



LAND USE CONFLICT RISK ASSESSMENT

313 MAGPIE LANE, GALAMBINE

113 MAGPIE LANE, GALAMBINE
LOT 1 DP174385, LOT 1 DP1003242
GULGONG NSW

CAM ENGINEERING
MARCH 2024



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Document Control Sheet

| Issue No. | Amendment | Date | Prepared By | Checked By |
|-----------|-----------|------------|-------------|------------|
| A | Draft | 05/03/2024 | LN | SBL |
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Table of Contents

| | | |
|------------|---|-----------|
| 1.0 | INTRODUCTION | 1 |
| 2.0 | SCOPE OF WORKS..... | 2 |
| 3.0 | GATHER INFORMATION | 3 |
| 3.1 | NATURE OF THE LAND USE CHANGE AND PROPOSED DEVELOPMENT | 3 |
| 3.2 | NATURE OF THE PRECINCT WHERE THE LAND USE CHANGE AND DEVELOPMENT IS PROPOSED..... | 4 |
| 3.2.1 | <i>Zoning</i> | <i>4</i> |
| 3.2.2 | <i>Overview of Precinct.....</i> | <i>4</i> |
| 3.3 | TOPOGRAPHY, CLIMATE AND NATURAL FEATURES | 5 |
| 3.4 | SITE HISTORY | 5 |
| 4.0 | LAND USE CONFLICT RISK ASSESSMENT | 6 |
| 4.1 | CHANGES IN THE USE OF THE SITE..... | 6 |
| 4.2 | EXISTING SURROUNDING LAND USES | 6 |
| 4.2.1 | <i>Potential for Incompatibility and Conflict.....</i> | <i>8</i> |
| 4.3 | RISK RANKING | 8 |
| 4.3.1 | <i>Risk Reduction Controls.....</i> | <i>12</i> |
| 4.3.2 | <i>Performance Monitoring.....</i> | <i>12</i> |
| 4.3.3 | <i>Management Strategies.....</i> | <i>12</i> |
| 5.0 | CONCLUSION..... | 13 |

APPENDIX A

HISTORICAL AERIAL IMAGERY

LIST OF FIGURES

FIGURE 1: LAND ZONING.

FIGURE 2: 664 GUNTAWANG ROAD, GALAMBINE (DEVELOPMENT SITE IN BLUE).

FIGURE 3: RISK RANKING MATRIX.

FIGURE 4: PROBABILITY TABLE.

FIGURE 5: MEASURE OF CONSEQUENCE.

1.0 Introduction

This Land Use Conflict Risk Assessment (LUCRA) has been prepared in response to Mid-Western Regional Councils (MWRC) feedback during a Pre-Development Application meeting (Pre-DA) for the subject proposal, held on 2nd December 2022. The subject proposal seeks development consent for a caravan park and associated works, at 313 Magpie Lane, Galambine. This LUCRA has also been prepared to act as supporting documentation, as a component of a Development Application associated with the subject proposal.

LUCRA is a system that aims to identify and assess the potential for land use conflict to occur between neighbouring land uses. This LUCRA aims to:

- Accurately identify and assess potential land use conflict issues and risk of occurrence as a component of a new proposed land use;
- Objectively assess the effect of a proposed land use on neighbouring land uses;
- Increase the understanding of any potential land use conflicts to inform and complement any development design responses to such conflicts; and
- Highlight and recommend strategies to help minimise the potential for land use conflicts to occur and contribute to the negotiation, proposal, implementation and evaluation of separation strategies.

This LUCRA has been prepared in accordance with the Department of Primary Industries Land Use Conflict Risk Assessment Guide (October 2011), in addition to *Living and Working in Rural Areas*, a handbook for managing land use conflict issues.

2.0 Scope of Works

The predominant aim of this LUCRA is to identify the compatibility of surrounding and adjoining land uses with the proposed development. This report will utilise the LUCRA principles to guide the assessment of any potential conflict between land uses and identify potential implications of that conflict. The risk of any conflict will be quantified and suitably addressed.

There are four key steps in a LUCRA, which are utilised in this report. As follows:

1. Gather information about proposed land use change and associated activities

- Describe the nature of the proposed land use and proposed development;
- Describe any major activities associated with the land use change;
- Appraise topography, climate and natural features of the site and broader locality;
- Undertake a site history search, and review any previous environmental assessments and approvals for the site;
- Inspect the site; and
- Describe and record the main activities of the adjacent properties and their frequency, identifying those with a potential for complaint or conflict.

2. Evaluate the risk level of each activity

- Record activities on the Risk Ranking Matrix, and identify the level of risk of any activities arising from the land use.

3. Identify risk reduction management strategies

- Identify management strategies for each identified potential conflict that could help lower the risk level;
- Prioritise risk based on strategies;
- Provide performance targets for the aforementioned strategies.

4. Record LUCRA results

- Compile a summary of the key issues, their risk level, and the recommended management strategies.

This LUCRA has been prepared based on the above scope of works and principles.

3.0 Gather Information

As established within Part 2.0, step 1 in preparing a LUCRA is to gather information. This section outlines the relevant information and addresses step 1.

3.1 NATURE OF THE LAND USE CHANGE AND PROPOSED DEVELOPMENT

In summary, the proposed development is for a caravan park, comprising:

- 147 short-term sites situated in the northern portion of the site, including 3 amenities blocks, and an office and activities building;
- 240 long-term sites situated in the southern portion of the site, including 2 community centres and an office and activities building;
- An internal road network, including main access to the site via Magpie Lane, and two one-way emergency exits, one onto Guntawang Road, and another further east along Magpie Lane from the main entrance. Internal access roads, vehicle parking spaces, vehicle cul-de-sacs, and boom gate entry and exit points to both the short and long-term areas are also proposed;
- Intersection upgrade works to the Guntawang Road/Magpie Lane intersection;
- Sewer and water infrastructure works;
- Landscaping works;
- Stormwater detention works; and
- Earthworks associated with the proposed development.

The predominant nature of the land use change will be for the purposes of a caravan park, including any supporting infrastructure and ancillary development.

Further detailed information as to the specifics of the proposed development is included within the SEE, to which this report forms a component of the Appendices.

3.2 NATURE OF THE PRECINCT WHERE THE LAND USE CHANGE AND DEVELOPMENT IS PROPOSED

3.2.1 Zoning

Under the provisions of the *Mid-Western Regional Local Environmental Plan 2012*, the site is zoned RU4: Primary Production Small Lots (see **Figure 1**).

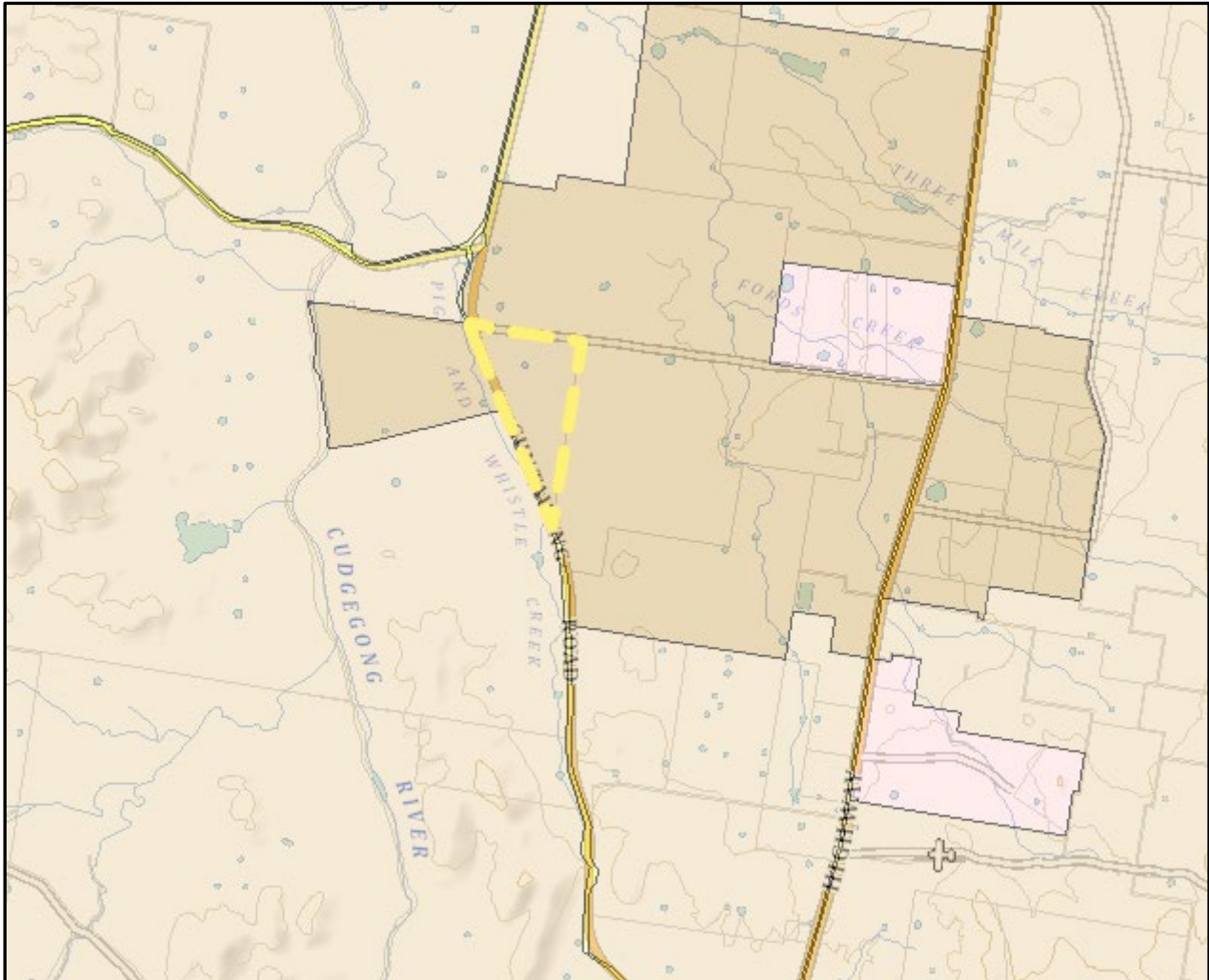


Figure 1: Land Zoning.

Neighbouring sites to the north, east, and a small portion of the west are also zoned RU4, with the remainder of the land to the west being zoned RU1: Primary Production. Guntawang Road is zoned SP2: Infrastructure. Land further to the northeast and the southeast is zoned R5: Large Lot Residential, however, this land is positioned 1.5km and 3.2km away from the site, respectively.

3.2.2 Overview of Precinct

The site is located within several different contextual precincts. The development site has frontage to the Guntawang Road precinct, which connects the nearby towns of Mudgee and Galambine, and on which sit several local heritage items. Guntawang Road also consists of several rural homesteads, in addition to several tourist attractions, and vineyards. The Magpie Lane precinct is much smaller than that of the Guntawang Road precinct, containing several rural homesteads, and vineyards. Magpie Lane connects Guntawang Road to Castlereagh Highway, the main connecting road between Gulgong, Galambine and Mudgee.

The site is also located within proximity to vineyards, comprising a portion of the eastern boundary, and a portion of the northern boundary. This precinct is comprised of grapevines utilised for viticulture.

Generally speaking, the site is characterised by the surrounding small lot rural precinct in which it is located, having sparse vegetation, grasslands, several dams, and rural enterprise.

3.3 TOPOGRAPHY, CLIMATE AND NATURAL FEATURES

In terms of topography, the site slopes gently from east to west, with elevations of approximately 450m Australian Height Datum (AHD) along the eastern boundary, and approximately 420-430m AHD along the western boundary.

Three watercourses run through the subject site, two (2) first-order watercourses, and one (1) second-order. The two first-order watercourses (both at the northern end of the site) have been established as not being present on site. The second-order watercourse (the southern-most watercourse) is present on site.

As per the Australian Building Codes Board Climate Zone Map, the site is within climate zone 6, which is associated with mild temperatures.

3.4 SITE HISTORY

Historical aerial imagery (**Appendix A**) indicates that the site has been relatively undeveloped since 1985. The small structure located proximal to the eastern boundary of the site can be seen in an aerial imagery as early as 2009. Several small waterbodies can also be seen on the site as early as 2009. The site appears to have been utilised as vacant land. The site remained largely undeveloped from 2009 until the most recent satellite image, in October 2023, barring some earthworks and construction of an internal site access. This work is understood to comprise a component of an approved DA in 2011.

The Preliminary Contamination Site Investigation (accompanying the SEE) provides additional site history from 1955. They summarised that based on the review of the historical information and photographic history, the site was formerly used as cleared farmland. The site operated as grazing land prior to 1971. From 1971 to 1999 when it was owned by an accountant and station manager the site was mainly utilised for rural living. The surrounding land use comprised rural / agricultural and viticultural land use.

4.0 Land Use Conflict Risk Assessment

4.1 CHANGES IN THE USE OF THE SITE

This LUCRA has been prepared to evaluate the risk of conflict between the site, and the proposed development, and neighbouring sites, resulting from the proposed change in land use of the subject site. As established in the earlier Parts of this report, the site is predominantly utilised as vacant rural land, with an established structure located on the eastern side of the site.

It is proposed to utilise the site for the purposes of a caravan park, comprising 147 short-term sites located at the northern portion of the site, and 240 long-term sites, located on the more southern portion of the site.

This change in land use is likely to result in increased occupancy of the site, in addition to increased human activity, both generally, and in a residential context. This increase is likely to result in additional traffic volume in the area, changes to the visual aesthetic of the site (as a result of the development), and potential impacts in terms of additional noise resulting from human habitation in an area. It is expected that the increase in human activity will also include an increase in outdoor activities, with residents/occupants of the caravan park expected to undertake outdoor recreation, exercise, and will have a general outdoor and neighbourly presence.

4.2 EXISTING SURROUNDING LAND USES

The land to the south of the site appears to be utilised as vacant rural land (that being 833 Goolma Road, Guntawang) and agricultural enterprise is not anticipated to present a risk of conflict with the proposed use given the separation distance between uses.

The land to the west of the site is understood to be utilised for viticulture, however, is separated from the site by Guntawang Road (with a width of 21 metres), and the grapevines being a distance of 190 metres from the road reserve. As such, the land utilised for viticulture to the west of the site is located some 210 metres away from the western boundary of the subject site. Therefore, given separation distances, minimal risk of conflict and interference with the proposed use is anticipated from the property (that being 664 Guntawang Road, Galambine).

The land directly to the north and the east of the site is understood to be utilised for viticulture (also comprising a component of the land holding at 664 Guntawang Road, Galambine). The land to the north of the site is separated via Magpie Lane, and the land to the east is separated from the site by a wire and post fence. Predominantly the land directly to the east is considered to present the most risk of incompatibility and potential conflict with the proposed development, with the land to the north anticipated to pose less of a risk.

There is no publicly available information as to the operation of the viticulture occurring both to the north and west of the site, other than that the separate lots all comprise a single land holding, addressed as 664 Guntawang Road, Galambine. As **Figure 2**, the land holding comprises the following lots-

- Lot 11/-/DP880851 (located to the west of the site);
- Lot 1/-/DP1103648 and Lot 5/-/DP178054 (located to the north of the site); and
- Lots 46, 82, 100, 107, 108, 109, 113/-/DP75543 and 1/-/DP115953 (located to the east of the site).



Figure 2: 664 Guntawang Road, Galambine (Development Site in Blue).

The viticulture associated with 664 Guntawang Road does not appear to be supported by any on-site commercial aspects (e.g., a cellar door, food and drink premises or similar), which is evidenced by the lack of built form on the sites both cumulatively and singularly. Based on publicly available information, it is assumed that the grapes are cultivated on-site and then transported off-site.

As such, there is a low likelihood of conflict between the proposed development and the nearby viticulture in terms of commercial aspects that would be typically expected for a vineyard operation with a heavy focus on visitors to the site (e.g., a vineyard with a cellar door, conference or wedding facilities or similar). It is assumed as with most standard viticulture practices, that the vineyard requires regular up-keep practices, including pruning, pesticide application, fertiliser application, mowing, irrigation and harvest. It is expected that seasonal harvesting times will result in the largest output of risk, with practices that may include the use of heavier machinery than throughout the rest of the year. It is expected that these processes will likely be the catalyst as the highest risk of conflict with the proposed development. It is noted that the risk of conflict is considered very low, however in the context of the existing viticulture and proximity to the caravan park, it is considered the most likely to create a potential conflict.

4.2.1 Potential for Incompatibility and Conflict

As established above, it is considered that there is minimal potential for land use incompatibility and conflict between the proposed development and the viticulture being undertaken on sites to both the north and east of the development site. In this respect, the prime risk (which is considered low) is the impacts of ongoing cultivation and management practices associated with the cultivation of the grapevines, which may impact future occupants of the caravan park. It is considered that the practice of pesticide application has the highest risk potential, with low-impact practices such as pruning, harvesting and mowing (or other use of machinery) significantly less likely to adversely impact the proposed development, and only occur for short periods, and can be managed affectively through plans of management and where required by the DA conditions of consent.

There is also the potential for aesthetic impacts on occupants of the caravan park, however, it is argued that the aesthetics of the established vineyards only add to, and enhance, the rural feel and character of the caravan park, rather than result in a conflict.

4.3 RISK RANKING

The Land Use Conflict Risk Assessment Guide, dated October 2011, and prepared by the Department of Primary Industries provides a methodology to identify and evaluate risks associated with potential land use conflicts and incompatibility. The methodology requires the preparation of a risk ranking table, which is prepared utilising the risk ranking matrix-

| PROBABILITY | A | B | C | D | E |
|-------------|----|----|----|----|----|
| Consequence | | | | | |
| 1 | 25 | 24 | 22 | 19 | 15 |
| 2 | 23 | 21 | 18 | 14 | 10 |
| 3 | 20 | 17 | 13 | 9 | 6 |
| 4 | 16 | 12 | 8 | 5 | 3 |
| 5 | 11 | 7 | 4 | 2 | 1 |

Figure 3: Risk Ranking Matrix.

The risk ranking matrix yields a risk ranking from 25 to 1. It covers each combination of five levels of 'probability' (a letter A to E as defined in **Figure 4** below) and 5 levels of 'consequence' (a number 1 to 5 as defined in **Figure 5** below) to identify the risk ranking of each impact.

| Level | Descriptor | Description |
|-------|----------------|--|
| A | Almost certain | Common or repeating occurrence |
| B | Likely | Known to occur, or 'it has happened' |
| C | Possible | Could occur, or 'I've heard of it happening' |
| D | Unlikely | Could occur in some circumstances, but not likely to occur |
| E | Rare | Practically impossible |

Figure 4: Probability Table.

| | |
|-----------------------------|---|
| Level: 1 | Descriptor: Severe |
| Description | <ul style="list-style-type: none"> Severe and/or permanent damage to the environment Irreversible Severe impact on the community Neighbours are in prolonged dispute and legal action involved |
| Example/ Implication | <ul style="list-style-type: none"> Harm or death to animals, fish, birds or plants Long term damage to soil or water Odours so offensive some people are evacuated or leave voluntarily Many public complaints and serious damage to Council's reputation Contravenes Protection of the Environment & Operations Act and the conditions of Council's licences and permits. Almost certain prosecution under the POEO Act |
| Level: 2 | Descriptor: Major |
| Description | <ul style="list-style-type: none"> Serious and/or long-term impact to the environment Long-term management implications Serious impact on the community Neighbours are in serious dispute |
| Example/ Implication | <ul style="list-style-type: none"> Water, soil or air impacted, possibly in the long term Harm to animals, fish or birds or plants Public complaints. Neighbour disputes occur. Impacts pass quickly Contravenes the conditions of Council's licences, permits and the POEO Act Likely prosecution |
| Level:3 | Descriptor: Moderate |
| Description | <ul style="list-style-type: none"> Moderate and/or medium-term impact to the environment and community Some ongoing management implications Neighbour disputes occur |
| Example/ Implication | <ul style="list-style-type: none"> Water, soil or air known to be affected, probably in the short term No serious harm to animals, fish, birds or plants Public largely unaware and few complaints to Council May contravene the conditions of Council's Licences and the POEO Act Unlikely to result in prosecution |
| Level: 4 | Descriptor: Minor |
| Description | <ul style="list-style-type: none"> Minor and/or short-term impact to the environment and community Can be effectively managed as part of normal operations Infrequent disputes between neighbours |
| Example/ Implication | <ul style="list-style-type: none"> Theoretically could affect the environment or people but no impacts noticed No complaints to Council Does not affect the legal compliance status of Council |
| Level: 5 | Descriptor: Negligible |
| Description | <ul style="list-style-type: none"> Very minor impact to the environment and community Can be effectively managed as part of normal operations Neighbour disputes unlikely |
| Example/ Implication | <ul style="list-style-type: none"> No measurable or identifiable impact on the environment No measurable impact on the community or impact is generally acceptable |

Figure 5: Measure of Consequence.

The utilisation of this methodology allows any potential risks associated with the development to be allocated a risk ranking. The below table provides a summary of potential conflicts and the risk ranking they have been allocated. The table has been broken into two main sections, with the first focusing on how the site may impact neighbouring sites, and the second section focusing on how the neighbours may impact the site. As has been established, based on the absence of any cellar door outlet or similar to the proximal vineyard, impacts from the development to neighbouring sites are considered limited and unlikely. Impacts from the neighbouring site to the development are considered much more likely and this is reflected in the information contained in the table.

| Location & Activity | Potential Conflict | Initial Risk | Management Strategy | Reduced Risk | Performance Monitoring & Targets |
|---|--|--------------|---|--------------|--|
| Site Impacts on Neighbours | | | | | |
| Establishment of development | Reduced rural aesthetic. | 8 | Design setbacks, landscaping. | 5 | Design approval. |
| Neighbours Impacts to the Site | | | | | |
| Harvesting | Noise and reduced amenity. | 8 | Design setbacks, potential consultation with vineyard. | 5 | Design approval, potential consultation. |
| Spraying | Noise, reduced amenity and potential air pollution. | 17 | Design setbacks, existing layout of vineyard, potential consultation with vineyard. | 5 | Design approval, potential consultation. |
| Mowing | Noise, reduced amenity. | 8 | Design setbacks, potential consultation with vineyard. | 5 | Design approval, potential consultation. |
| Pruning & on-going maintenance | Noise and reduced amenity. | 8 | Design setbacks, potential consultation with vineyard. | 5 | Design approval, potential consultation. |
| Traffic and potential heavy machinery utilising Magpie Lane | Noise, reduced amenity, and potential air pollution. | 17 | Design setbacks, landscaping, fencing. | 5 | Design approval. |

4.3.1 Risk Reduction Controls

As per the Table in Part 4.3, a risk ranking for each item has been identified, with the reduced risk ranking allocated in line with the implementation of management strategies, which in this circumstance reduces the risk. It is considered that as a consequence of appropriate design and setbacks of the caravan park, implementation of plans of management as part of the Approval to Operate, and consultation between the operators of both enterprises, and occupiers of the caravan park, the risk ranking is reduced for each identified potential conflict. Therefore, risks are considered satisfactory, short-term, and acceptable with respect to both developments.

4.3.2 Performance Monitoring

Performance monitoring measures can be included through the Approval to Operate, to ensure ongoing consistency of the development with the outcomes of this LUCRA. However, as there is a heavy reliance on neighbouring practices as part of their viticulture development, it is considered that the overall design of the development, and its distance from the neighbouring vineyards will successfully mitigate the majority of the potential conflicts, which minimises the need for ongoing performance monitoring.

4.3.3 Management Strategies

As per **Table** above, the overall design of the development is considered satisfactory in acting as a management strategy for the reduction of risk. The proposed development is significantly setback from the vineyard to the east, which allows for a suitable separation between the two uses, successfully minimising any conflict risk. It is expected that landscape buffer screening can be included to further the separation between the two sites if deemed to be required (noting the distance is significant already).

In terms of the vineyard's management strategies, potential consultation with the owner/manager of operations could result in even further mitigation of potential conflict risks. However, given the lack of a cellar door premises at the nearby vineyard, this already negates potential conflict risks that would be typically associated with a vineyard incorporating differing land use in terms of amenity impact. Potentially a change in the style of fencing between the two boundaries could be utilised to further lessen any potential conflicts.

In terms of the spraying risk and potential vineyard impacts more broadly, it is anticipated that the following 'best practice' actions in relation to vineyard activity could be implemented through consultation with the adjoining land owner to further lessen any potential conflicts-

- utilise appropriately designed, maintained and noise-limited machinery;
- be undertaken during business hours (and only outside these hours in extreme circumstances such as when the activity is required to ensure vine health and/or crop integrity);
- operate at low speed (< 20 km/hr) to minimise the incidence of airborne dust;
- apply pesticides according to on-label chemical specifications;
- apply foliar spray when the average wind speed is < 20 km/hr; and
- avoid foliar spray application from the surrounding vineyards and agricultural enterprises when wind direction impacts the caravan park.

5.0 Conclusion

In conclusion, there is the potential for land use incompatibility and potential conflict between the development site and the nearby vineyards/agricultural enterprise. It is considered that in line with the recommendations of this LUCRA, the caravan park site design, communication and implementation of effective best practice management strategies by land owners/managers and operators of the surrounding agricultural enterprises and the caravan park will suitably mitigate and reduce potential conflicts and risks.

Based on the general findings of this LUCRA, whilst the potential for land use incompatibility is present, it can be effectively managed, reducing risks. Generally, the inclusion of suitable mitigation measures, including the large setbacks granted by the siting of the proposed development, will successfully mitigate these conflicts. Additional considerations to further mitigate the risk could involve consultation with the adjoining land owner, and alternate fencing and landscape buffers.

It is considered that the proposed development can satisfactory be undertaken when considering potential neighbour land use risks as identified in this LUCRA.

Appendix A

HISTORICAL AERIAL IMAGERY



Historical Imagery - September 2009.



Historical Imagery - November 2012.



Historical Imagery - September 2013.



Historical Imagery - December 2015.



Historical Imagery - July 2017.



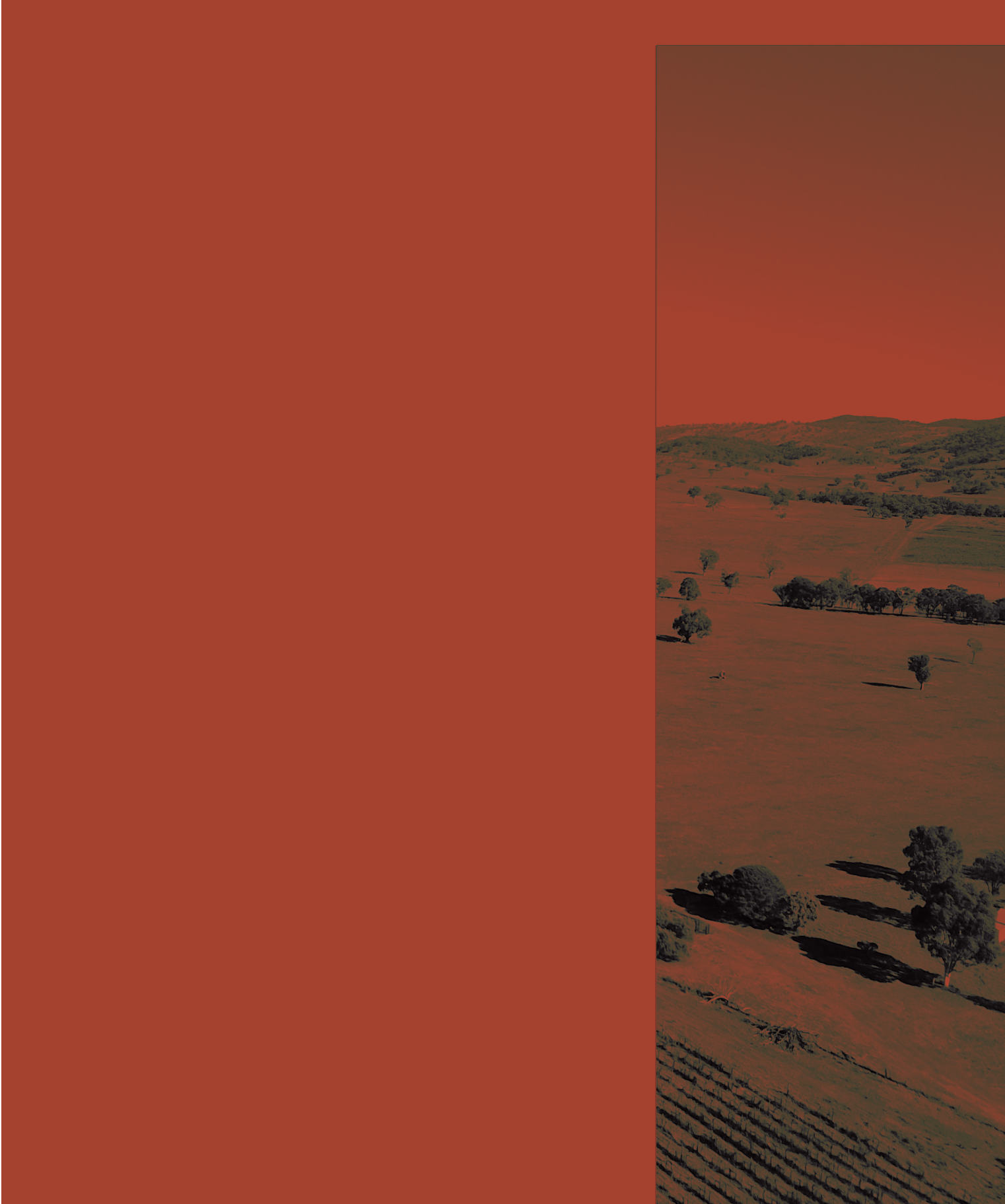
Historical Imagery - August 2020.



Historical Imagery - December 2022.



Historical Imagery - October 2023.



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