



Land Use Conflict Risk Assessment

Grenfell Breeder/Rearer Farm

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This document has been prepared for:

Baiada Properties Pty Limited

Contact: Elaine Dickson
Chief Risk Officer
Baiada Properties Pty Limited
PO Box 21
Pendle Hill NSW 2145

This document has been prepared by:



Contact: David Ireland
PSA Consulting (Australia) Pty Ltd
PO Box 10824, Adelaide Street, Brisbane QLD 4000
Telephone +61 7 3220 0288
david@psaconsult.com.au
www.psaconsult.com.au

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LIST OF ACRONYMS

BAR	Basic Right Access
BAL	Basic Left Access
DPI	Department of Primary Industries
EIS	Environmental Impact Statement
LUCRA	Land Use Conflict Risk Assessment
MSDS	Material Safety Data Sheets
POEO Act	<i>Protection of Environment & Operations Act</i>

1 INTRODUCTION

This Land Use Conflict Risk Assessment (LUCRA) has been prepared as part of an Environmental Impact Assessment (EIS) to accompany a Development Application seeking Development Consent for the construction of four poultry breeder/rearing farms consisting of 10 poultry sheds per farm (40 sheds in total) at 1130 Gooloogong Road, Grenfell, NSW. Each farm will house a maximum of 140,140 birds, with a maximum of 570,000 birds across the property.

Each farm will house a maximum number of birds as follows:

- **Farm 1 – Rearing Farm:** 10 Sheds with a maximum of 153,000 birds.
- **Farm 2 – Breeder Farm:** 10 Sheds with a maximum of 132,000 birds.
- **Farm 3 – Breeder Farm:** 10 Sheds with a maximum of 132,000 birds.
- **Farm 4 – Breeder / Rearing:** 10 Sheds with a maximum of 153,000 birds.

The subject site is formally described as Lot 1 DP1022013, Lots 1-3 DP1206485 and Lot 22 DP866857. Specifically, this development application is seeking approval for the following components and elements:

- Construction of a new 40 poultry sheds (separated into 4 separate farms) for the purposes of breeding and rearing chickens;
- Ancillary buildings and supporting infrastructure, being manager residences, water tanks, access road and other services; and
- Access road (which is proposed to be located across on Lots 3, 4 and 5 DP1210276).

The proposed farm is intended to produce fertile eggs which are hatched at a company hatchery and will be grown at company broiler farms (meat chickens) across NSW.

DPI Agriculture recommended that the Applicant prepare a Land Use Conflict Risk Assessment (LUCRA) as part of the Secretary's Environmental Assessment Requirements for the project.

The purpose of this LUCRA is to identify the compatibility and potential conflicts between the proposed development and neighbouring land uses and the identification of appropriate avoidance and mitigation measures.

The assessment aims to:

- Accurately identify and address the efficacy of risk of conflict between the proposed use and adjoining land uses before a new land use proceeds or before dispute arises;
- Objectively assess the effect and level of the proposed land use on neighbouring land uses;
- Increase the understanding of potential land use conflict to inform and complement development control and buffer requirements; and
- Highlight or recommend strategies to help minimise conflict and contribute to the development of separation strategies.

(Source: NSW DPI Land Use Conflict Risk Assessment Guide, 2011)

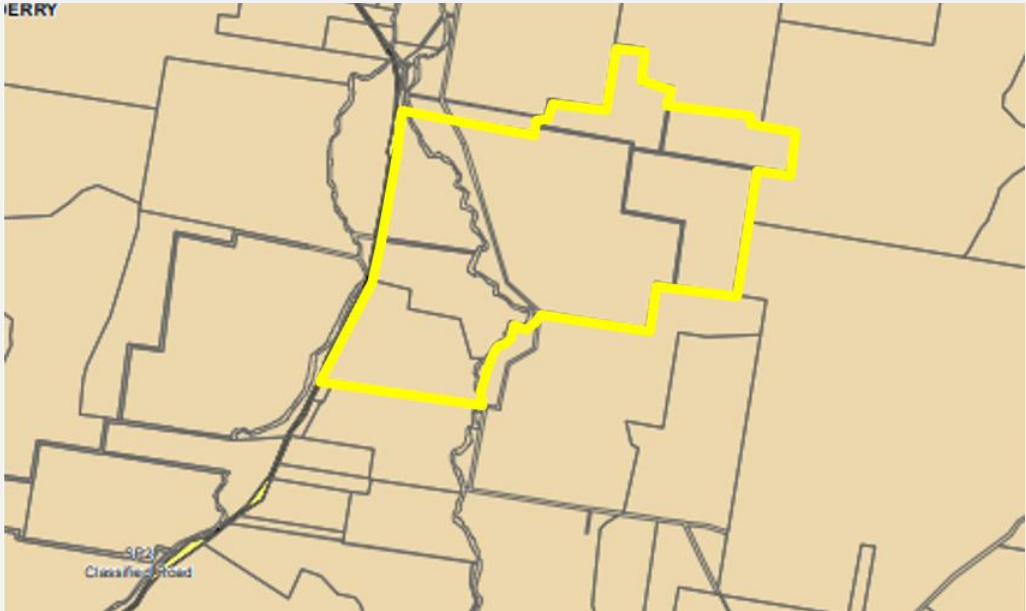
The assessment comprises four-stages, including:

1. Information gathering - site characteristics, the nature of development proposed and surrounding land uses.
2. Risk Level Evaluation - identification and recoding of activities and conflict analysis.
3. Identification of Risk Mitigation Strategies - assess strategies to manage risk of potential conflict.
4. Review and recommendations - recommendations and management strategies.

2 INFORMATION GATHERING

2.1 THE SITE

2.1.1 Site Details

ADDRESS	1130 Gooloogong Road, Grenfell
REAL PROPERTY DESCRIPTION AND LAND OWNERS	Lot 1 DP1022013 – Baiada Properties Pty Limited Lots 1-3 DP1206485 – Baiada Properties Pty Limited Lot 22 DP866857 – Baiada Properties Pty Limited
APPLICANT	Baiada Properties Pty Limited
CONSENT AUTHORITY	Minister for Planning
ZONING	RU1 Primary Production (Weddin Local Environmental Plan 2011)
TOTAL SITE AREA	708.75 ha
BRIEF HISTORY	The site has been historically cleared and used for agricultural uses.
CURRENT LAND USE	The current site has traditionally been used for cropping, grazing and agriculture.
LOCATION	The site is located at 1130 Gooloogong Road, Grenfell, approximately 11km north of Grenfell NSW.
CONTEXT	 Figure 1: Site Locality and Context (Weddin Local Environmental Plan 2011)
STRATEGIC CONTEXT	The site is located within an agricultural area and is appropriately zoned as RU1 Primary Production. The proposed poultry farm is Permitted with Consent within the RU1 Zone.

2.2 SURROUNDING LAND USES

2.2.1 Land Use Summary and Proposed Activities

The site is situated approximately 11km north of Grenfell, approximately 50km south of Forbes and within the Weddin Shire Council area. The site is surrounded by rural properties and agricultural activities. The Conimbla National Park is located approximately 6km to the east of the subject site. The nearest sensitive receptors (rural dwellings) is located immediately to the north of the subject site at 1268 Gooloogong Road and the next closest is located at 1094 Bald Hills Road, Grenfell.

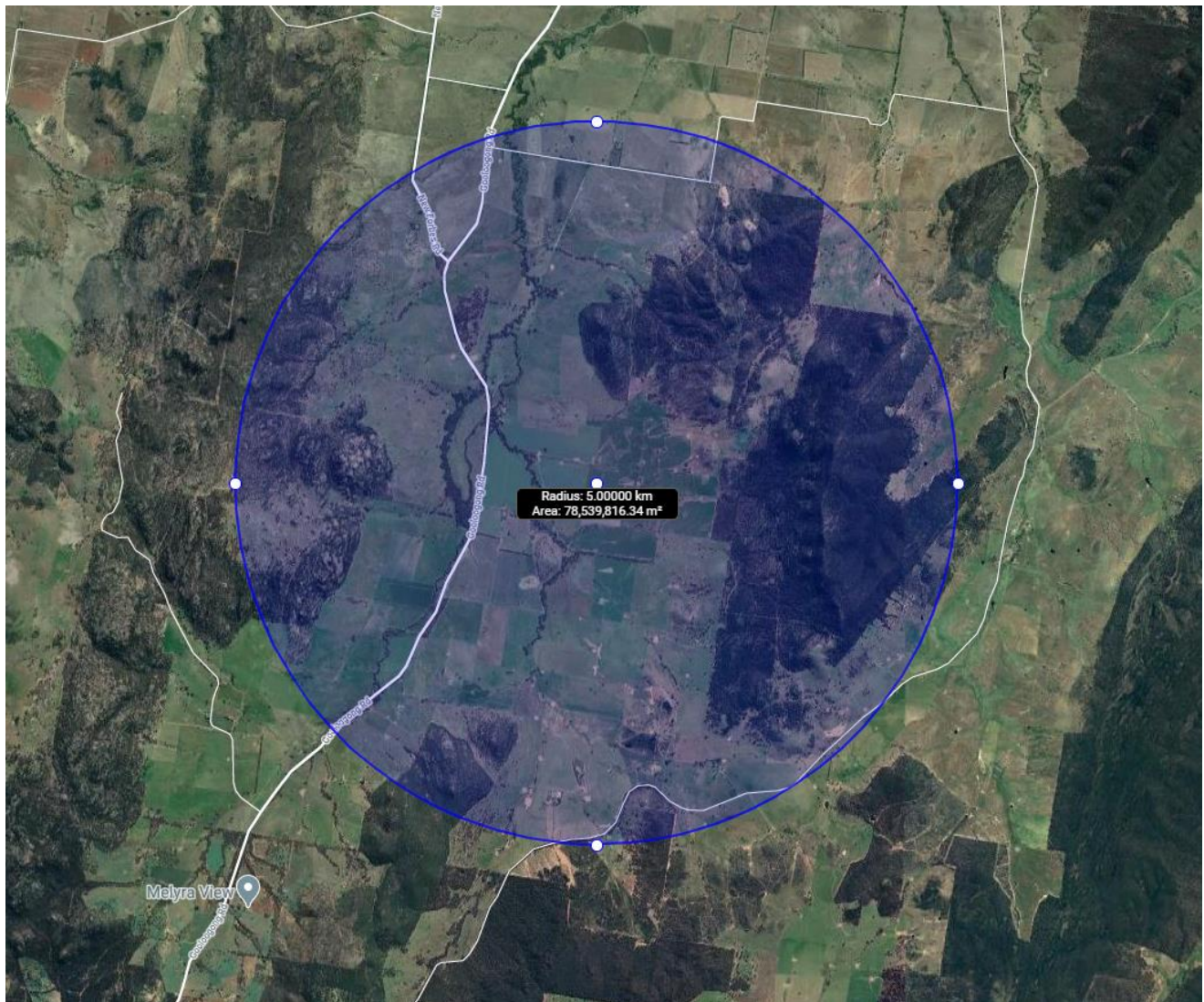


Figure 2: Land uses within 5km of the subject site (Nearmap, 2021)

2.3 POTENTIAL LAND USE CONFLICTS

2.3.1 Compatibility with Adjoining Activities

The subject site adjoins rural and agricultural land uses. Baiada has an existing approval to the site for a Poultry Breeder / Production Farm (from Weddin Shire Council – reference 75/2002) however this approval will not be pursued due to changes in poultry standards and an increase in the number of sheds and birds proposed as part of the development.

The site has been subject to multiple technical investigations which have confirmed that there are no site based, biophysical, cultural or operational constraints which would limit the physical development or operations proposed at the site.

As demonstrated below, the proposed development aligns with the proposed zoning for the subject site. The objectives for the RU1 Primary Production are as follows:

- *To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.*
- *To encourage diversity in primary industry enterprises and systems appropriate for the area.*
- *To minimise the fragmentation and alienation of resource lands.*
- *To minimise conflict between land uses within this zone and land uses within adjoining zones.*

The proposed farm falls under Weddin LEP definition of **intensive livestock agriculture** which means “the keeping or breeding, for commercial purposes, of cattle, poultry, pigs, goats, horses, sheep or other livestock, and includes any of the following – dairies (restricted), feedlots, pig farms, poultry farms; but does not include extensive agriculture, aquaculture or the operation of facilities for drought or similar emergency relief”.

In accordance with the Land Use Table of the Weddin LEP, development of an intensive livestock agriculture within the Primary Production Zone (RU1) is permitted with consent.

The site is located amongst other agricultural activities, with the nearest sensitive receptors (rural dwellings) located immediately to the north of the subject site at 1268 Gooloogong Road, and the next closest at 1094 Bald Hills Road, Grenfell. The proposal is anticipated to be low impact in terms of visual amenity and environmental risks, particularly when mitigative measures are applied – as such, it is consistent with its surrounding activities and the provisions of the Weddin LEP.

2.3.2 Odour and Dust

Regardless of the Odour and Dust Assessment (**Appendix 12** of the EIS) demonstrating compliance with the applicable criteria, a series of recommendations have been made by Astute Environmental Consulting to further minimise the risk of unacceptable odour impacts from the project.

2.3.3 Noise

The Noise Impact Assessment Report (**Appendix 13** of the EIS) confirms that the operation and construction of the Grenfell Poultry Farms will not cause any long term excessive environmental noise at any residential properties.

2.3.4 Visual Impacts

The subject site and proposed development will be in keeping with the rural nature of the local area. The proposed farm is located along Gooloogong Road, which is a road with 100km speed limit. The site will also be screened with vegetation around the farms. Given the low scale and rural nature of the proposed development, the visual impacts are anticipated to be minimal.

2.3.5 Stormwater and drainage

The Stormwater Management Plan (**Appendix 9** of the EIS) confirms that stormwater will be managed through the construction of swales and detention basins on the subject site. The proposed development is not expected to result in any unacceptable discharges to the downstream receiving environment.

2.3.6 Traffic

A Traffic Impact Assessment (**Appendix 8** of the EIS) confirms that the development will require a Basic Right and Basic Left turn treatments will need to be applied to the intersection as well as sealing of the shoulder widening. The TIA confirms that the swept path analysis shows that a 26m A-Double vehicle is able to manoeuvre through the site. As such, the mitigation measures for the traffic impacts are minimal.

3 LAND USE CONFLICT RISK ASSESSMENT

3.1 INTRODUCTION

Table 1 shows the LUCRA matrix which identifies risk rankings from 1 to 25 for each set of probabilities (A-E) (refer to **Table 2**) and consequences (1-5). A rank of 25 is the highest magnitude of risk, i.e. a highly likely and very serious event. A rank of 1 represents the lowest magnitude of risk, i.e. an almost impossible and very low consequence event. Priority is given to those activities listed as high risk. This helps to rank multiple effects and provide a priority list when developing management strategies.

Table 1: Risk Ranking Matrix (Department of Primary Industries, 2011)

CONSEQUENCE	PROBABILITY					
		A	B	C	D	E
	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

Table 2: Probability Table (Department of Primary Industries, 2011)

Level	Descriptor	Description
A	Almost certain	Common or repeated occurrence
B	Likely	Known to occur
C	Possible	Could occur
D	Unlikely	Could occur in some circumstances, but not likely to occur
E	Rare	Practically impossible

Table 3: Measure of Consequence (Department of Primary Industries, 2011)

LEVEL 1	DESCRIPTOR: SEVERE
Description	- Severe and/or permanent damage to the environment - Irreversible - Severe impact on the community - Neighbours are in prolonged dispute and legal action involved
Example or Implication	- 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 <i>Protection of Environment & Operations Act</i> (POEO Act) and the conditions of Council's licences and permits. Almost certain prosecution under the POEO Act.
LEVEL 2	DESCRIPTOR: MAJOR

Description	• Serious and/or long term impact to the environment • Long-term management implications • Serious impact on the community • Neighbours are in serious dispute
Example or Implication	• Water, soil or air impacts, possibly in the long term • Harm to animals, fish, birds or plants • Public complaints. Neighbour disputes occur. Impacts pass quickly • Contravenes the conditions of Council licences, permits and the POEO Act • Likely prosecution
LEVEL 3	DESCRIPTOR: MODERATE
Description	• Moderate and/or medium-term impact to the environment and community • Some ongoing management implications • Neighbour disputes occur
Example or Implication	• 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	• 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 or Implication	• Theoretically could affect the environment or people but no impacts noticed • No complaints to Council • Infrequent disputes between neighbours
LEVEL 5	DESCRIPTOR: NEGLIGIBLE
Description	• Very minor impact to the environment and community • Can be effectively managed as part of normal operations • Neighbour disputes unlikely
Example or Implication	• No measurable or identifiable impact on the environment • No measurable impact on the community or impact is generally acceptable

3.2 INITIAL RISK IDENTIFICATION AND RISK RANKING

Table 4 lists the initial risk evaluation for the project.

Table 4: Initial Risk Identification and Risk Rating

POTENTIAL CONFLICT/SOURCE	EXPLANATION	RISK ASSESSMENT WITHOUT MITIGATION		
		PROBABILITY LEVEL	CONSEQUENCE LEVEL	RISK RATING
TRAFFIC	Additional traffic movements causing a nuisance	C	4	8
ODOUR	Odour creating a nuisance	B	2	21
PARTICULATE MATTER	Dust creating a nuisance	C	3	13
NOISE	Operational noise creating a nuisance Traffic noise creating a nuisance	C	3	13
CULTURAL HERITAGE	A Cultural Heritage artefact is found/disturbed	C	1	22
STORMWATER	Stormwater runoff causing impacts offsite	D	4	5
WASTE	Storage of waste causing odour or vermin impacts	C	3	13
CONSTRUCTION MANAGEMENT	Construction noise creating a nuisance	B	4	12
CHEMICAL USE	Chemical spill	D	4	5

3.3 Risk Reduction Controls and Management Strategies

Table 5 outlines the proposed mitigation and measurement measures.

Table 5: Proposed Risk Reduction Controls and Management Strategies

IDENTIFIED IMPACT	MITIGATION MEASURES AND MANAGEMENT MEASURES
TRAFFIC	A Basic Right (BAR) and Basic Left (BAL) at the intersection of Gooloogong Rd and the development site access. It is also recommended that this construction should also include sealing the shoulder widening for the intersection.
AIR QUALITY (ODOUR)	- Vegetative screens will be planted and maintained around the sheds as soon as practicable following construction. Vegetation screens reduce the magnitude and frequency of any adverse air quality impacts by effectively slowing and filtering air movement, which enhances dust deposition and odour dispersion. - The poultry sheds will be tunnel-ventilated, which will allow improved control over internal moisture levels and promote optimum shed conditions and bird health. - The sheds will be best practice design with reduces the potential for additional moisture in the sheds which lowers the risk of high litter moisture content, which is known to be a potential risk. - The feed silos will be fully enclosed to both prevent the entry of rainwater, with wet feed also identified as a potential odour source, and minimise emissions of dust/particulate matter when loading and unloading.

IDENTIFIED IMPACT	MITIGATION MEASURES AND MANAGEMENT MEASURES
	• Regular monitoring and maintenance of the tunnel ventilation systems and bird drinkers will be performed. • Stocking densities and bird health within each of the poultry sheds will be regularly checked and, if necessary, appropriate corrective measures will be implemented to ensure compliance with relevant standards. • Daily monitoring and maintenance of the bedding material will occur to minimise wet spots. • Litter will be promptly removed from the sheds and transported off-site in covered trucks at the end of each production cycle during the clean-out phase. • Dead birds will be collected from the sheds on a daily basis and stored in on-site chillers before removal from site. • The insides of the poultry sheds and the surrounds will be maintained at all times to ensure a clean and sanitary environment. • Shed access points will remain closed at all times other than for allowing access to the sheds. • Where possible, activities that may increase odour emissions (for example, bedding material replacement) will be performed during daytime hours.
AIR QUALITY (DUST)	• Vegetative screens will be planted and maintained around the sheds as soon as practicable following construction. Vegetation screens reduce the magnitude and frequency of any adverse air quality impacts by effectively slowing and filtering air movement, which enhances dust deposition and odour dispersion. • The feed silos will be fully enclosed to minimise emissions of particulate matter when loading/unloading. • Vehicles will not exceed a general speed limit of 40 km/hr within the site and will be confined, where possible, to the internal access roads. • Internal access roads will be appropriately maintained to minimise dust emissions. • The poultry shed ventilation systems will be maintained to ensure air movement is at design levels. • The poultry sheds will be thoroughly cleaned between batches, with a focus on the fan end of the sheds. • Generators will be contained in lockable acoustic enclosures with vertical air discharge. • The emergency standby generators will meet the relevant emission standards in Schedule 4 of the Clean Air Regulation. • Where possible, the handling of bedding material and litter will be avoided during adverse climatic conditions and shed ventilation systems will not be used during litter removal. • Poultry litter will be promptly transported off-site in covered trucks at the end of each production cycle.
NOISE	Operations • The poultry farms may operate over a 24 hour period. • No special acoustic modifications are required for site operation. However, in the unlikely event of complaint, we suggest as a first course of action constructing a landscaped earthen mound along west side of the Farm 2 sheds. The mound should be 1500-1800mm above ground level (also see Appendix B).

IDENTIFIED IMPACT	MITIGATION MEASURES AND MANAGEMENT MEASURES
	• Speed restriction signs should be erected at regular intervals along all access roads. A speed limit of 20-25km/hr should be imposed. • All access roads should be kept in good condition, i.e. no potholes, etc. • The generator is to be located in a shed or similar shielded building. The generator is to be fitted with a residential grade silencer. • Any lightweight clear roof sheeting, i.e. alsanite, makralon, laserlight, or similar, proposed to provide natural lighting for the workshop will reduce the overall noise transmission loss of the building. Therefore, sheets must only be used sparingly at regular intervals along the roof or wall length, i.e. no more than 6m² for each 45m² roof/wall area. • Once plant selection has been finalised, noise emission details should be forwarded to the acoustic consultant for approval. • A regular maintenance schedule should be adopted for all mobile and fixed plant items. Items found producing high noise should be stood down until repairs are completed. • The site manager should take responsibility and be available to consult with community representatives, perhaps only during opening hours. Response to complaints or comments should be made in a timely manner and action taken reported to the concerned party. • All staff and employees directly involved with the facility should receive informal training with regard to noise control procedures. Additional ongoing on the job environmental training should be incorporated with the introduction of any new process or procedure. This training should flow down contractually to all sub-contractors. • A noise monitoring program, during commissioning, or in the early life of the site is recommended to confirm compliance. In the event of any non-compliance(s) additional noise control strategies are to be implemented, followed by further confirmation monitoring. Construction • All combustion engine plant, such as generators, compressors and welders, should be carefully checked to ensure they produce minimal noise, with particular attention to residential grade exhaust silencers and shielding around motors. • Trucks and other machines should not be left idling unnecessarily. Machines found to produce excessive noise compared to industry best practice should be removed from the site or stood down until repairs or modifications can be made. • Framing guns and impact wrenches should be used sparingly, particularly in elevated locations, with assembly of modules on the ground preferred. • Table 12 in the full noise report (contained in Appendix 11) shows some common construction equipment, together with noise control options and possible alternatives. • To minimise noise impacts during construction, early work should concentrate on grading and levelling the areas. In the event of complaints arising the following additional strategies should be considered: ○ Consider alternate construction method. ○ Cease operation and discuss with neighbours suitable times for noisy construction activities. ○ Place acoustic enclosures or screens directly adjacent to stationary noise sources (compressors, generators, etc).

IDENTIFIED IMPACT	MITIGATION MEASURES AND MANAGEMENT MEASURES
	• We recommend that construction noise management strategies should be implemented to ensure minimum disruption to neighbours. Noise control strategies include co-ordination between the construction team and neighbours to ensure the timetable for noisy activities does not coincide with sensitive activities. • The site manager/environmental officer and construction contractor should take responsibility and be available to consult with community representatives, perhaps only during working hours. Response to complaints or comments should be made in a timely manner and action reported to the concerned party. • All staff and employees directly involved with the construction project should receive informal training with regard to noise control procedures. Additional ongoing on the job environmental training should be incorporated with the introduction of any new process or procedure. This training should flow down contractually to all sub-contractors. • A risk assessment should be undertaken for all noisy activities and at the change of each process. This will help identify the degree of noise and/or vibration impact at nearby receivers and ameliorative action necessary.
ECOLOGICAL	• Weed management: Appropriate weed control activities will be undertaken in accordance with the Central West Regional Strategic Weed Management Plan 2017 – 2022 (2017). • Delineation of clearing limits: Clearing limits marked either by high visibility tape, metal/wooden pickets, fencing or an equivalent boundary marker. Disturbance, including stockpiling, restricted to clearing limits. • Tree protection measures: Inductions to communication tree protection measures. Installation of fences around trees within 10 metres of the development footprint. Access to treed areas restricted during construction. • Pre-clearance survey: Pre-clearance surveys will be conducted in all areas of vegetation that are required to be cleared. Pre-clearing surveys will be undertaken within one week of clearing. Habitat features will be marked during the pre-clearing survey. • Staging of clearing: Vegetation clearing will be conducted as outlined in BDAR. Animals disturbed or dislodged during the clearance but not injured will be assisted to move to adjacent bushland. If animals are injured during the vegetation clearance, appropriate steps will be taken to humanely treat the animal (either taken to the nearest veterinary clinic for treatment, or if the animal is unlikely to survive, it will be humanely euthanized). • Sedimentation control: Construction activities will be undertaken in accordance with “The Blue Book” (Landcom 2004). • Weed management: Appropriate weed control activities will be undertaken in accordance with the Central West Regional Strategic Weed Management Plan 2017 – 2022 (2017). • Delineation of clearing limits: Clearing limits marked either by high visibility tape, metal/wooden pickets, fencing or an equivalent boundary marker. Disturbance, including stockpiling, restricted to clearing limits. • Tree protection measures: Inductions to communication tree protection measures. Installation of fences around trees within 10 metres of the development footprint. Access to treed areas restricted during construction. • Pre-clearance survey: Pre-clearance surveys will be conducted in all areas of vegetation that are required to be cleared. Pre-clearing surveys will be undertaken within one week of clearing. Habitat features will be marked during the pre-clearing survey.

IDENTIFIED IMPACT	MITIGATION MEASURES AND MANAGEMENT MEASURES
	• Staging of clearing: Vegetation clearing will be conducted as outlined in BDAR. Animals disturbed or dislodged during the clearance but not injured will be assisted to move to adjacent bushland. If animals are injured during the vegetation clearance, appropriate steps will be taken to humanely treat the animal (either taken to the nearest veterinary clinic for treatment, or if the animal is unlikely to survive, it will be humanely euthanized). • Sedimentation control: Construction activities will be undertaken in accordance with "The Blue Book" (Landcom 2004).
CULTURAL HERITAGE	• Surface collection methodology of artefacts is to be confirmed post-approval. • With respect of sub-surface excavation, eight 50cm x 50cm excavation squares will be placed in the area of interest. This will be temporarily fenced and signed appropriately. • An unanticipated finds protocol and an unanticipated skeletal remains protocol will be in place for the construction. • All land disturbing activities will be confined to the study area.
BUSHFIRE	• Construction of the rural workers dwellings is to comply with BAL-12.5 specifications and be provided with an APZ measuring 23m in width, as set out by the Bush Fire Management Plan. • Internal road network design and dimensions comply with those set out by the Bush Fire Management Plan. • Defensible space areas are provided which comply with those illustrated by the Bush Fire Management Plan. • Consider the preparation of a bush fire emergency management and evacuation plan to support the safe operation of the facility. • The static water supply for the facility meets the following recommendations of this assessment: ○ a 6 metre defensible space area is provided around the tanks. ○ each steel tank is to facilitate fire appliance access by providing an outlet within 4 metres of the standing position of a Category 1 tanker, which is likely to pull up on the central access road. The outlet is to be fitted with a 65mm metal Storz outlet with gate or ball valve. ○ the tanks are to be topped up to full capacity at the start of each regulated fire season and water levels observed throughout each fire season to ensure sufficient firefighting capacity is maintained for the duration of the season. ○ ensure the fire safety provisions of the NCC are implemented and consider the ability for firefighting equipment provided on site to protect the entirety of each building (i.e. hoses are located and can stretch the perimeter around buildings, etc.). • In relation to the LPG tank, a 10 metre defensible space area is to be provided. The LPG tanks are also required to be shielded by a masonry (i.e. besser block) radiant heat screen at a height of 1.5m or otherwise sufficiently high to screen the height of the tanks, in a manner outlined by the Bush Fire Management Plan. Plastic gas fittings are not acceptable in a grass fire hazard area and are not to be used. • Provide electricity supply in a manner which complies with the requirements of PBP 2019 and undertake annual checks and maintenance to limit the ignition hazard posed by the electricity supply.

IDENTIFIED IMPACT	MITIGATION MEASURES AND MANAGEMENT MEASURES
	• Ensure APZs (including earthworks batters) are landscaped to limit fire potential and comply with the 'inner protection zone' provisions of PBP 2019. • Continue to maintain the existing trail and track network across the broader subject site.
STORMWATER	• Swale diversions, detention basins, and pit and pipe network to be constructed to control stormwater quantity and flow. • Obtain a license or approval to operate activities that are classed as environmental relevant activities (i.e. they have the potential to cause environmental harm). • Implement and maintain appropriate control measures to prevent sediment laden wastewater and other potential pollutants such as oil, paint and wet concrete from entering the stormwater system via stormwater drains and gullies. The control measures which must be considered to be adopted are: ○ Limitation of site access during construction to minimise disruption to traffic. Install a temporary construction entry/ exit sediment trap at all site accesses to minimise mud and sediment from the site being tracked onto public road, particularly during wet weather or when the site is muddy. ○ Install and maintain appropriate sediment fences around construction areas. ○ Divert clean stormwater runoff, using catch drains, around construction areas to existing or new stormwater drainage system. ○ Install sandbags and other pollution containment devices around stormwater drains and any other locations where required to prevent sediment entering the trunk stormwater system. ○ Cover open earth/ soil areas progressively (with concrete slabs and pavements or mulch) to minimise areas of bare earth/ soil. ○ Any stockpiles of excavated soil and demolition/ construction waste must be located where risk of erosion and sedimentation is minimal and must be protected from wind and water erosion. ○ Implement and maintain appropriate control measures such as catch drains and sediment fences to prevent ponding of stormwater or discharge of stormwater from the site to adjacent properties. ○ Provision of spill/ pollution control equipment that is readily accessible to clean up spills and leaks. ○ Ensure spill/ pollution control measures are available and maintained in working condition. ○ Sediment contained by the sediment control devices such as sandbags, sediment fences and containment bunds must be frequently removed and placed in a controlled area. ○ Implement an inspection schedule for any spill or leaks of any potential polluting areas or activities.
WASTE	• Waste is managed in accordance with the Waste Management Plan.
CHEMICAL USE	• Chemical handling and storage procedures will be undertaken in accordance with the applicable Safety Data Sheets (SDS) and all relevant Australian Standards. • The area immediately surrounding the LPG tanks shall be designed in accordance with AS/NZS 1596:2014.

IDENTIFIED IMPACT	MITIGATION MEASURES AND MANAGEMENT MEASURES
	- All areas containing Dangerous Goods shall be zoned in accordance with the requirements of AS/NZS 60079.10.1.2009. - All electrical equipment located within hazardous areas shall comply with AS/NZS 60079.10.1.2009. - A No Smoking Policy and placarding in accordance with AS/NZS 1940-2017 shall be provided in the vicinity of all Dangerous Goods stores. - The safeguards outlined in Table A1 Appendix A – Hazard Identification Table of the PHA shall be implemented including but not limited to: - Installation of proprietary ARMCO barriers or equivalent to protect tanks from impact. - Hydrant protection as per AS2419:1:2005. - Provision of spill kits and staff training for spill response.
CONSTRUCTION MANAGEMENT	- A Construction Management Plan is to be prepared which addresses the following: - Identifying construction vehicle traffic routes that minimise impacts to neighbours, as far as possible; - Providing arrangements for parking of worker and construction vehicles on-site; - Storing all equipment on site; - Identifying management practices to minimise and manage interruptions to traffic flows; - Establishing practices to maintain traffic and pedestrian safety to local residents; - Minimising disruption proposed road closures, temporary traffic routes, loss of pedestrian or cyclist access or reversing manoeuvres; - Providing queueing space onsite for the standing of vehicles; - Providing clear signage to direct construction vehicles; and - Provide signage on site that provides a contact number for residents to direct enquiries and report incidents (e.g. theft or break and enter to the site while unattended), should they occur.
ENVIRONMENTAL MANAGEMENT	Prepare an implemented a detailed Environmental Management System for the farms in accordance with the AS/NZS/ISO 14001: 2015 Standard.

3.4 Mitigated Risk Ratings

Table 6 sets out the mitigated risk ratings after the mitigation and measurement measures have been put in place.

Table 6: Mitigated Risk Ratings

POTENTIAL CONFLICT/SOURCE	RISK RATING (BEFORE MANAGEMENT STRATEGY IS APPLIED)			REVISED RISK RANKING (AFTER MANAGEMENT STRATEGY IS APPLIED)		
	PROBABILITY LEVEL	CONSEQUENCE LEVEL	RISK RATING	PROBABILITY LEVEL	CONSEQUENCE LEVEL	RISK RATING
TRAFFIC	C	4	8	D	4	5
ODOUR	B	2	21	D	4	5

POTENTIAL CONFLICT/SOURCE	RISK RATING (BEFORE MANAGEMENT STRATEGY IS APPLIED)			REVISED RISK RANKING (AFTER MANAGEMENT STRATEGY IS APPLIED)		
	PROBABILITY LEVEL	CONSEQUENCE LEVEL	RISK RATING	PROBABILITY LEVEL	CONSEQUENCE LEVEL	RISK RATING
PARTICULATE MATTER	C	3	13	D	4	5
NOISE	C	3	13	D	4	5
CULTURAL HERITAGE	C	1	22	C	4	8
STORMWATER	D	4	5	E	4	3
WASTE	C	3	13	E	4	3
CONSTRUCTION MANAGEMENT	B	4	12	C	5	4
CHEMICAL USE	D	4	5	D	4	5

4 CONCLUSIONS AND RECOMMENDATIONS

The LUCRA to support the proposed Grenfell farm demonstrates that with appropriate management and mitigation measures in place, the proposal is able to proceed with a reduced impact on the surrounding properties. Each of the mitigated risk ratings for all of the matters are within the accepted risk ratings.

As such, the proposed management and mitigation strategies should be adopted as part of the development consent.