffers range from 20 metres either side for a 2nd order watercourse to 40 metres either side for a 4th order watercourse, however this is a matter for individual Development Applications.

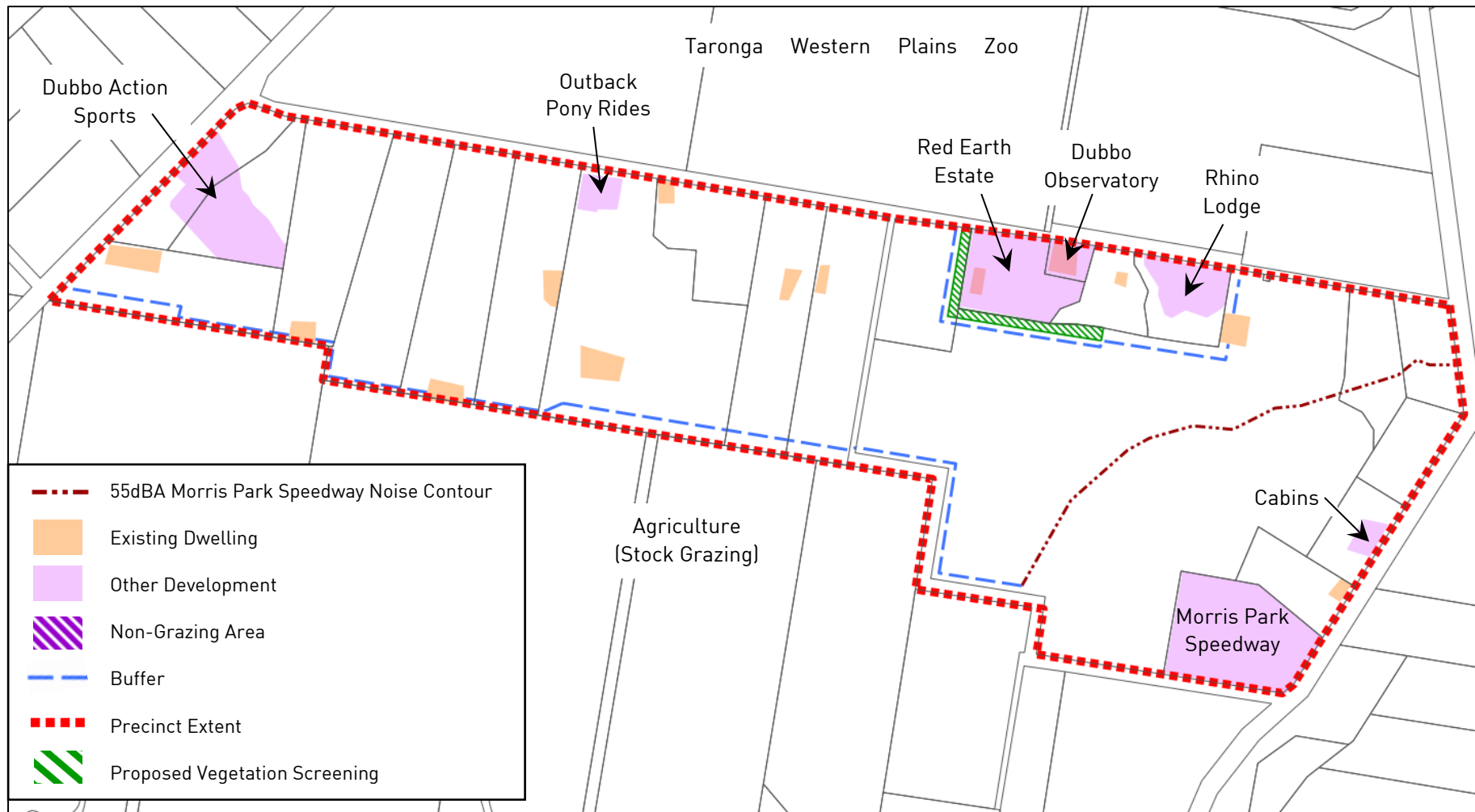


Figure 6. Proposed Buffers

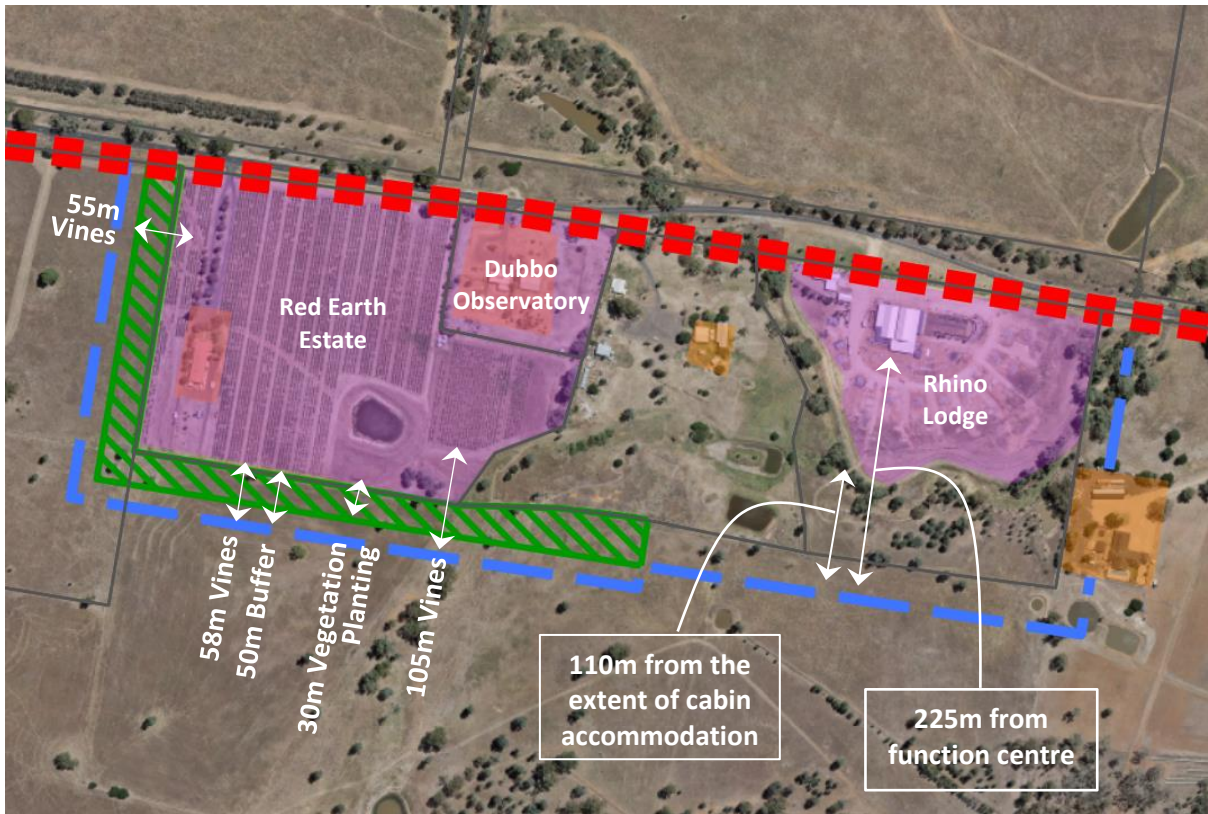


Figure 7. Proposed Buffer Areas Surrounding Vineyard, Observatory and Function Centre

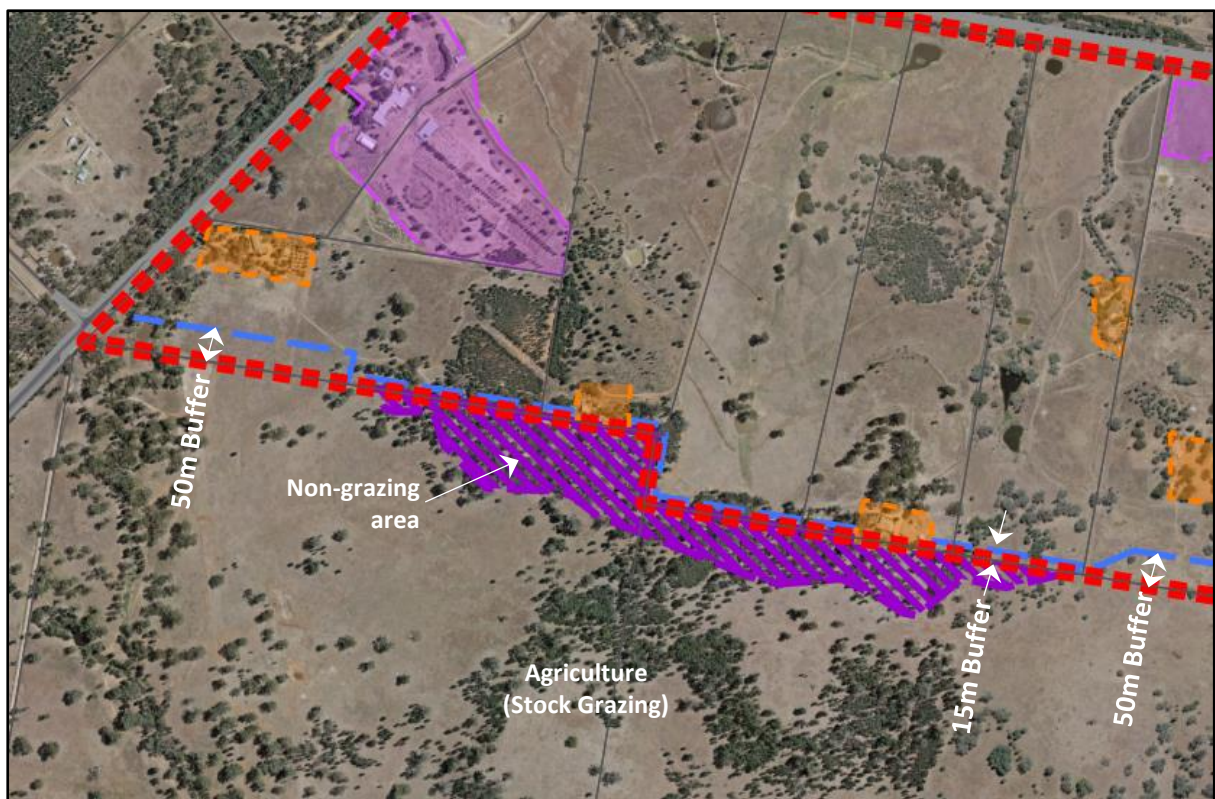


Figure 8. Proposed Buffer along the southern boundary between the existing agricultural area.

4. MORRIS PARK SPEEDWAY

The Morris Park Speedway is located in the south-eastern corner of the Precinct. The Speedway has the potential to impact the overall development of land given the noise created from motorsport activities. As there is no noise criteria specific to motorsport, the Structure Plan has adopted and mapped the 55 dBA acoustic impact line. This provides guidance based on the NSW Road Noise Policy for night time assessment criteria whereby suitable acoustic treatments can be undertaken for individual dwelling houses based on specific locations and existing site constraints to achieve relevant night time assessment criteria.

For the land to the north of the mapped 55 dBA acoustic line, any future residential or other development will be required to provide an acoustic assessment to Council for consideration, prepared by a suitably qualified and experienced professional. Acoustic assessments provided to date demonstrate that dwellings constructed outside of the 55 dBA acoustic line can apply relevant acoustic treatments and comply with the noise requirements of Clause 102 of the State Environmental Planning Policy (Infrastructure) 2007. The land within the 55 dBA acoustic line is not suitable for additional dwellings based on the noise impacts. However, tourist development can be considered on its individual merits.

It is noted that the Employment Lands Strategy includes a recommendation that areas subject to noise impacts generated by Morris Park be formalised through planning provisions in the Dubbo Local Environmental Plan 2011.

Given that Morris Park Speedway operates on average once to twice per month depending on the season, the noise being generated is not of a constant and sustained nature. Additionally, the club advertises race meetings in advance meaning existing and future residents are aware of when potential noise disturbances will occur.

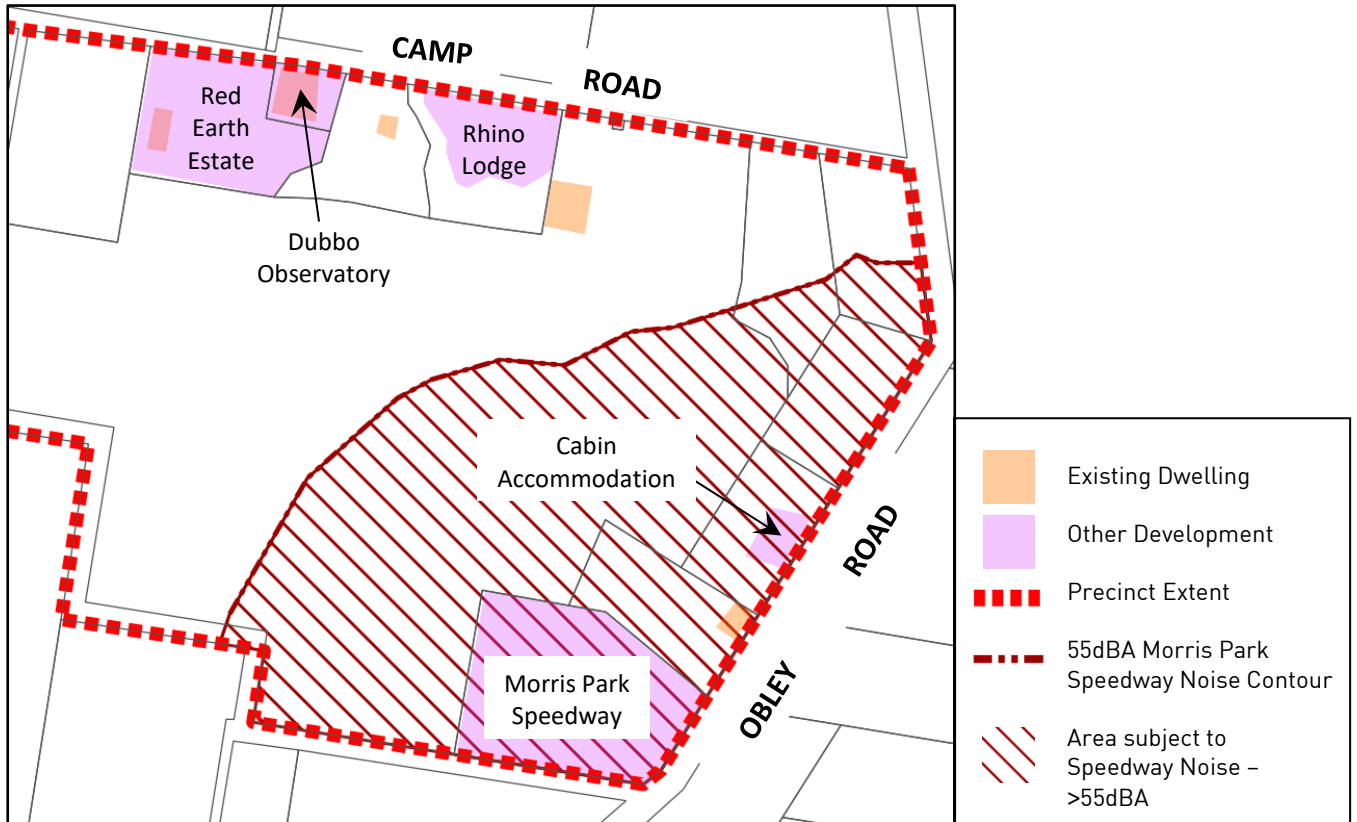


Figure 8. Morris Park Speedway Noise Contour

5. TARONGA WESTERN PLAINS ZOO

The Taronga Western Plains Zoo is situated to the north of the subject land. Part of the land immediately adjoining the Camp Road Precinct is currently used by the Zoo for technical activities, including a breeding program. This land is shown hatched in red on Figure 9.

Taronga Western Plains Zoo has created a 110 hectare breeding sanctuary on the south western corner of the Zoo, on the north-eastern intersection of the Newell Highway and Camp Road.

This sanctuary area is being used for a State significant breeding sanctuary for the Greater bilby and the Plains Wanderer. Both of these projects are being carried out with partnership and support from Office of Environment and Heritage. The Greater bilby and Plains-Wanderer are susceptible to prolonged increases of noise and light. Impacts on the breeding sanctuary can be reduced through the five (5) hectare minimum lot size fronting Camp Road and limiting light sources in the precinct such as those included in Section 3.

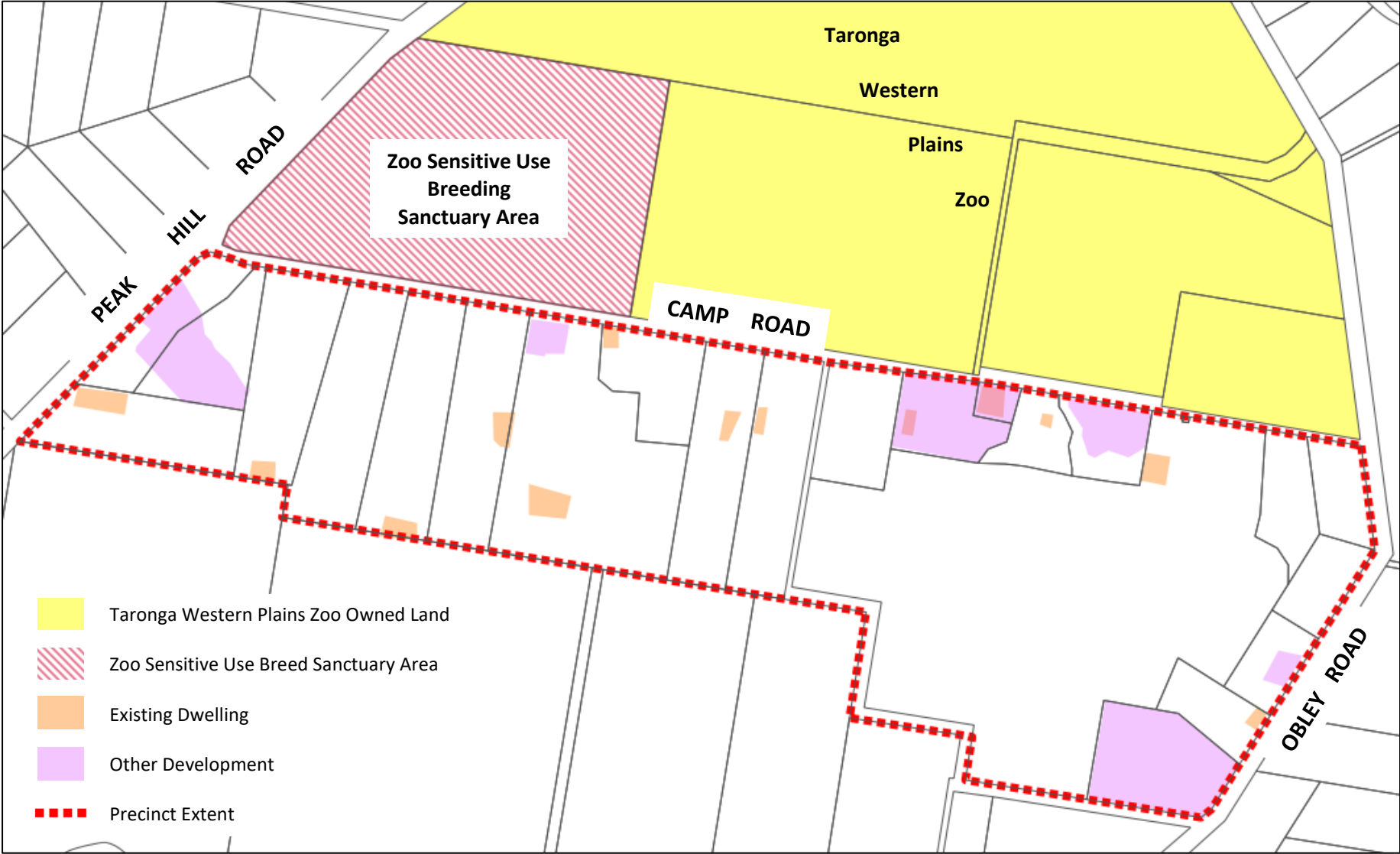


Figure 9. Relationship of the Zoo to the Camp Road Precinct



6. INFRASTRUCTURE

The precinct is serviced by a reticulated water supply main. The precinct is supplied by the water reservoir on Rifle Range Road, located to the north-west of the precinct.

The eastern portion of the precinct has access to sewerage infrastructure with a pump station located adjacent to 4L Camp Road. However, it would appear this would be insufficient to service a large portion of the precinct. Any future development would therefore most likely be serviced by onsite waste management systems. Based on typical soil analysis on the eastern end of the precinct, onsite waste management systems are achievable, however the specific requirements of system types and suitable locations will be subject to site specific geotechnical analysis at the Development Application and Construction Certificate stages.

An indicative overview of existing water and sewerage supply infrastructure is shown in Figure 10.

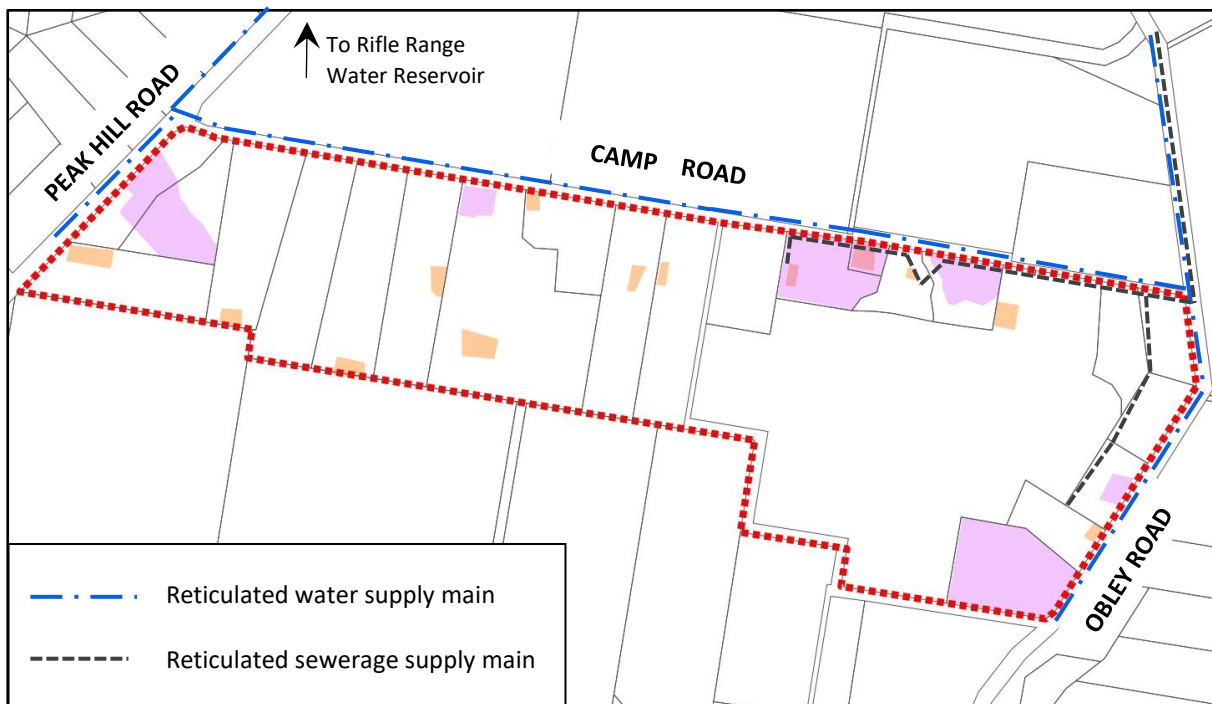


Figure 10. Existing water and sewerage supply infrastructure

Note: Infrastructure locations are indicative only for illustration purposes and are not drawn to scale

7. TRANSPORT AND ACCESS

The Dubbo City Transportation Strategy includes a proposal for a Distributor Road to connect the Newell Highway through Camp Road to the Southern Distributor and ultimately the Mitchell Highway. It is envisaged that this road will consist of two (2) lanes. The Dubbo City Transportation Strategy is currently being reviewed and based on current analysis, the Camp Road link is most likely not required until at least 2060, but more likely towards 2070.

It is noted that given a future distributor road in this location is identified as a 'very long term' project in the Strategy review, it presents some difficulties from a planning perspective as it

requires a significant level of other road infrastructure projects to be completed prior.

However, to ensure there is an appropriate setback and provision made for the road in the future, future development should consider a 30 metre setback to the Camp Road, road reserve. This will also allow a suitable area to facilitate the development of future intersections and/or service roads into various sectors of the Precinct.

Future development within the precinct is to gain access from Camp Road or future service roads.

8. MINIMUM LOT SIZES

The precinct currently has no minimum lot size pursuant to the provisions of the Dubbo Local Environmental Plan 2011.

The Structure Plan has identified three (3) distinct areas within the subject land, which have guided the minimum lot size provisions. These three (3) areas are:

- 5 hectares
- 2 hectares
- No minimum lot size

It is proposed to have a minimum lot size of five (5) hectares along the frontage to Camp Road to allow lots sufficient area to allow tourist activities and dwellings to co-exist. It is considered that for tourist activities to be feasible in this precinct, they would need to be located immediately adjacent to Camp Road where they have visibility and direct road access. Additionally, the topography of the land on the central and southern portions is not particularly suited to either tourist development or agriculture.

For the remainder of the land (excluding the area impacted by Morris Park Speedway noise constraint), there are several considerations that lend itself towards a small lot size. Noting the infrastructure servicing requirements including provision of a reticulated water supply and the likelihood of providing onsite waste management systems, provision of an appropriate lot size will need to be considered to minimise potential impacts on adjoining properties with respect to sufficient disposal area.

Based on the typically soil typology and natural constraints including vegetation and watercourses along with the availability of services for the precinct, it is considered that a minimum lot size of two (2) hectares across the remainder of the site is most appropriate. It is considered this an appropriate size that balances being able to undertake viable development of the land, minimises land use conflicts and achieves the revised role of the Camp Road precinct which is to allow small-scale rural based tourist activities and semi-rural style lifestyle lots to co-exist with minimal land use impacts occurring as a result. As discussed throughout this Structure Plan, the recommendations and further considerations should be implemented to minimise land use conflicts.

A preliminary undertaking of supply and demand analysis in the Dubbo Regional LGA would indicate there is limited availability of vacant two (2) hectare lots.

Noting that one of the intents of the precinct is to provide a buffer between the Taronga

Western Plains Zoo and the agricultural land from more intensive uses, a minimum lot size lower than two (2) hectares would not be appropriate as potential land use conflicts may begin to arise.

For the land within the identified 55dBA noise contour associated with the Morris Park Speedway, no minimum lot size is proposed. As no minimum lot size is proposed within the area, no minimum lot size will ensure it is not identified for the development of land parcels suitable for dwellings. Tourist related development will still be permissible with consent subject to noise impact assessments being undertaken.

The proposed minimum lot size regime is shown on Figure 11.

The suitability of subdividing respective parcels into two (2) hectare lots will need to be considered given site specific natural, physical and infrastructure constraints. These are issues that are typically considered in future detail at Planning Proposal and Development Application stage.

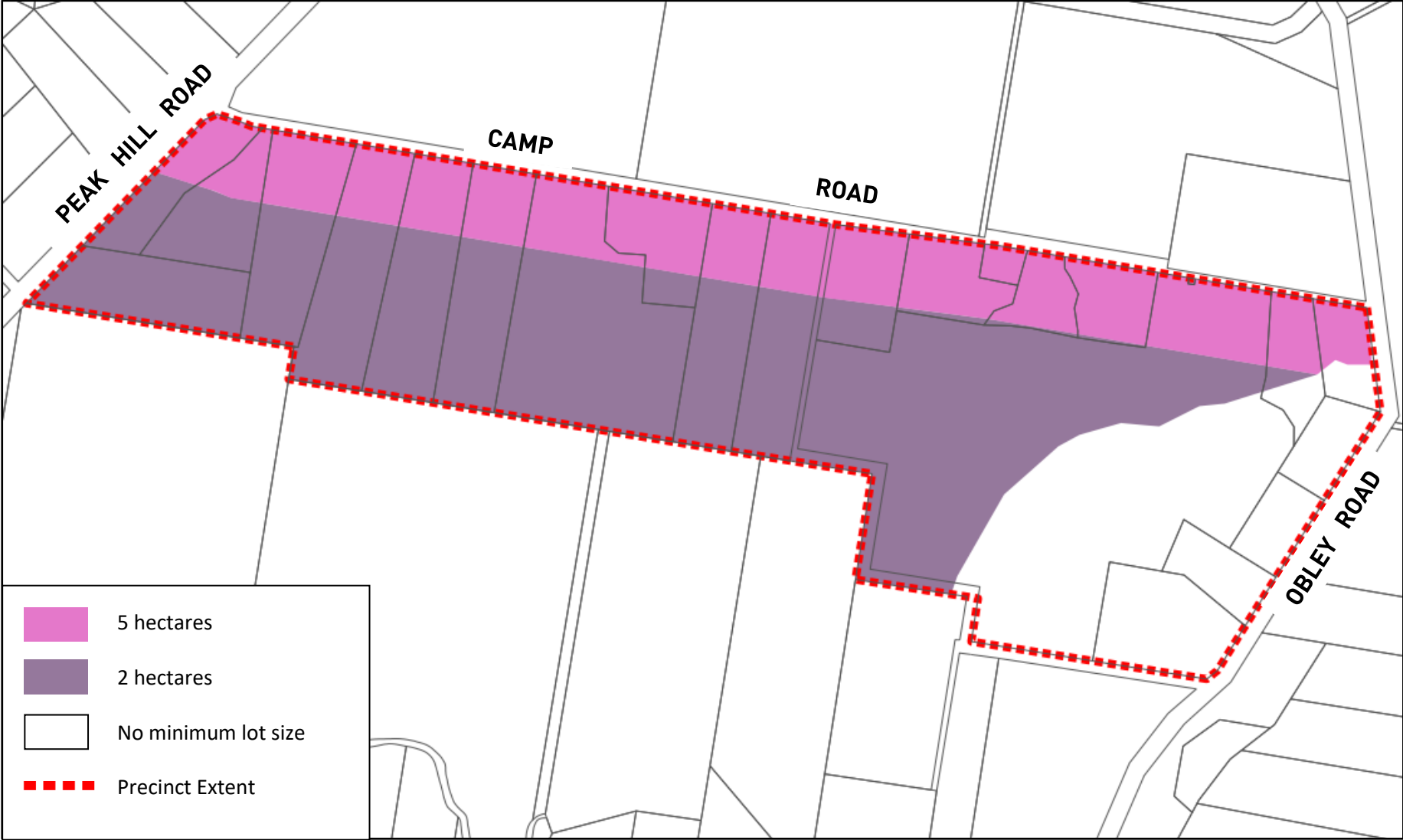


Figure 11. Proposed minimum lot size regime



APPENDIX 1

Comprehensive Structure Plan

CAMP ROAD STRUCTURE PLAN

