PSA CONSULTING

Environmental Impact Statement

Grenfell Breeder/Rearer Farm

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Revision History

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DECLARATION

The undersigned declares that this EIS:

- has been prepared in accordance with Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*;
- contains all available information relevant to the environmental assessment of the development, activity or infrastructure to which the EIS relates;
- does not contain information that is false or misleading;
- addresses the Planning Secretary's environmental assessment requirements (SEARs) for the project;
- identifies and addresses the relevant statutory requirements for the project, including any relevant matters for consideration in environmental planning instruments;
- has been prepared having regard to the Department's State Significant Development Guidelines - Preparing an Environmental Impact Statement;
- contains a simple and easy to understand summary of the project as a whole, having regard to the economic, environmental and social impacts of the project and the principles of ecologically sustainable development; • contains a consolidated description of the project in a single chapter of the EIS;
- contains an accurate summary of the findings of any community engagement; and
- contains an accurate summary of the detailed technical assessment of the impacts of the project as a whole.

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EXECUTIVE SUMMARY

Project Overview

PSA Consulting has been engaged by Baiada Properties Pty Limited to prepare this Environmental Impact Statement 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. The farms will house a maximum of 570,000 birds across the property. The subject site is formally described as Lot 1 DP1022013, Lots 1-3 DP1206485 and Lot 22 DP866857.

Each of the farms 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

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.

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

Poultry Consumption and Demand

Research undertaken by the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) indicates that total chicken meat consumption in Australia has increased by an average of 5% per annum over the 10 years to 2022-23, representing 45% of the total meat consumption.

The ABARES commodities report shows that chicken continues to be the most consumed meat in Australia and has increased by over 65% between 2000 (~30kg per person) and 2018 (~50kg per person). The growth is driven by the product's versatility, convenience and a lower price point compared to beef, lamb and pork. Per capita poultry consumption is expected to continue growing to reach around 51.5kg by 2022-23.

As a result of the ongoing and predicted growth in demand for poultry meat products in Australia, significant expansion of the industry is required. The proposed construction of the proposed Grenfell poultry farm is a direct consequence of this increase in demand for poultry products throughout Australia and will provide additional breeding stock to ensure supply meets demand.

Core Objectives

The core objectives for the proposal are as follows:

- Construction of the Grenfell Farms 1-4 consisting of 40 poultry sheds with a capacity of 570,000 birds;
- Support the poultry meat cluster in the Central West of NSW;
- Provide bio-security separation for the poultry farm away from other clusters;
- Provide additional meat chickens (broilers) to meet the projected growth in demand for poultry products in Australia.

Alternatives

The alternatives to carrying out the development include:

1. No development of a poultry breeder / rearer farm;
2. Construction of a poultry farm in an alternate location within the region;
3. Development of 3 breeder / rearer farms in accordance with the existing approval.

As outlined in the EIS, there is a need for poultry breeder / rearer farms to be developed in the Central West/Orana Region to service the demand for poultry products in Australia. Development of the additional capacity needs to be located in the Central West/Orana Region where necessary integrated infrastructure is available and the locational characteristics provide efficient access to markets and inputs such as grain.

There are limited sites available which satisfy the specific locational requirements to allow the development of a new breeder / rearer farm, which are as follows:

- Access to water;
- Access to grain supplies;
- Sufficiently large site to provide the required separation distance between farms and other sensitive receptors; and
- Proximity to other facilities within the poultry supply chain.

Construction of a new farm on an alternate site within the region would require the identification and purchase of an alternate site as well as losing the benefit of the existing infrastructure available to the subject property particularly the high quality water supply.

The site has an existing approval for Poultry Breeder / Production Farm issued by Weddin Shire Council in 2002 (DA Reference 75/2002). Construction of the approved development (3 farms) in accordance with the existing current consent does not reflect current best practice or provide the operational efficiencies or necessary egg supply to make the project financially viable. The proposed complex has been designed based on Baiada's preferred model to breeder / rearer farms, taking into account all necessary animal welfare, biosecurity and operational considerations.

The alternatives to the proposed development are either financially unviable, unlikely to succeed or do not represent and efficient approach to the expansion of poultry production in Australia in order to the forecast growth in demand. Further, as demonstrated within this EIS, the proposed development can be undertaken in a manner consistent with all applicable environmental and planning safeguards and standards and as such, the project as proposed is clearly the best option to achieve the core objectives.

The Proponent

Baiada Properties Pty Limited is part of the Baiada Group of Companies (Baiada) which includes the Steggles business. Baiada is a privately owned Australian company providing premium quality poultry products throughout Australia and has an employee base of more than 7,000 people. The Baiada business is a fully integrated poultry operation encompassing broiler and breeder farms, hatcheries, processing plants, feed million and protein recovery. Baiada's products include the sale of live poultry (including breeding stock), poultry feed, fertile eggs, day old chickens, primary processed chicken (raw), processed chicken products and pet food.

The Site

The proposed Grenfell Poultry Breeder Farm is situated on Lot 1 DP1022013, Lots 1-3 DP1206485 and Lot 22 DP866857. The site has an area of 598 ha and is situated approximately 11km north of Grenfell, NSW. The site has been historically cleared and used for agricultural uses. The site is accessed via Gooloogong Road, which is a local road under the authority of Weddin Shire Council. The Wallan Wallan Creek intersects the property and runs south to north across the site.

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.

Existing Opportunities and Approvals

The site has an approval 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.

Land Use Planning and Permissibility

Under the *State Environmental Planning Policy (SEPP) (State and Regional Development) 2011*, Part 2, 8(1), the development is classified as a State Significant Development as it involves "Intensive livestock agriculture" that has a Capital Investment Value greater than $30 million.

Under the *Weddin Local Environmental Plan 2011*, the subject site is located in the RU1 Primary Production zone. The objectives of this zone are:

- *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.*

In accordance with the land use tables of the *Weddin Local Environmental Plan 2011*, the development of an 'intensive livestock agriculture' within the Primary Production (RU1) zone is identified as development permitted with consent.

The proposed poultry farm is a rural use located within the Primary Production zone and surrounded by a number of other rural industries and large scale agricultural activities. The proposed development will support the Council's objectives for the zone. The proposed development will also employ (at full operation) an additional 50 FTE local workers, providing employment in the area.

Consultation

In preparing the Environmental Impact Statement consultation has been undertaken with Authorities, Stakeholders and the broader community.

A formal Request for Secretary's Environmental Assessment Requirements (dated 6 October 2020) was submitted with the New South Wales Department of Planning, Industry and Environment (DPIE). The DPIE consulted with a number of other departments including NSW Environmental Planning Authority (EPA), Roads and Maritime Services, Office of Environmental and Heritage and Weddin Shire Council. Each of the departments was included in the SEARs issued on 1 March 2021.

Consultation was also undertaken with the broader community, including surrounding residents and businesses to gain preliminary feedback with respect to the proposed development. This included a letter, flyer and offers to meet with the nearby residents.

Two virtual stakeholder meetings were held with surrounding landowners. The offer was made to a total of four stakeholders, however not all requested a meeting. Overall, meetings were generally supportive of the project and its contribution to the local economy, subject to some matters of concern being addressed as part of the detailed design / assessment process. Items of concern raised in the stakeholder meetings included:

- Potential for odour / air pollution impacting on nearby houses;
- Potential visual impacts on views;
- Road access and retention of the unconstructed road reserves;
- Maintenance of boundary fencing;
- Potential impacts on adjoining farming operations.

Baiada will continue to engage with these landholders in both an informal and formal basis moving forward as the project progresses.

Assessment of Potential Impacts

An assessment of the proposed development has been undertaken and has found that the development will not have any significant detrimental impact upon the community, economy and receiving environment. Further details on the assessments undertaken are provided below.

Direct Employment

At full operation, the farms are anticipated to provide employment for 50 full time equivalent (FTE) positions across the four farms.

Water Use

It is anticipated that 1ML of water will be required per day for the proposed development. The 1ML will be used by the four farms collectively and will be used for drinking water for the birds, cleaning, washdown water, staff drinking water and amenities.

Central Tablelands Water (CTW) is the relevant water supply authority and services the Shires of Blayney, Cabonne and Weddin. Preliminary discussions have been held with CTW regarding connection to the nearby water pipeline, the Gooloogong-Grenfell Water Pipeline. From these discussions, it is understood that water is available to be supplied in the quantity and quality required.

Ecological Impact Assessment

Native vegetation was calculated to occupy approximately 3.0% of the specific subject land and comprised remnant woodland, scattered native trees, derived native grassland and planted native trees. The remaining land within the subject land comprises exotic dominated pasture and cleared land.

The plant community types within the study area and subject land include:

- PCT 201 – Fuzzy Box Woodland on alluvial brown loam soils mainly in the NSW South Western Slopes Bioregion;
- PCT 267 – White box – White Cypress Pine – Western Grey Box shrub/grass/forb woodland in the NSW South Western Slopes Bioregion;
- PCT 276 – Yellow Box grassy tall woodland on alluvium or parna loams and clays on flats in NSW South Western Slopes Bioregion
- Planted Native Trees;
- Pastureland (Category 1 Land – not assessed).

Of these plant community types, the vast majority of the vegetation in the subject land (45.52ha out of the 46.94ha) is pastureland which is Category 1 Land and was not assessed as part of the Ecological Impact Assessment.

The total of other vegetation in the subject land are as follows:

- 1.16ha of PCT267;
- 0.21ha of PCT201;
- 0.04ha of planted native trees; and
- 0.01 PCT267.

As the project includes the removal of some areas of native vegetation, offsets are required in the form of ecosystem credits. The Biodiversity Assessment Method calculator (BAMC) generated a list of threatened species requiring assessment which included 34 ecosystem credit species and 3 species credit species.

Several management recommendations have been provided to minimise potential ecological impact, particularly during the construction phase of the project.

Based on the assessment undertaken by Cumberland Ecology, the report concludes that the implementation of the proposed mitigation and offsetting measures, it is considered that the impacts of this project on biodiversity, in particular on Box Gum Woodland will be minimal and can be appropriately managed.

Cultural Heritage Assessment

An Aboriginal Cultural Heritage Assessment has been undertaken by OzArk Environment and Heritage to support the proposed development. The methods used for this assessment are in compliance with the Office of Environment and Heritage (OEH) 'Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales' and the relevant legislation.

During the survey, one Aboriginal cultural heritage site (Wallah Wallah Creek OS-1) was recorded. Wallah Wallah Creek OS-1 is a low density artefact scatter with associated potential archaeological deposit; however, any associated subsurface deposits are considered unlikely to be intact due to previous levels of disturbance. Wallah Wallah Creek OS-1 is located within the impact footprint of the proposed access track and will be partially impacted by the project. As such, the site will require management and mitigation measures to be completed prior to the proposed work for the project commencing.

Odour and Dust Impact Assessment

An Odour and Dust Impact Assessment has been prepared by Astute Environmental Consulting to assess the impacts of odour and dust from the proposed farms. All proposed on-site odour and dust sources have been assessed and modelled.

Modelling of the proposed development identified the cumulative site odour impact (odour footprint) using the NSW EPA Impact Assessment Criteria of 5 odour units (ou), which is a conservative criterion given the number of nearby residences. The assessment found that the development complies with the criterion of 5 ou. The highest predicted concentration is 3.9 ou (K=2.2) at sensitive receptor 3 (SR3).

Dust impacts from the proposed development have been assessed using the Approved Methods (NSW EPA, 2016) for assessment the impacts from dust generating activities. Particulate emissions from the proposed sheds and other activities were based on data collected at a meat chicken farm in New South Wales as well as theoretical considerations. The modelling shows that no exceedances of the applicable criteria (24 hour PM10) were predicted to occur at any of the sensitive receptors.

Noise Impact Assessment

A detailed assessment has been undertaken by Reverb Acoustics to assess the proposed development against the relevant acoustic criteria. The report has shown that providing recommendations detailed in this report are implemented, noise levels from the upgraded site will be compliant with the EPA's NPI requirements at all nearby residential receivers during the day, evening and night, for neutral and worst-case atmospheric conditions.

The assessment shows that site operations are predicted to be compliant with the criteria at all nearby residential receivers during the day and night for neutral and adverse weather conditions.

A minor 2dB(A) exceedance is predicted at residence R1 during adverse weather conditions, however this assumes all ventilation fans, truck movements and the emergency generator are operating simultaneously – in reality, this is exceedingly unlikely, implying compliance.

During construction the total impact at each receiver is related to the received noise level and the duration of excessive noise. Generally, construction noise will comply with the criteria, however, during major construction activities some exceedances may occur. However, nearby neighbours should accept some periods of high noise, considering the relatively short-term nature of louder construction activities.

To reduce the impact in the area during construction, it is recommended that louder construction activities, should be completed with the minimum of undue delay. In any case, all reasonable attempts should be made to complete significant noisy activities within as short a time as possible.

Reverb has concluded that operation and construction of the Grenfell site will not cause any long term excessive environmental noise at any residential properties.

Traffic Impact Assessment

A Traffic Impact Assessment has been prepared by PSA Consulting which reviewed the proposed development and its impacts on the existing road network and proposed access road from Gooloogong Road to each of the farms. At full

operation, the proposed development is expected to generate up to 56 total vehicle trips per day, with the majority of these being light vehicles (42 out of 56). A background traffic growth rate of 3% per year has been assumed for Gooloogong Road. The assessment found that even with the proposed development, the intersection with Gooloogong Road will operate without the need for further intersection analysis. It is recommended that Basic Left and Basic Right turning treatments are applied to the intersection as well as sealing the shoulder widening.

Vehicles will access the site via an existing entry point on Gooloogong Road. The road is currently an accepted route for B-double vehicles as per the Transport for NSW *Combined Higher Mass Limits (HML) and Restricted Access Vehicle (RAV) Map.* Increasingly, transportation of the agricultural products is being undertaken by A-Doubles and as such, this has been adopted as the largest design vehicle for the site. However, it is noted that Gooloogong Road is not an approved route for A-Double vehicles and should the use be proposed, a permit will need to be acquired from the National Heavy Vehicle Regulator (NHVR) in order for the necessary vehicles to access the site.

The intersection with Gooloogong Road is deemed to have no sight distance related issues.

Swept path analysis shows that a 26m A-Double is able to manoeuvre throughout the site and enter and exit the site safely.

Flooding

A Flood Impact Assessment (FIA) has been prepared by Storm Engineering to investigate potential flooding impacts associated with the proposed development. The flood study analyses the local and regional flooding impacts on the site to appropriately address flood risks and impacts for the proposed development and its associated works.

A pre-development scenario and a post-development scenario has been adopted, to determine the potential impacts as a result of development during the 39%, 5% and 1% AEP design events, and to review peak water levels in and around each proposed farm building during the peak 1% AEP event.

Additional sensitivity analysis has been undertaken for the 0.5% and 0.2% AEP events as proxies for Climate Change and the impacts as a result of the potential changes in rainfall intensity.

The proposed poultry farms are to be situated above the 1% AEP Flood Planning Level and therefore complies with the NSW Floodplain Development Manual and WSC LEP requirements. Furthermore, all proposed channels around the site are demonstrating efficient capture and release from external incoming sheet flow from local sub-catchments.

Stormwater Management Plan

A detailed Stormwater Management Plan has been prepared by MPN Consulting Engineers. The aim of the SMP is to:

- Prevent or minimise adverse social or environmental impacts from stormwater runoff originating from the proposed development;
- Achieve acceptable levels of stormwater runoff quality and quantity; and
- Identify stormwater quantity and quality best management practice for the site and demonstrate that water quantity and quality impacts will be minimised in receiving waters.

Roof water and stormwater runoff from each farm will be collected and conveyed in a new internal stormwater open swale and pit and pipe network, prior to discharge to five separate detention basins.

The runoff from the shed roof areas and surrounding pavements will discharge to swales between the sheds which will then be conveyed to the detention basins via a new pipe system under the surrounding road.

In order to limit the site stormwater discharge, stormwater runoff from each farm will be detained in five separate above ground basins. The basins have been oversized to compensate for the negligible increase in stormwater runoff from the internal roads which will bypass detention.

In order to reduce overall post-development pollutant loads and concentrations being discharged from the site, treatment solutions have been provided to remove hydrocarbons, suspended solids and nutrients prior to being discharged from site.

Stormwater runoff from the sheds will be treated by grassed swales and the bioretention/detention basins prior to discharge to receiving waters. Stormwater runoff from the internal roads will be treated by a roadside swale proposed along the low side of the road.

Erosion and Sediment Control will be implemented in accordance with the following guidelines and standards:

- Managing Urban Stormwater: Soils & Construction (Landcom, 2004)
- Soil and Landscape Issues in Environmental Impact Assessment (DLWC, 2000)
- Wind Erosion – 2nd Edition (DIPNR, 2003)

As shown on the plans, the proposed detention basins around the sheds will be utilised as sedimentation basins during the construction phase. Additional erosion management measures are documented in the Stormwater Management Plan

The Stormwater Management Plan confirms that stormwater quality and quantity treatment is achievable to the levels required by Weddin Shire Council and Industry Best Management Practice.

Economic Impact Assessment

Once operational , the project will create 50 full time equivalent (FTE) positions. In addition to the direct employment, the additional farm will create additional opportunities for numerous contractors who support poultry farming including:

- Transport Contractors – transporting eggs, clean bedding material, poultry feed, live birds, gas, manure and litter;
- Live Bird Collection Crews;
- Shed cleaning and set up crews; and
- Local maintenance contractors including electricians and plumbers, etc.

The Capital Investment Value (CIV) of the project has been calculated in accordance with the *State Environmental Planning Policy Amendment (Capital Investment Value) 2010* and the project is estimated to be **$64,124,200** a majority of which is associated with construction of the proposed farm.

In this regard, it is estimated that the project will create 60 construction jobs to deliver the project over a 26 month period. Indirect opportunities during construction will also be created for local tradespersons to assist with the build including electricians, plumbers, earthmovers and the like.

The project is anticipated to have a positive impact on the employment prospects for local residents. There is expected to be sufficient potential employees in the local area to fill the new jobs associated with the project.

Social Impact Assessment

Each of the technical assessments included in this EIS has confirmed that the development can be constructed and operated in such a manner that will have limited impact on the surrounding properties. As such, it can be concluded that the proposed development is unlikely to have significant, negative social impacts provided the proposed mitigation and management measures are implemented, however, it can be determined that the project will generate significant, positive impacts, particular in relation to economic impacts.

Hazards

In accordance with the requirements of *State Environmental Planning Policy 33* (SEPP33), a screening assessment of the dangerous goods (DGs) to be stored on site has been undertaken by Lote Consulting.

This screening assessment found that the bulk storage of LPG (a Class 2.1 flammable gas) would exceed the storage thresholds listed in the SEPP and as such, the site would be regarded as being potentially hazardous. Accordingly, a Preliminary Hazard Assessment (PHA) was required for the project. Vehicle movements as a result of DG storage was also assessed and the thresholds for these vehicular movements was not exceeded.

A Preliminary Hazard Assessment (PHA) was required for the project by Lote Consulting.

As part of the PHA, the potential hazards associated with the operations or storage of materials have been identified. Based on the identified hazards, scenarios were postulated which may result in an incident with potential offsite impacts, which were then carried forward for consequence analysis. The consequence analysis undertaken by Lote Consulting shows that no scenarios had the potential to impact offsite and as such, frequency analysis was not required to be conducted as the probability of a fatality at the site boundary was already minimised to within the acceptable risk criteria.

The assessment concludes that the risk at the site boundary do not exceed the acceptable risk criteria. Hence the proposed development would only be classified as potentially hazardous and would be permitted within the current land zoning for the site.

Animal Welfare

Baiada currently have in place a national Livestock Animal Welfare and Biosecurity Manual (Issue No 1, dated 13 November 2019) which contains a comprehensive livestock management program which will be applied to the site. Baiada is committed to achieving high standards of bird welfare and the company understands that bird welfare and economic performance go hand-in-hand. As well as being in the bird's best interest, it makes sound economic sense to ensure that flocks are maintained in an environment in which they are safe, comfortable and free from injury or harm.

The conditions under which poultry are managed during their growing phase, transportation and slaughter are set down in several statutory and industry endorsed codes of practice designed to safeguard their health and welfare. In this regard, Baiada is committed to meet or exceed the standards of care detailed in the following Primary Industries Standing Committee documents:

- *Model Code of Practice for the Welfare of Animals - Land Transport of Poultry (2006)*; and
- *Model Code of Practice for the Welfare of Animals - Livestock at Slaughtering Establishments (2002)*.

Biosecurity

As noted above, Baiada currently have in place a national Livestock Animal Welfare and Biosecurity Manual (Issue No 1, dated 13 November 2019) which contains a comprehensive livestock management program which will be applied to the site. Bio-security will be managed in accordance with the Hazard Analysis and Critical Control Points (HACCP) Plan which will be developed for the site. The HACCP plan will identify hazards and risks that have the potential to compromise food safety and outlines the relevant risk management and mitigation procedures.

Impact Management and Mitigation Measures

The following table presents a summary of the impact management and mitigation measures proposed to be implemented in associated with the proposed development.

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. • 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.

IDENTIFIED IMPACT	MITIGATION MEASURES AND MANAGEMENT MEASURES
	• 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 little 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). • 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

IDENTIFIED IMPACT	MITIGATION MEASURES AND MANAGEMENT MEASURES

	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).
	• 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.

IDENTIFIED IMPACT	MITIGATION MEASURES AND MANAGEMENT MEASURES
	• 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. • 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).

IDENTIFIED IMPACT	MITIGATION MEASURES AND MANAGEMENT MEASURES
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.
	• 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.

IDENTIFIED IMPACT	MITIGATION MEASURES AND MANAGEMENT MEASURES

	• 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. • 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.

IDENTIFIED IMPACT	MITIGATION MEASURES AND MANAGEMENT MEASURES
	• 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.

Conclusion

This Environmental Impact Statement has been prepared in accordance with the requirements of the relevant State and Local statutory planning requirements and assesses all relevant impacts of the proposed development. Where impacts have been identified, appropriate management and mitigation measures have been prescribed. Provided that the mitigation and management measures described in the EIS are adhered to, the proposed development is not predicted to result in unacceptable impacts on the receiving environment or local community. Accordingly, the development is recommended for Approval, subject to relevant and reasonable conditions.

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LIST OF ACRONYMS

AADT	Annual Average Daily Traffic
ABARES	Australian Bureau of Agricultural and Resource Economics and Sciences
ACHAR	Aboriginal Cultural Heritage Assessment Report
ACHMP	Aboriginal Cultural Heritage Management Plan
AEP	Annual Exceedance Probability
AHD	Australian Height Datum
APZ	Asset Protection Zone
BAL	Basic Left Turn
BAM	Biodiversity Assessment Method
BAMC	Biodiversity Assessment Method Calculator
BAR	Basic Right Turn
BC Act	Biodiversity Conservation Act
BDAR	Biodiversity Development Assessment Report
BOM	Bureau of Meteorology
CBD	Capital Business District
CIV	Capital Investment Model
CTW	Central Tablelands Water
DA	Development Application
DAWE	Department of Agriculture, Water and the Environment
dB	Decibel
DCP	Development Control Plan
DG	Dangerous goods
DIPNR	(former) Department of Infrastructure, Planning and Natural Resources
DLWC	(former) Department of Land and Water Conservation
DoP	(former) Department of Planning
DPI	Department of Primary Industries
DPIE	Department of Planning, Industry and Environment
EES	Environment, Energy and Science
EGN	Early general news
EIS	Environmental Impact Statement
EMP	Environmental Management Plan
EOI	Expression of Interest
EPA	Environment Protection Agency
EPBC	*Environmental Protection and Biodiversity Conservation Act 1999*
EPL	Environmental Production Licence
FIA	Flood impact assessment

FPL	Flood protection level
FTE	Full time equivalent
GFA	Gross floor area
GST	Goods and services tax
Ha	Hectare
HACCP	Hazard Analysis Critical Control Points
HML	Higher Mass Limits
IAC	Impact Assessment Criteria
ICNG	Interim NSW Construction Noise Guideline
LALC	Local Aboriginal Land Council
LEP	Local Environmental Plan
LGA	Local Government Area
mm	Millimetres
ML	megalitre
NHVR	the National Heavy Vehicle Regulator
NPfI	Noise Policy for Industry
NSW	New South Wales
ODIA	Odour and Dust Impact Assessment
OEH	Office of Environment and Heritage
ou	Odour unit
PAD	Potential archaeological deposit
PBP	Planning for Bushfire Protection
PCT	Plant Community Type
PHA	Preliminary Hazard Assessment
POEO Act	Protection of the Environment Operations Act 1997
RAV	Restricted Access Vehicle
RFS	Rural Fire Service
RMS	Roads and Maritime Services
RNP	Road Noise Policy
SA2	Statistical Area 2
SAII	serious and irreversible impacts
SDS	Safety Data Sheets
SEARs	Secretary's Environmental Assessment Requirements
SEPP	State Environmental Planning Policy
SISD	Safe intersection site distance
SMP	Stormwater Management Plan
SOP	Standard Operating Procedures
sqm	Square metre
SR	Sensitive receptor
SSD	State Significant Development
TBDC	Threatened Biodiversity Data Collection
TEC	Threatened Ecological Community
TIA	Traffic Impact Assessment
WSC	Weddin Shire Council

1 THE SITE

1.1 SITE OVERVIEW

Address	1130 Gooloogong Road, Grenfell
Property	Lot 1 DP1022013
	Lots 1, 2 and 3 DP1206485
	Lot 22 DP866857
Land Owners	Baiada Properties Pty Limited
Applicant	Baiada Properties Pty Limited
Consent Authority	Minister for Planning
Local Government Area	Weddin Shire Council
Zoning	RU1 Primary Production Zone
Total Site Area	708.75 Ha

A copy of a current Certificate of Title for each of the properties the subject to this Development Application are included in **Appendix 1**.

1.2 SITE DESCRIPTION

The proposed Grenfell Poultry Breeder/Rearer Farm is situated on Lot 1 DP1022013, Lots 1,2 and 3 DP1206485 and Lot 22 DP866857 (refer to **Figure 1**).

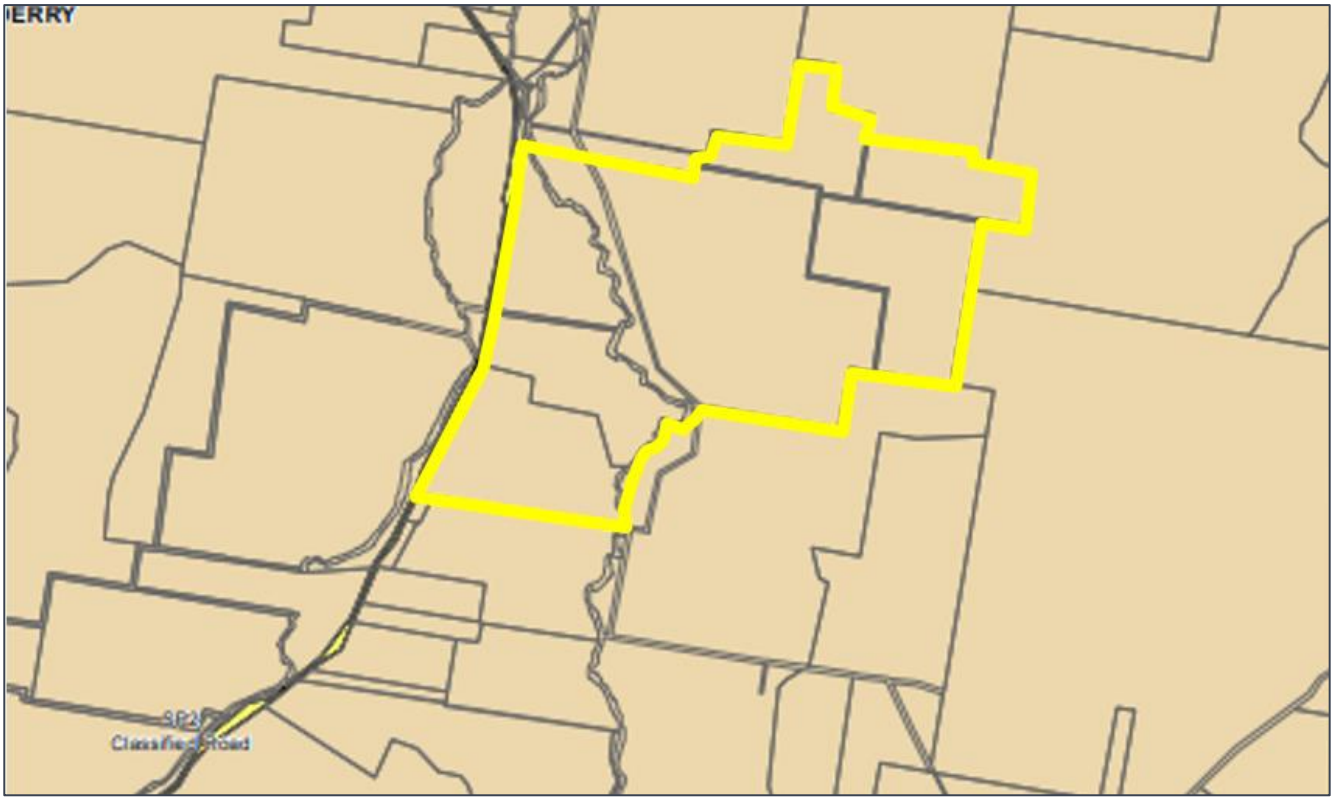


Figure 1: Subject site (Weddin LEP, 2011)

The site has an area of 708.75 ha and is situated approximately 11km north of Grenfell, NSW. The site has been predominantly cleared for historic agricultural uses. The site is access via Gooloogong Road, which is a local road under the authority of Weddin Shire Council. Wallah Creek intersects the property and runs south to north across the site.

1.3 SURROUNDING AREA

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) are 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.

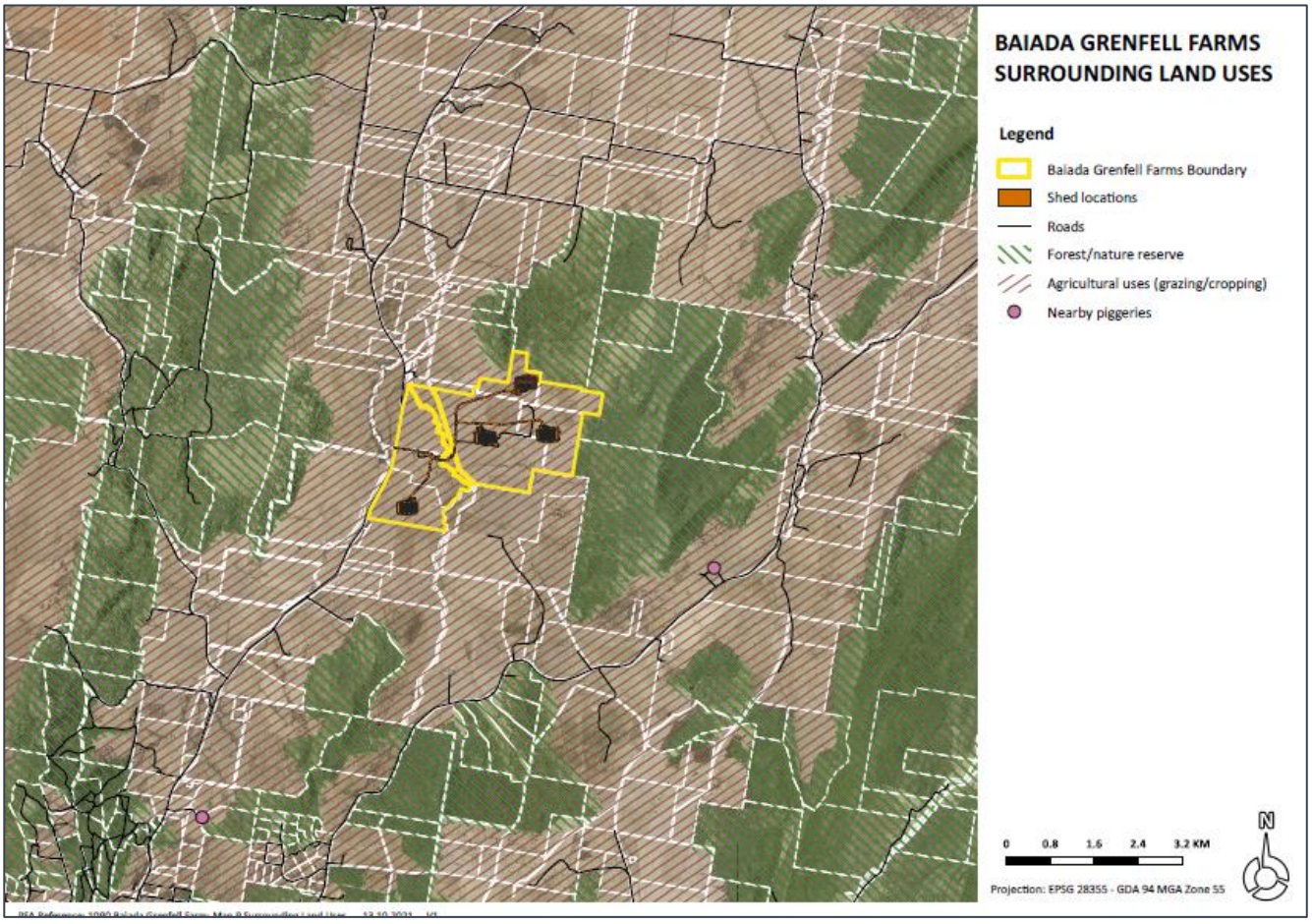


Figure 2: Surrounding Land Uses (PSA Consulting, 2021)

1.4 EXISTING APPROVALS

The site has an existing approval for Poultry Breeder / Production Farm issued by Weddin Shire Council in 2002 (DA Reference 75/2002), however this approval will no longer be pursued due to changes in poultry standards and an increase in the number of sheds and birds proposed as part of the development. A copy of the existing Development Consent is included in **Appendix 2**.

1.5 THE PROPONENT

Baiada Properties Pty Limited is part of the Baiada group of companies (Baiada). The Baiada business is a fully integrated poultry operation encompassing broiler and breeder farms, hatcheries, processing plants, feed milling and protein recovery. Baiada's products include the sale of live poultry (including breeding stock), poultry feed, fertile eggs, day old chickens, primary processed chicken (raw), processed chicken products and pet food.

The company has its head office at Pendle Hill, 30km west of Sydney CBD, with operating centres located in New South Wales (including Tamworth), South Australia, Victoria and Western Australia. Baiada has a current employee base of approximately 6,000 people.

Baiada is the largest producer of poultry meat in Australia and currently supplies approximately 35% of the national demand, equating to around 5 million birds per week.

1.6 AUSTRALIAN POULTRY INDUSTRY CONTEXT

Research undertaken by the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) indicates that total chicken meat consumption in Australia has increased by an average of 5% per annum over the 10 years to 2022-23, representing 45% of the total meat consumption.

The ABARES commodities report shows that chicken continues to be the most consumed meat in Australia. As shown in **Figure 3**, consumption of chicken meat per person has increased by over 65% between 2000 (~30kg per person) and 2018 (~50kg per person), driven by the product's versatility, convenience and a lower price point compared to beef, lamb and pork. Per capita poultry consumption is expected to continue growing to reach around 51.5kg by 2022-23. As shown in **Figure 4**, chicken meat production in Australia has grown steadily with growth forecast to continue.

As a result of the ongoing and predicted growth in demand for poultry meat products in Australia, significant expansion of the industry is required. The proposed development of the Grenfell breeder / rearing Farm is a direct consequence of this increase in demand and will provide an increase in fertile eggs supply for the company hatcheries, and ultimately additional meat chicken birds (broilers) which will be grown at the company and contract grower broiler farms.

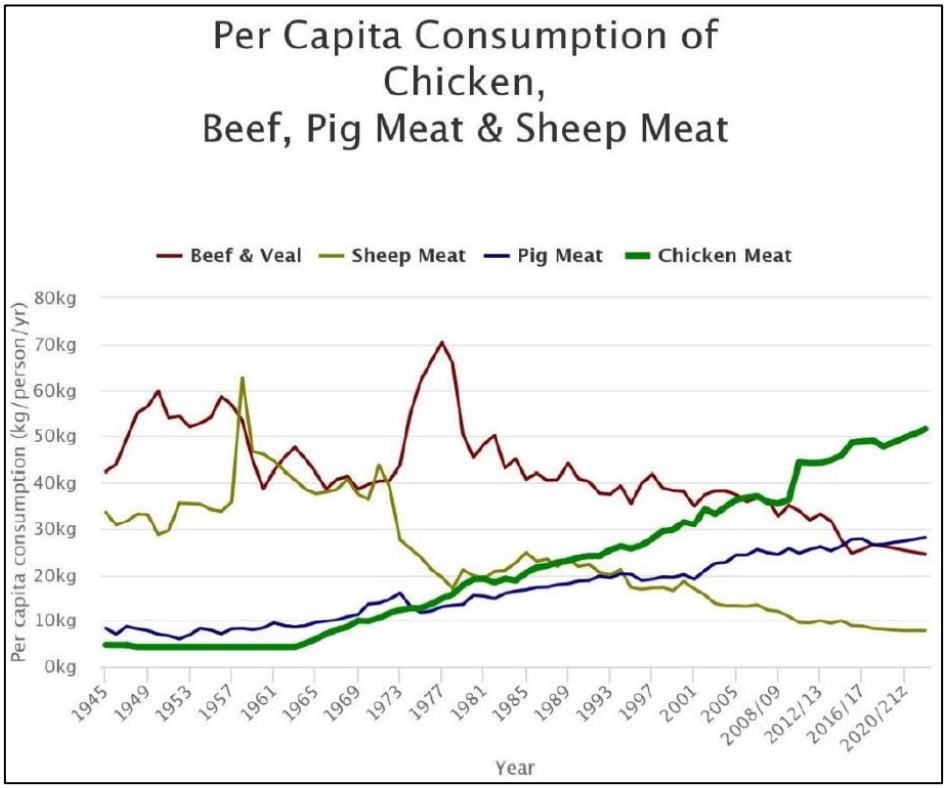


Figure 3: Consumption of various meats in Australia (ABARES, 2018)

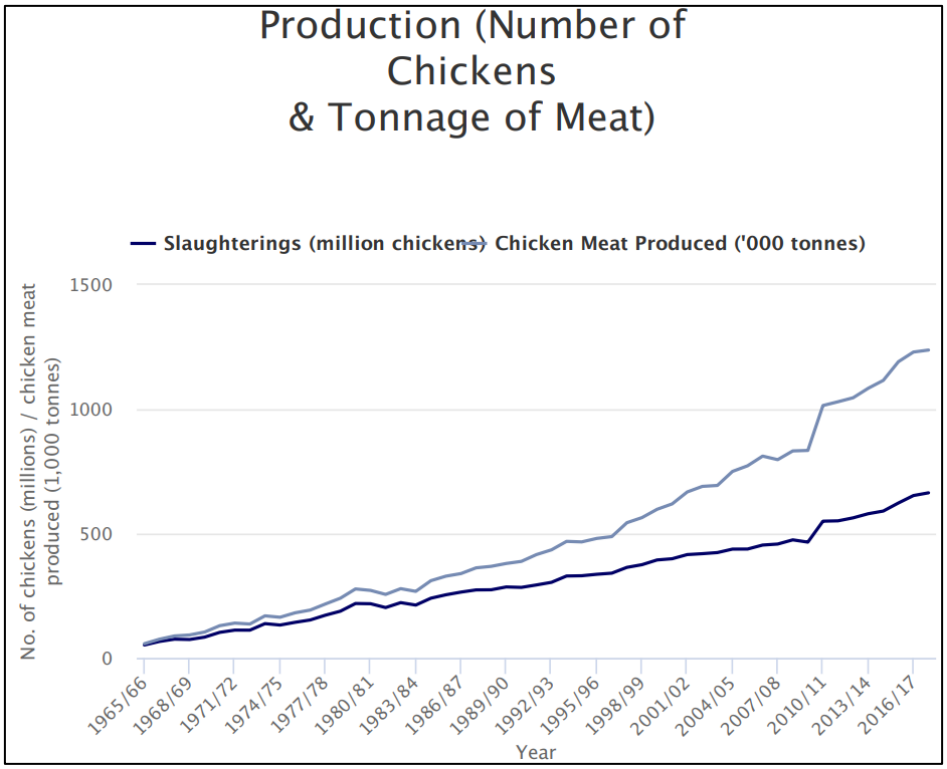


Figure 4: Chicken Meat Production in Australia (ABARES, 2018)

1.7 REGIONAL CONTEXT

The response to the projected demand for poultry products in the Australian marketplace, there is a need to increase bird numbers to be bred for meat production. Without Baiada's contribution to capacity which will be supplied by this breeder / rearing farm, it is likely that there will be shortfall in supply of poultry products in the Australian market in the coming years.

The proposed development site has been carefully chosen based on consideration of a number of factors including:

- The site has sufficient land size to accommodate 4 separate poultry farms that with appropriate biosecurity separation.
- The site is free from environmental (significant flora or fauna or threatened ecological communities) and physical constraints (steep gradient, unsuitable geology, flooding and other natural hazards).
- The site is appropriately zoned and free from planning constraints which enable a development application to be considered.
- The site has suitable road access allowing for the movement of heavy vehicles and staff to and from the site.
- The farm is located within a grain growing region to minimise transport costs associated with feed.
- The farm is located in proximity to a population centre which can provide employees and accommodation to support the operation.
- The farm will have access to adequate and reliable water supply.
- The site has suitable separation distances to sensitive receptors to ensure no unacceptable amenity impacts.
- Have suitable separation distances to other poultry farms, intensive livestock operations and other land uses which may introduce a biosecurity risk.
- The site has proximity to major poultry production clusters at Tamworth and Griffith with capacity to grow to meet projected demand for poultry meat production.

1.8 OPERATIONAL CONTEXT

The proposed Grenfell farms will produce fertile eggs for distribution primarily to the Tamworth region. The operations of the site production and rearing cycles are summarised in Figure 5 below. How these farms relate to Baiada's wider NSW operations are shown in Figure 6.

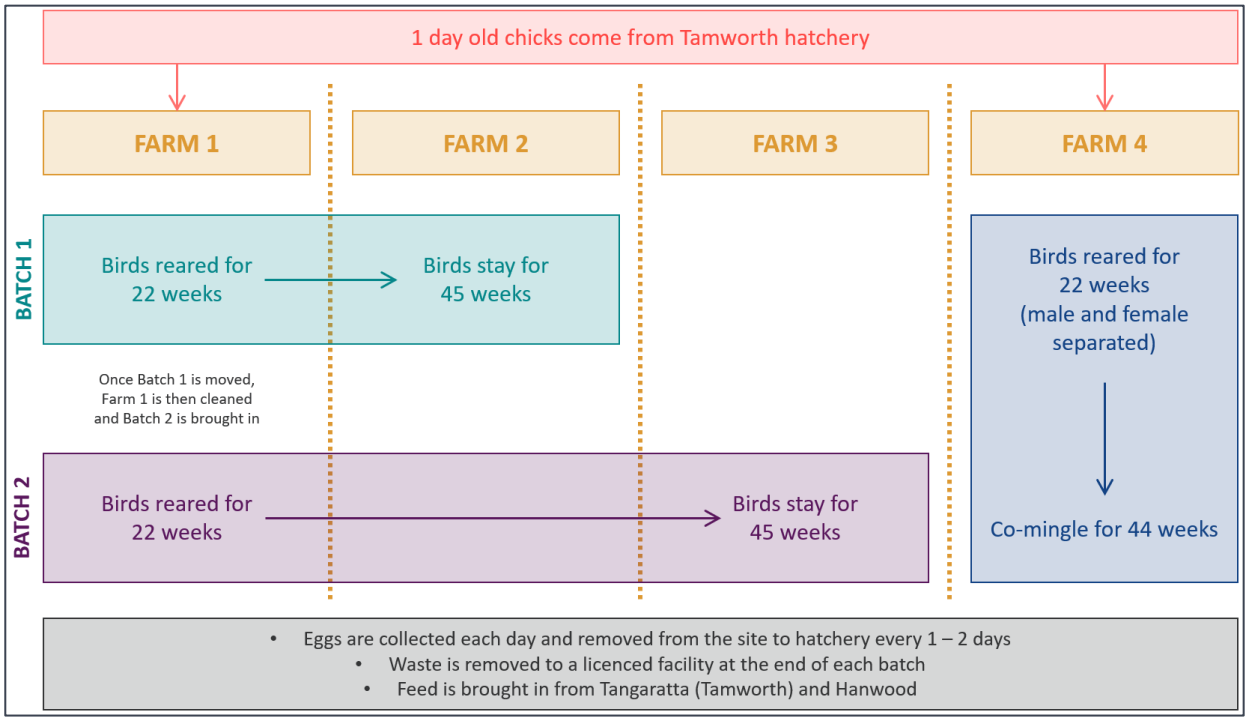


Figure 5: Grenfell Farm Cycle

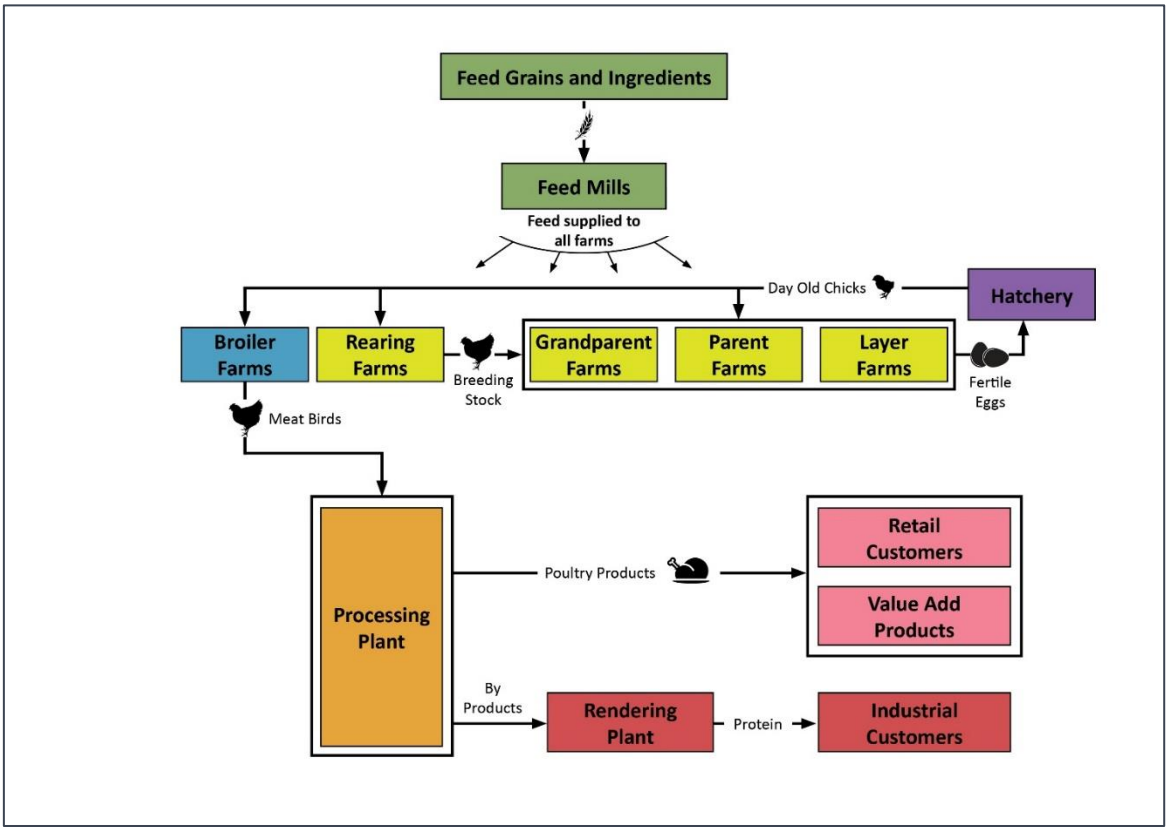


Figure 6: Baiada Operations

1.9 PHYSICAL ENVIRONMENT

1.9.1 Topography

The subject site generally slopes from east to west and has a maximum height of 442m AHD at the north eastern corner of the site and 326m AHD along Gooloogong Road in the north western corner. The site is punctuated by as hill in the south-central area of the site which reaches 370m AHD and Wallah Creek which bisects the property, running from the north-western corner to the southern boundary. There are a number of other small watercourses / overland flow paths which collect stormwater from the site and discharge into Wallah Creek. A Detailed Topographic Survey has been prepared for the site and is included in **Appendix 3**.

1.9.2 Soils and Geology

As shown in **Figure 7**, the Department of Planning, Industry and Environment's (DPIE) eSPADE mapping system shows that the subject site is comprised of a combination of rudosols, kurosols/natric and kandosols under the Australian Soil Classification. Kandosols, which are mostly well-drained, permeable soils, is the predominant soil classification for the site.

The Kurosols/Natric soils, which are acidic soils with an abrupt increase in clay, are generally limited to the riparian area surrounding Wallah Creek. A small area of Rudosol soil is located in a small area between the creek and Gooloogong Road.

As identified above, the lowest part of the site is situated at 326m AHD and the site is not subject to acid sulphate soils of any class.

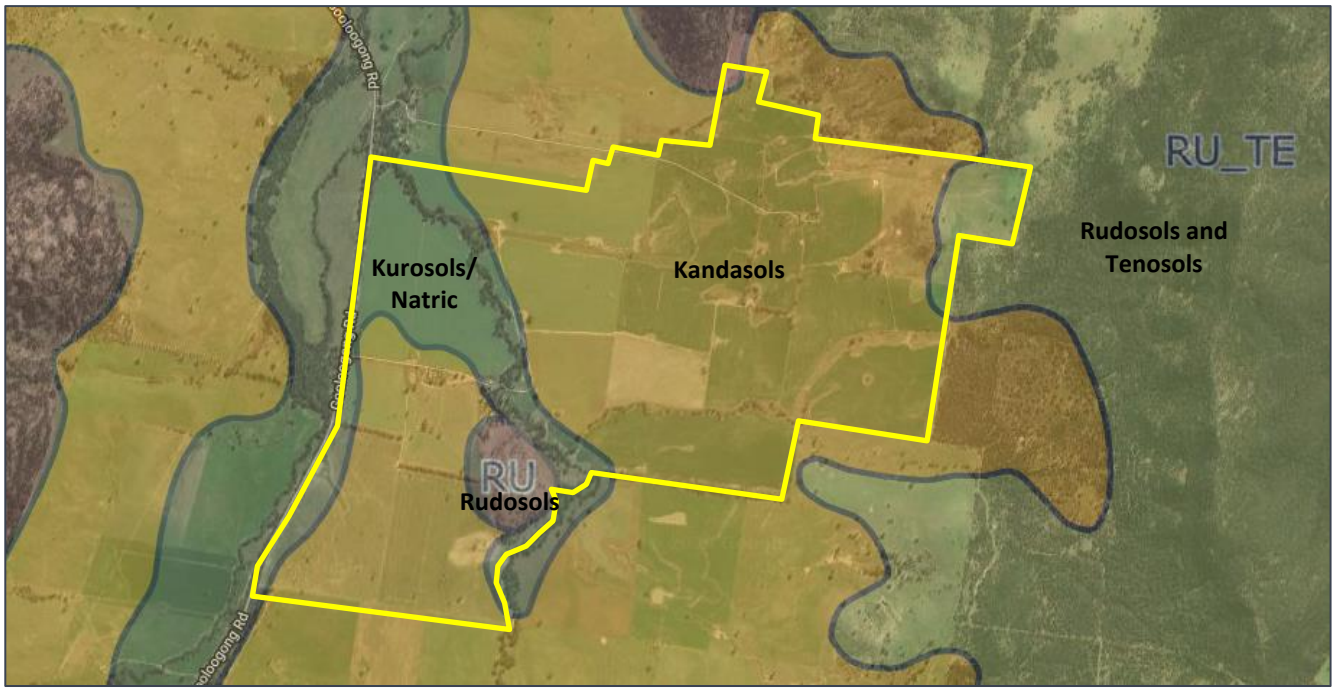


Figure 7: Australian Soils Classification (DPIE, 2020)

1.9.3 Watercourses

The site is located within 3,000m to both perennial and non-perennial watercourses with the most significant being Warranderry Creek located on the eastern side of Gooloogong Road, and Wallah Creek which runs through the subject site.

1.9.4 Flooding and Stormwater

The subject site varies between approximately 326m AHD at its north-western corner and 442m AHD in the east, as well as a hill in the south-central area of the site which reaches 370m AHD. A number of valleys within the site are tributaries of Wallah Creek, which runs diagonally from the north-western corner of the site to its south-central boundary. Two regional catchments discharge through the site via perennial watercourses: the Warraderry Creek Catchment and the Wallah Creek Catchment.

The subject site is not identified as flood affected under the Weddin LEP 2011. However, independent flood modelling suggests there are perennial and non-perennial watercourses within the site are subject to peak flooding during rainfall events and therefore require further consideration.

A Flood Impact Assessment has been prepared by MPN Consulting and Storm Flood Engineering and is included as **Appendix 5**. As shown in Figure 8, the subject site is impacted by minor flooding during the 1% AEP Flood Event.

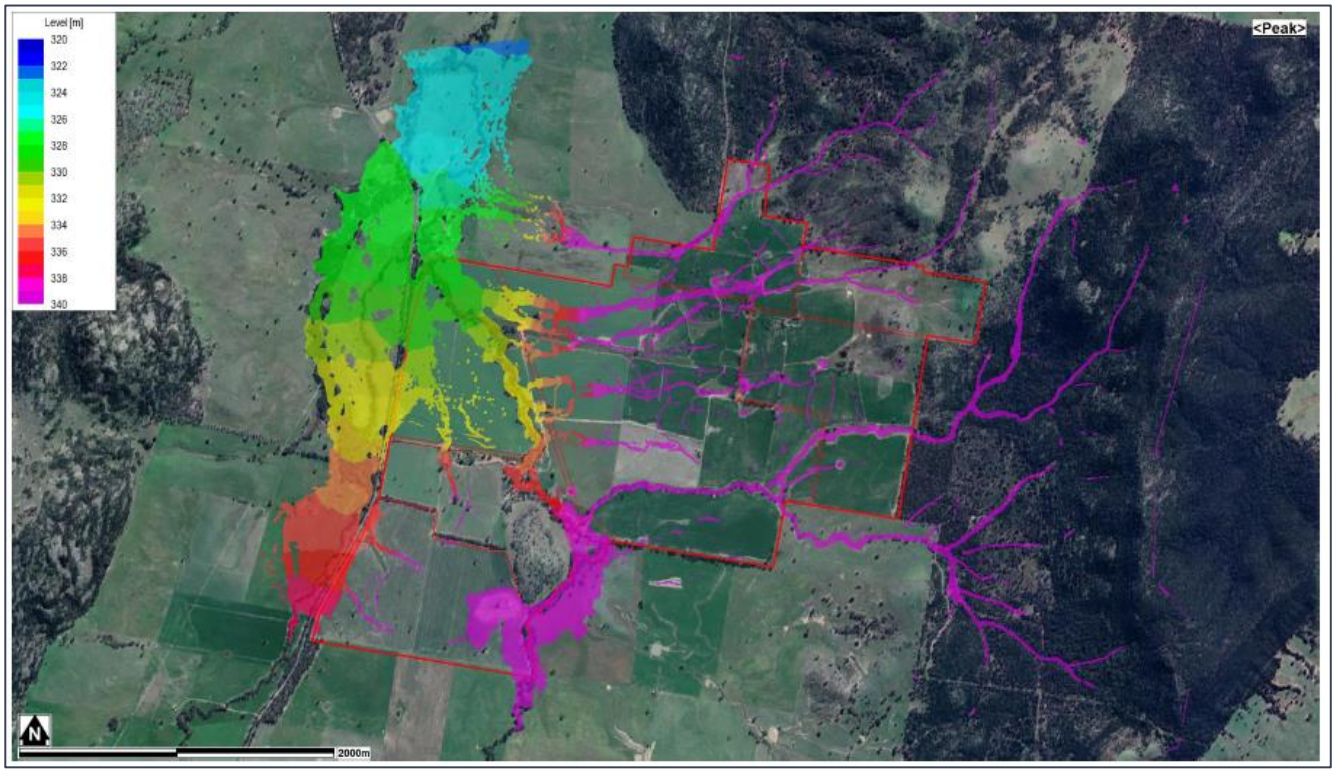


Figure 8: 1% AEP Flood Extent (Storm Flood Engineering, 2021)

1.9.5 Groundwater

The subject site is shown on the Weddin LEP 2011 Groundwater Vulnerability Map (refer to **Figure 9**), however these areas are avoided by the development footprint. There are no established bores on the property.

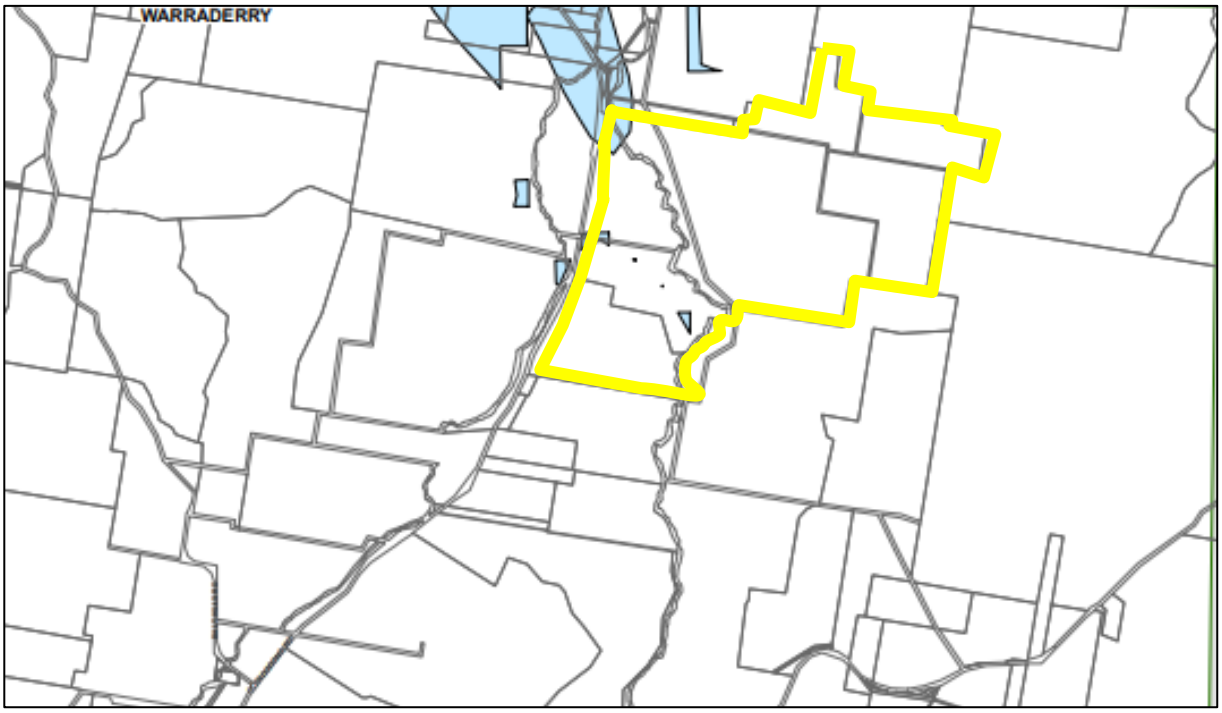


Figure 9: Groundwater Vulnerability (Weddin LEP, 2011)

1.9.6 Meteorological Data

There are a number of meteorological stations in the Grenfell area that provide meteorological data. The Grenfell (Quondong Road) (site number 073014) is a centre for meteorological data collection for the Grenfell Region and has a latitude of 33.90^{o}S and 148.17^{o}E. Data from this site dates back to 1885.

1.9.6.1 Temperature

Under the Koppen climate classification scheme, Grenfell has a temperate climate. The long-term temperate figures show a mid-summer mean maximum temperature of approximately 35.9^{o}C and a mid-winter mean minimum temperature of approximately 10.9^{o}C. **Table 1** shows the average temperature recorded at Grenfell (Quondong Road) since 1907. The temperature range is suitable for poultry production without an overreliance on heating and cooling of the sheds.

Table 1: Temperature information - Grenfell (Bureau of Meteorology, 2020)

WEATHER STATION	GRENFELL (QUONDONG ROAD)												
Monthly	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Annual**
Mean maximum temperature (Celsius)	38.0	35.9	33.4	27.8	22.5	17.0	15.9	20.1	21.4	27.4	32.4	33.8	24.8
Mean minimum temperature (Celsius)	26.9	27.0	24.3	19.6	13.1	11.2	9.3	12.2	14.7	18.4	21.5	25.7	20.3
Mean temperature	31.9	31.0	27.8	22.7	17.8	13.9	13.0	14.8	18.5	22.7	26.7	30.0	22.6

1.9.6.2 Rainfall

As shown in **Table 2**, rainfall in the local area is historically experienced throughout the year within an average of 619mm received per year. It is noted that the Grenfell area is currently experiencing a drought with consecutive years of less than average rainfall.

Table 2: Rainfall information - Grenfell (Bureau of Meteorology, 2020)

WEATHER STATION	GRENFELL (QUONDONG ROAD)												
Month	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Annual**
Rainfall (mm mean rainfall)	51.7	47.4	48.9	46.8	49.2	58.1	56.0	55.1	50.3	53.7	50.2	55.4	619.5

1.9.6.3 Wind

Wind roses are used to show the frequency of winds by direction and strength. The bars show the compass points (north, north-north-east, north-east etc) from which wind could blow. The length of each bar shows the frequency of winds from that direction and the different coloured sections within each bar show the wind speed categories and frequency of winds in those categories. In summary, wind roses are used to visually show winds over a period of time.

The wind roses were created from data extracted from CALMET by Astute Environmental and are presented in **Figure 10**. The annual wind rose shows that the site is dominated by south easterly winds with a noticeable north easterly component. The wind roses show a relatively low proportion of calm winds (~0.5%) with light winds over the year (up to 3 m/s) occurring ~58% of the time.

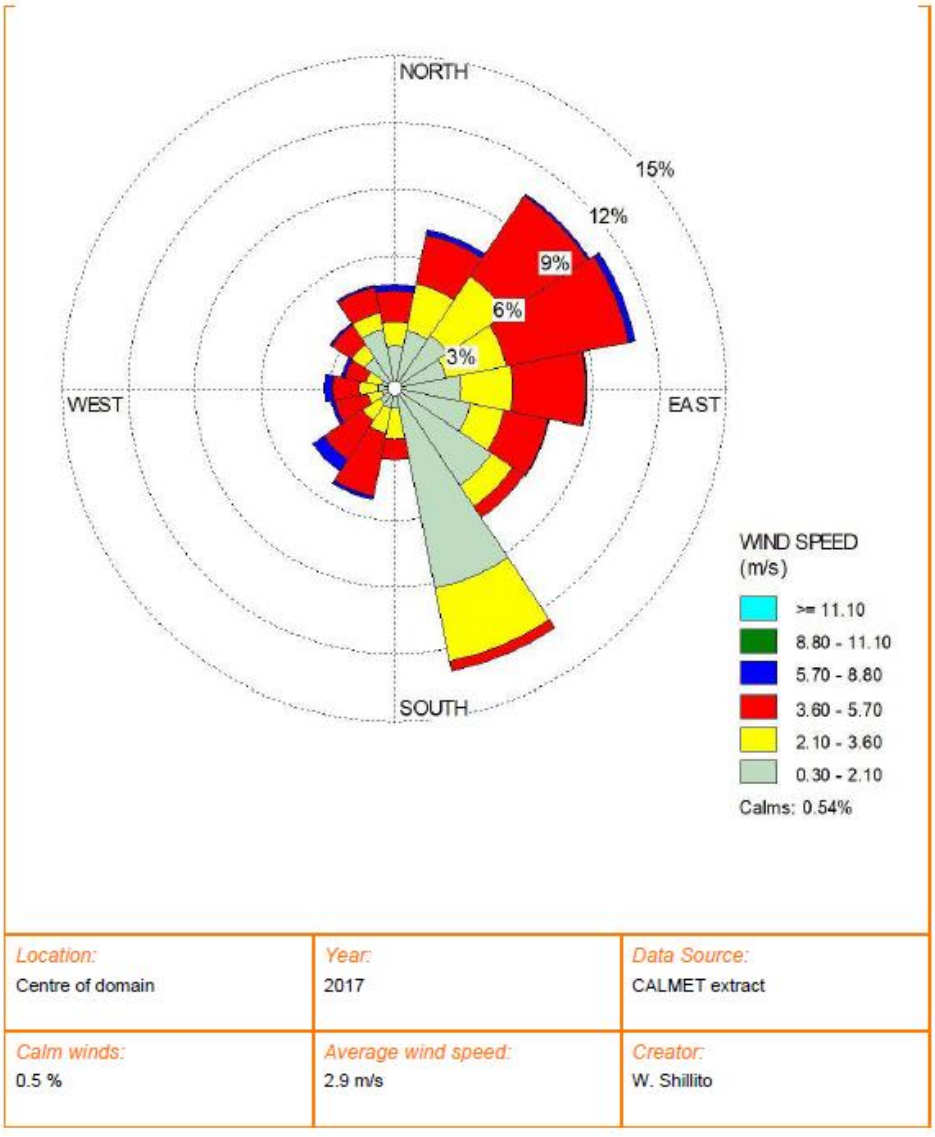


Figure 10: Annual Wind Rose 2017 (Astute Environmental, 2021)

1.10 URBAN INFRASTRUCTURE

The site has existing access to all necessary service and infrastructure networks required to support the development.

1.10.1 Water and Sewer

The Central Tablelands Gooloogong-Grenfell Water Pipeline is located to the west of the subject site (wholly outside the subject site). This pipeline is 250mm in diameter. In accordance with the previous approval for the site an 80mm meter connection was established from the pipeline which was connected via a rising main to an on-site water tank (~1ML).

There is no reticulated sewerage available to the property and the existing house is serviced by a standard septic system.

1.10.2 Power Supply

The existing homestead on the site is supplied with electricity supply via an overhead powerline. This line crosses the site from north to south across Lot 22 DP866857 and Lot 1 DP1022013 (refer to **Figure 11**).

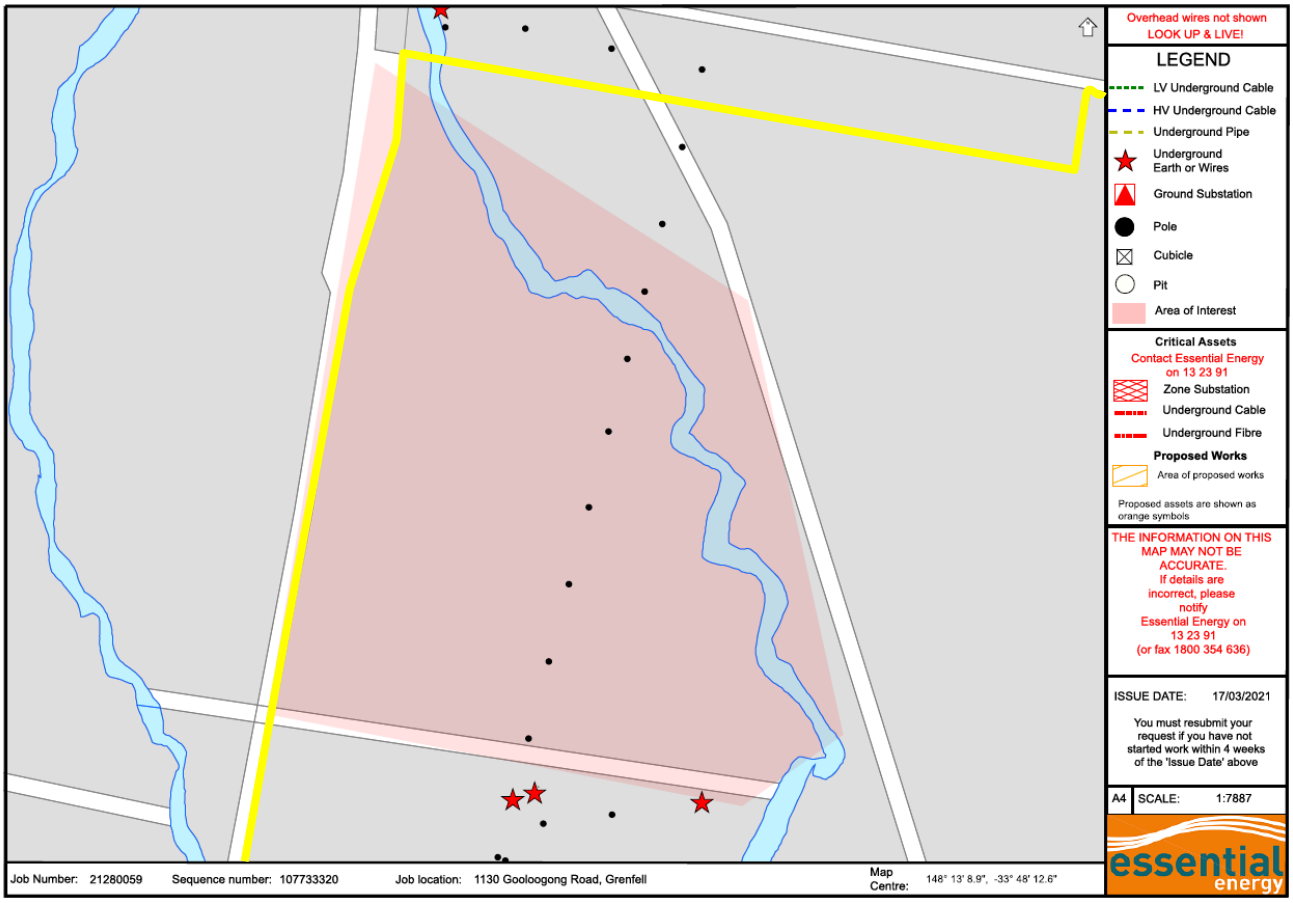


Figure 11: Essential Energy Infrastructure (Dial Before You Dig/Essential Energy, 2021)

1.10.3 Telecommunications

The existing homestead on the site is supplied with telecommunications.

1.10.4 Road Network and Site Access

The subject site has direct access to Gooloogong Road, which is a bitumen sealed road running north to south along the western frontage of the site. Gooloogong Road is an approved B-Double truck route (refer to **Figure 12**) allowing for 25/26m B-Double access.

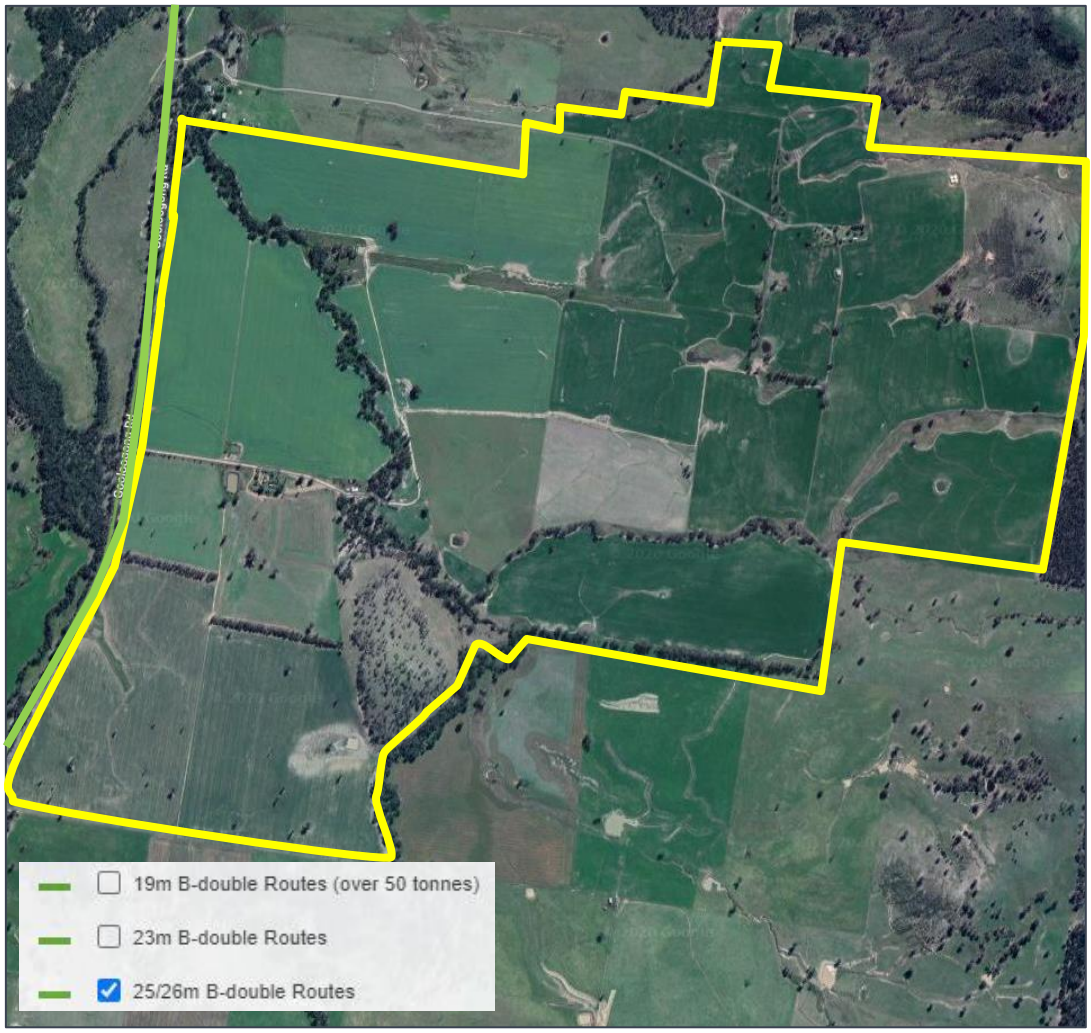


Figure 12: B-double Routes (Transport for NSW, 2021)

1.11 STATUTORY PLANNING

1.11.1 Weddin Local Environmental Plan 2010

As shown in **Figure 13**, under the *Weddin Local Environmental Plan 2010*, the subject site is located in the RU1 Primary Production Zone. 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 development is defined as Intensive Livestock Agriculture which is defined as:

> *"the keeping or breeding, for commercial purposes, of cattle, poultry, pigs, goats, horses, sheep or other livestock, and includes any of the following—*
>
> *(a) dairies (restricted),*
>
> *(b) feedlots,*
>
> *(c) pig farms,*
>
> *(d) poultry farms,*
>
> *but does not include extensive agriculture, aquaculture or the operation of facilities for drought or similar emergency relief.*

Note—

Intensive livestock agriculture is a type of agriculture—see the definition of that term in this Dictionary."

In accordance with the Land Use Table for the RU1 Primary Production Zone, Intensive Livestock Agriculture located in the RU1 Primary Production Zone is **permitted with consent.**

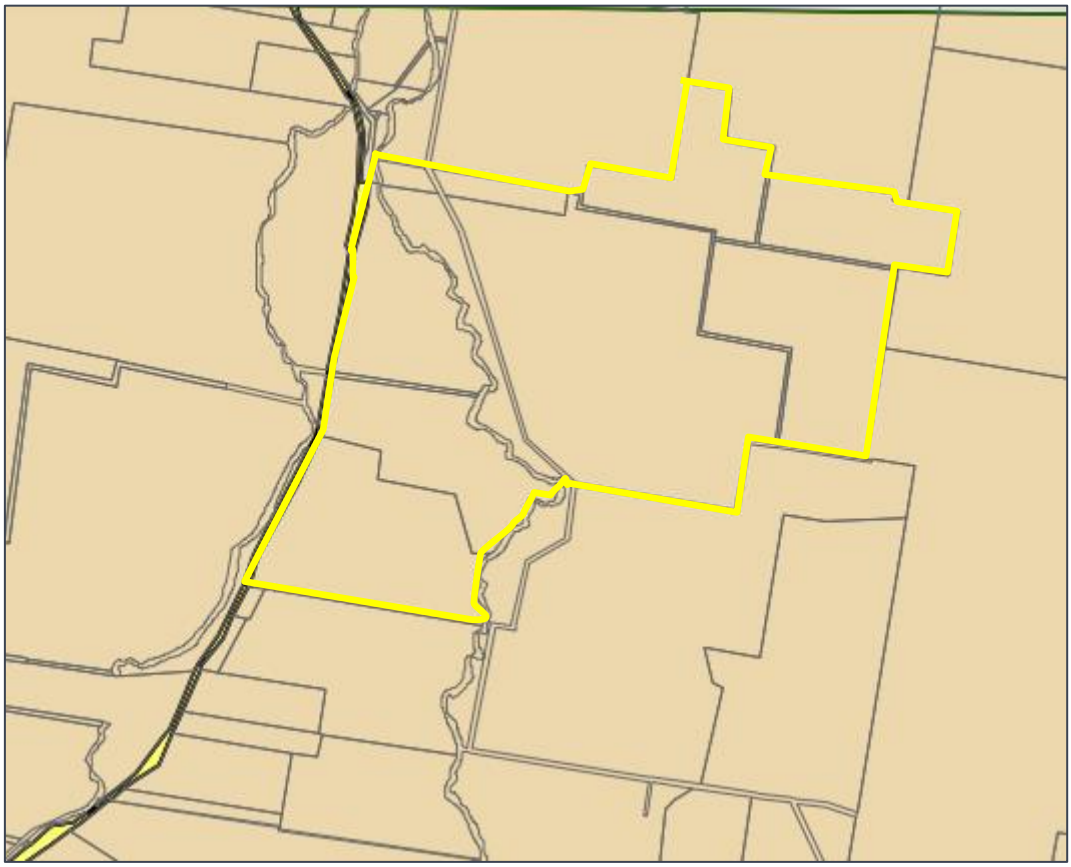


Figure 13: Zoning Plan (Weddin LEP, 2020)

2 THE PROPOSAL

2.1 CORE OBJECTIVES

The core objectives for the proposed are as follows:

- Construction of the Grenfell Farms 1-4 consisting of 40 poultry sheds with a capacity of 570,000 birds.
- Provision of additional supply fertile eggs / meat chickens (broilers) to meet the projected growth in demand for poultry products in Australia.
- Support the ongoing growth of the poultry meat clusters in regional NSW.
- Provision of a bio-secure breeding and rearing facility, well separated from other poultry farms and facilities.

2.2 KEY CHARACTERISTICS OF THE PROPOSED DEVELOPMENT

A summary of the proposed development is provided in **Table 3**.

Table 3: Key Characteristics of the Proposed Development

DEVELOPMENT CHARACTERISTIC	PROPOSED DEVELOPMENT
Purpose	Poultry Production Farm (Poultry Rearing and Breeding Facility).
Site area and development footprint	Each farm would have a footprint of approximately 5.95 hectares (~170m x 350m).
Earthworks	To be confirmed following survey and detailed civil design
Number of individual farms	Four Farms in total • Farm 1 for Rearing • Farm 2 for production of fertile eggs • Farm 3 for production of fertile eggs • Farm 4 for rearing / production; Each shed will be supported by two manager's residences
Number of poultry sheds per farm	10 sheds, each measuring approximately 135m long, 14m wide and 4.6 m high
Type of poultry sheds	Tunnel-ventilated fully-enclosed climate-controlled poultry sheds
Maximum population / shed	• Farm 1 – Rearing Farm: 10 Sheds with a maximum of 15,300 birds in each shed • Farm 2 – Breeder Farm: 10 Sheds with a maximum of 13,200 birds in each shed • Farm 3 – Breeder Farm: 10 Sheds with a maximum of 13,200 birds in each shed • Farm 4 – Breeder / Rearing: 10 Sheds with a maximum of 15,300 birds in each shed
Maximum farm population	• Farm 1 – Rearing Farm: 153,000 birds • Farm 2 – Breeder Farm: 132,000 birds • Farm 3 – Breeder Farm: 132,000 birds • Farm 4 – Breeder / Rearing: 153,000 birds
Maximum site population	570,000 birds (~10% roosters)
Maximum bird density	30 kilograms per square metre of shed floor space

DEVELOPMENT CHARACTERISTIC	PROPOSED DEVELOPMENT
Hours of operation	Operations will be undertaken 24 hours a day, 7 days a week Fertile egg collection will generally occur between 7.30am to 4.00pm, 7 days a week. Depopulation of the production farms will generally occur between 10pm to 5am (for animal welfare reasons). This will occur over approximately 10 days per farm per year at end of batch. For the production farms, this would occur when the birds are around 64 weeks of age. Depopulation of the rearing farm will generally occur between 10pm to 5am. This will occur over approximately 20 days per farm per year at the end of each batch. For the rearing farm, this would occur when the birds are around 22 weeks of age.
Production cycle length	The production cycle lengths are proposed as follows: • Farm 1 – 22 weeks (2 batches per year) • Farms 2 and 3 – 45 weeks • Farm 4 – 64 weeks per cycle
Production cycles per year	The number of production cycles are proposed as follows: • Farm 1 – 2 cycles • Farms 2 and 3 – 1 cycle • Farm 4 – less than 1 cycle per year
Anticipated Staging	• Lead in infrastructure. • Farm 1 (rearing) would likely be built first. • Farm 2 to commence within 20 weeks of birds being placed in farm 1. • Farm 3 to commence a further 20 weeks later. • Farm 4 would likely then be built last and will can operate independently from the other farms. The staging order is subject to change depending on demand for poultry products in the broader market.
Buffers	• Each of the farms are separated by a minimum of 500m for biosecurity protection.. • A 50m buffer has been provided between each farm and the site boundaries biosecurity and bushfire protection and to assist in site management.

Within the production sheds, the birds (both roosters and hens) are allowed to mingle and breed. The hens enter the nest boxes located centrally in the sheds to lay eggs which are automatically collected (via conveyor belt) and placed into refrigerated storage, before being transported to the company's hatchery, primarily to Tamworth. Through the use of temperature control (18 degrees Celsius), the eggs can be held in stasis and hatched in batches at a precise time. Once hatched, the day old chicks are then transported to various broiler (meat chicken) farms where they are raised for meat production.

2.3 PROPOSAL OVERVIEW

2.3.1 Farm Operations

Baiada Properties Pty Limited is seeking development consent for a poultry breeder / rearer farm, which comprises four (4) farms, with 10 sheds per farm giving a total of 40 poultry sheds on the site. The location of the farms and internal access roads are shown in **Figure 15**. Detailed Plans for the project are included as **Appendix 4**. 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.

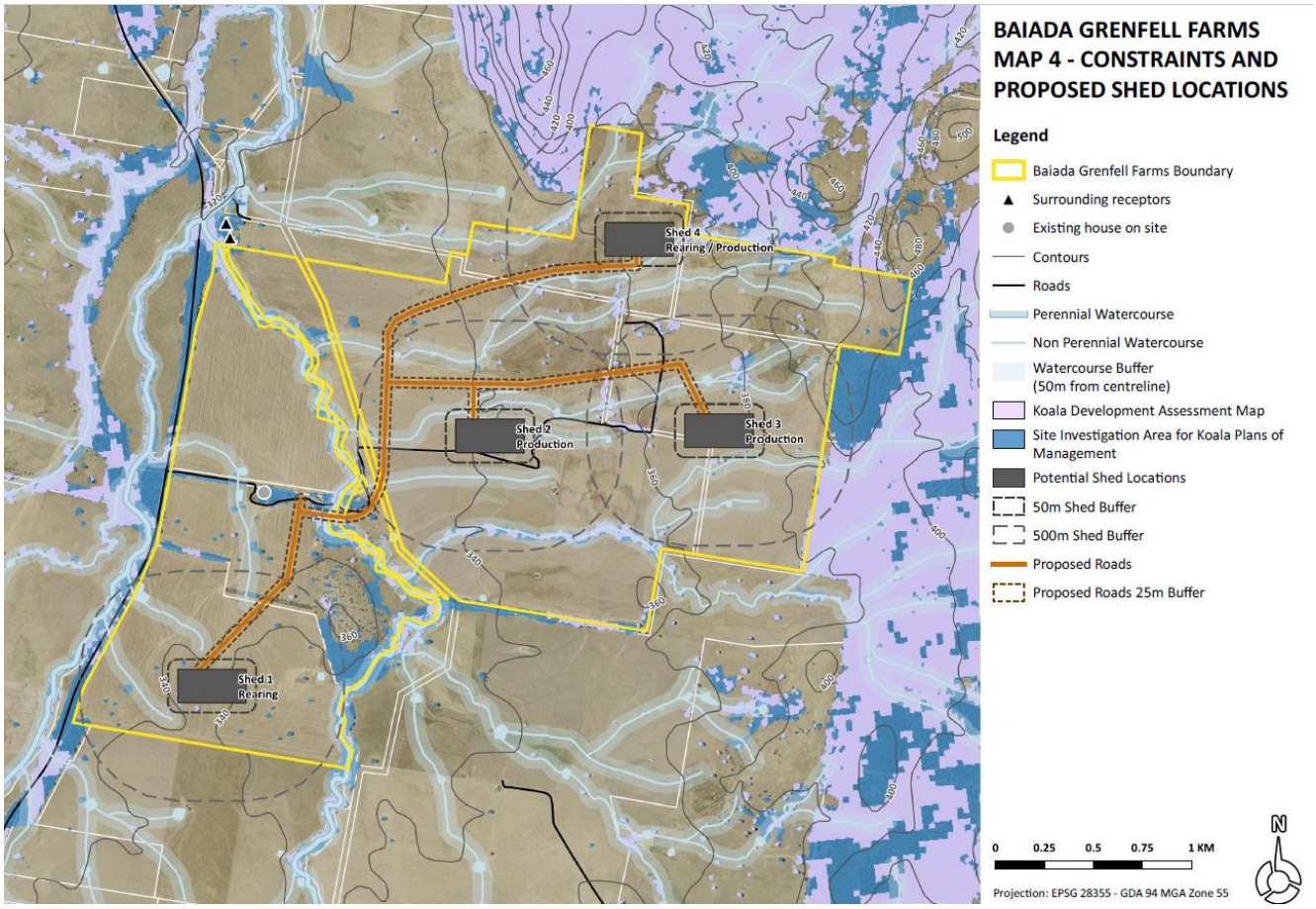


Figure 14: Proposed development (PSA Consulting, 2021)

As outlined above, the Grenfell Farm will be an integrated poultry breeding and rearing facility. Each of the farms will perform a specific role to assist in generating a steady and reliable supply of fertile eggs for the broader poultry production business.

- **Farm 1 – Rearing Farm:** Farm 1 will be a rearing farm growing birds from day old chicks (pullets) to sexual maturity when they being to lay (around 20 weeks of age). Once the birds reach this age, they will be transferred from this farm and placed into the Breeder Farms 2 and 3.
- **Farm 2 – Breeder Farm:** Farm 2 will be a breeder farm accommodating a male (~10%) and female birds (~90%) which will produce fertile eggs. Eggs are laid within a central nest box which drop onto an automated conveyer belt for regular collection. Birds will be retained within the shed for up to (and sometimes over) 60 weeks of age where egg production begins to fall. Farm 2 will be supplied with reared birds from Grenfell Farm 1. Placement of new birds from Farm 1 will be alternated with Farm 3.
- **Farm 3 – Breeder Farm:** Farm 2 will be a breeder farm accommodating a male (~10%) and female birds (~90%) which will produce fertile eggs. Eggs are laid within a central nest box, which drop onto an automated conveyer belt for regular collection. Birds will be retained within the shed up for to (and sometime over) 60 weeks of age where egg production begins to fall. Farm 3 will be supplied with reared birds from Grenfell Farm 1. Placement of new birds from Farm 1 will be alternated with Farm 2.
- **Farm 4 – Breeder / Rearing:** Farm 4 will operate independently from Farms 1, 2 and 3 and will receive day old chicks and rear them for 20 weeks when the birds sexually mature and then commence operations as a breeder farm. Birds will be retained within the shed for up to (and sometimes over) 60 weeks of age where egg production begins to fall.

The fertile eggs produced are hatched at a company hatchery, with the resulting progeny to be grown at company and contract broiler farms (meat chickens) across NSW. The higher number of birds within the rearing sheds in comparison to the breeding sheds accounts for potential mortalities during the rearing phase.

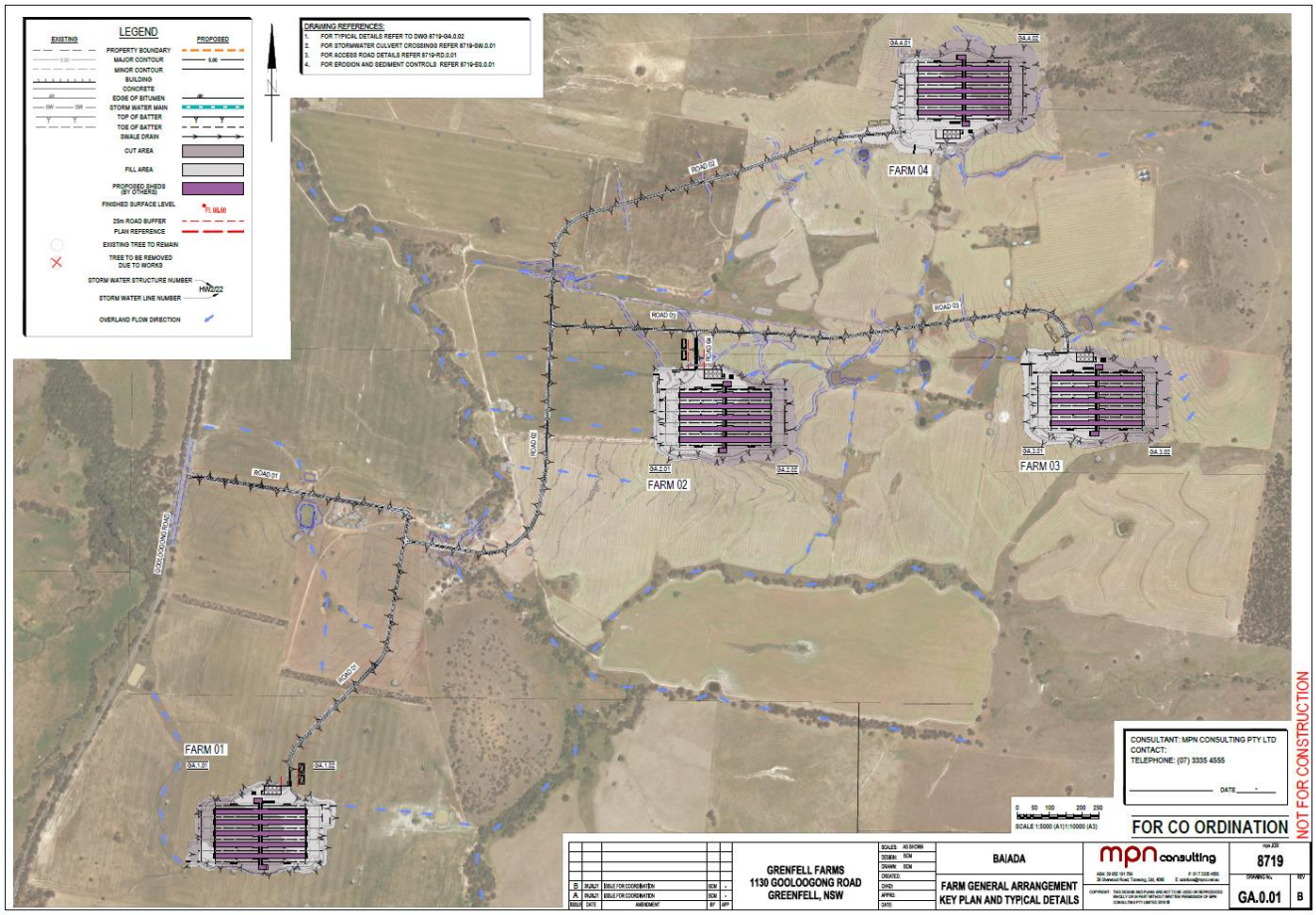


Figure 15: Site Layout Plan (MPN Consulting, 2021)

2.3.2 Building Works

2.3.2.1 Poultry Sheds

Detailed plans of the proposed farms and associated buildings are provided in **Appendix 4**. As outlined above, each of the proposed farms will consist of 10 sheds which are to be constructed in 2 rows of 5 sheds, with a centralised egg collection conveyor linked to the separate egg packing room. The poultry sheds are 139.3m Long, 14.5m wide giving a floor area of 2019m^2 per shed. The proposed sheds will be tunnel ventilated to provide climate control.

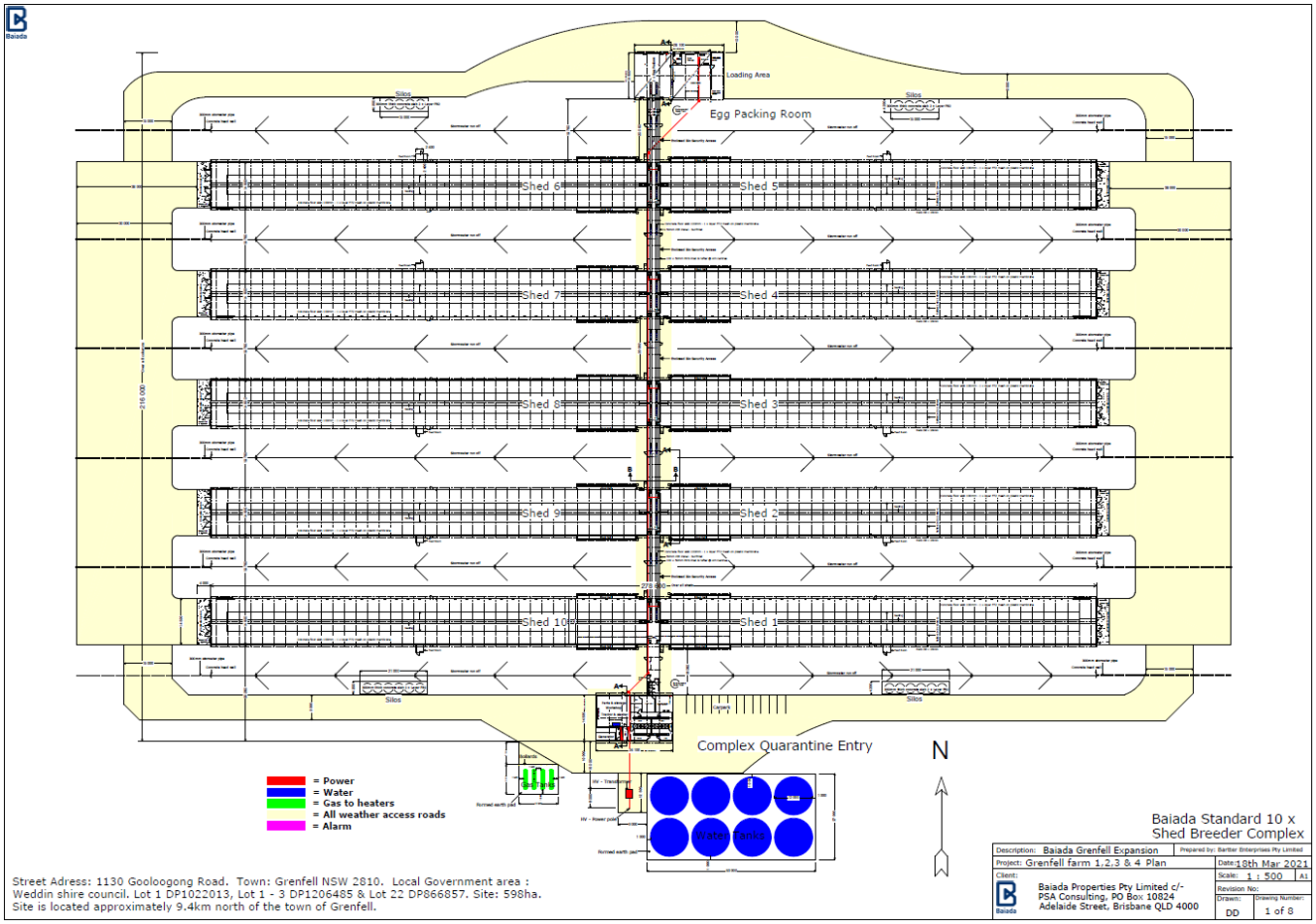


Figure 16: Standard Farm Plan (Baiada, 2021)

The shed walls are 3m tall and the peak of the roof is 4.6m high. The sheds are constructed with a concrete slab, metal frame, insulated panel walls and Custom Orb (Zinc) roof. The sheds will be constructed in a surfmist colour, which is used in poultry sheds because of its low visual impact and maximum thermal performance.

Concept imagery of the proposed sheds is provided in Figure 17 below.

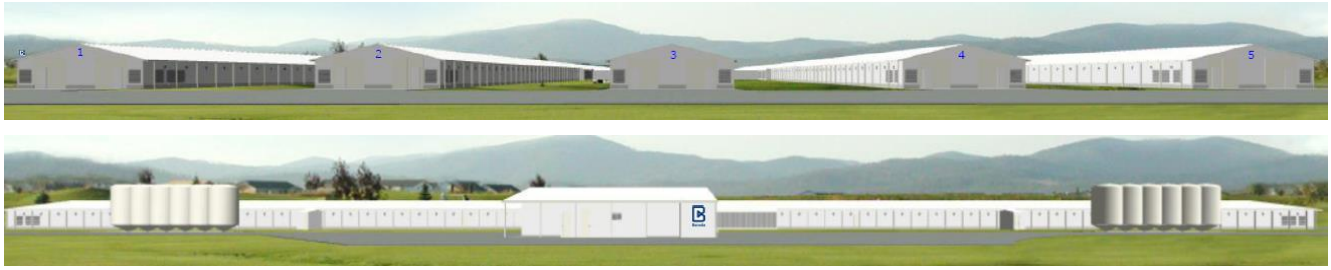


Figure 17: Concept Images of the Poultry Sheds (Baiada, 2021)

2.3.2.2 Supporting Buildings and Infrastructure

The staff amenities building is located at the entrance of each farm and will provide shower in / shower out facilities (for biosecurity reasons), staff change rooms, lunchrooms, office, storage, workshop and meeting spaces to allow for day to day operations at each farm. The building is 14.5m wide, 24.1m long and has a maximum height of 4.7m. Colours and materials are consistent with the poultry sheds and will feature surfmist colourbond wall sheeting and a Custom Orb (Zinc) roof.

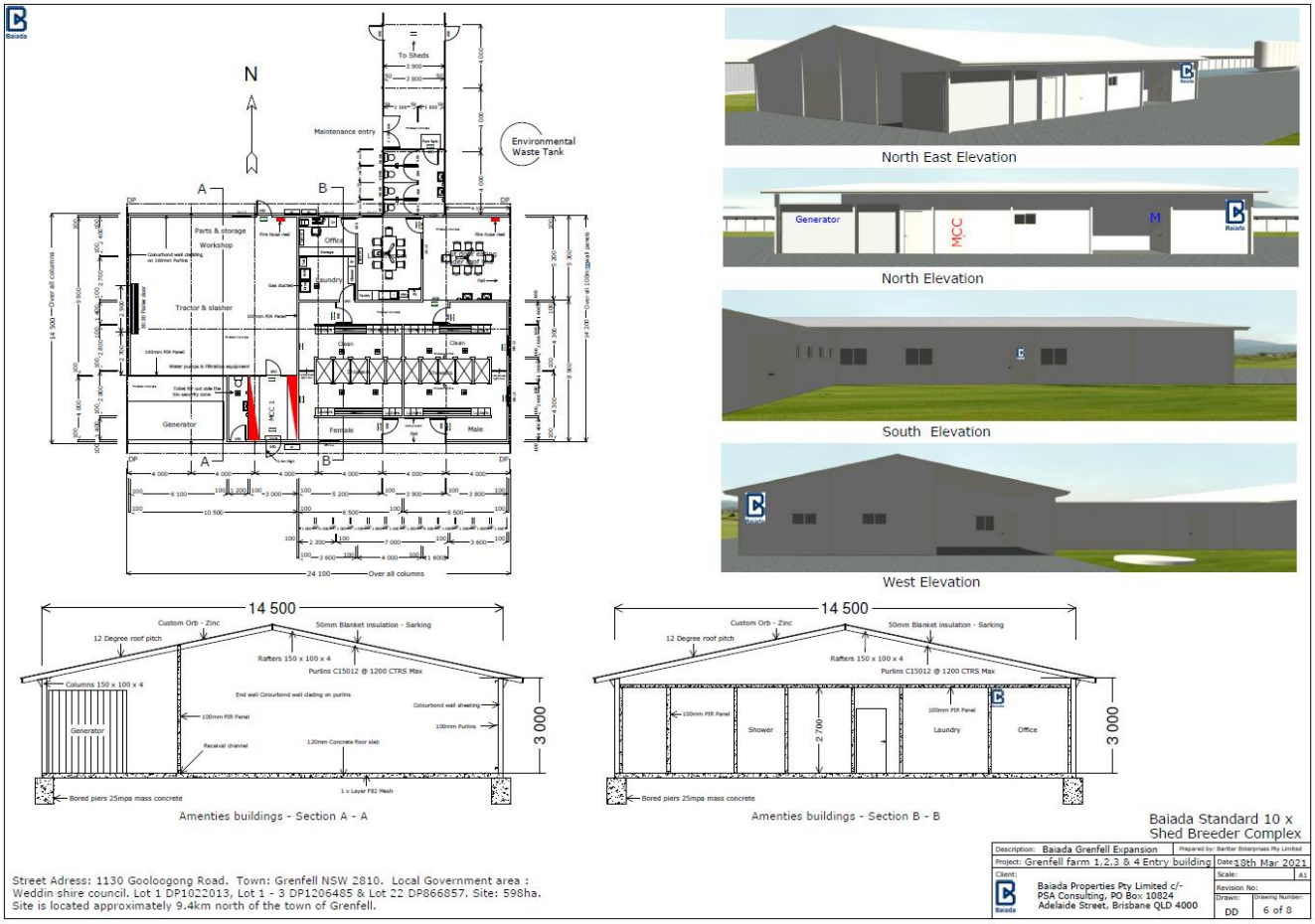


Figure 18: Amenities building floor plan, elevations and sections (Baiada, 2021)

The egg packing building is centrally located at the end of the conveyors from each farm. The egg packing room will house plant and equipment associated with the collection of fertile eggs from the sheds, packing and cold storage prior to transport to the company hatcheries. The building is 14.5m wide, 28m long and has a maximum height of 4.7m. As per the poultry sheds, the egg packing building will be constructed with a concrete slab, metal frame, insulated panel walls and Custom Orb (Zinc) roof. The sheds will be constructed in a surfmist colour.

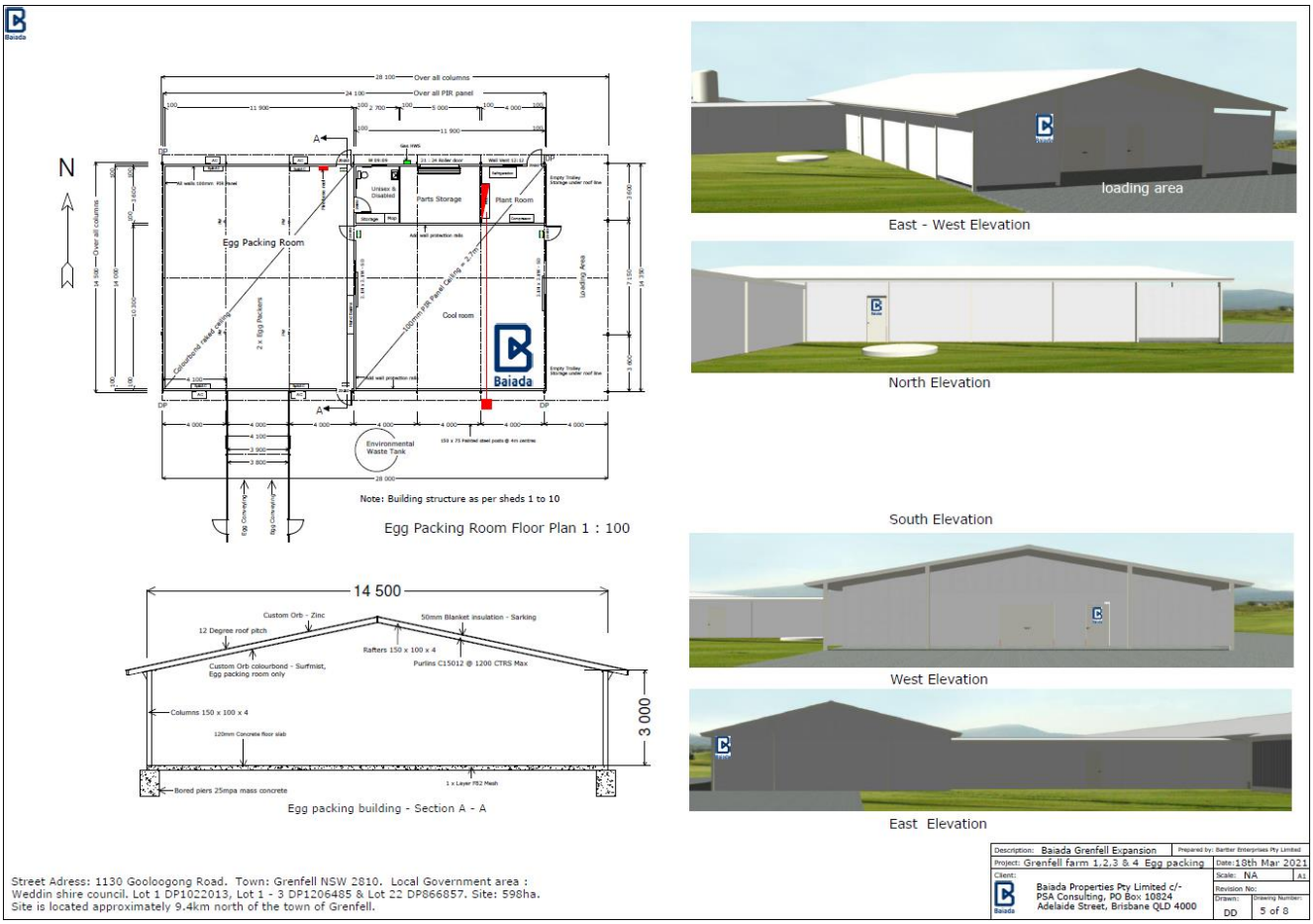


Figure 19: Egg packing room plan, section and elevations (Baiada, 2021)

Other ancillary buildings and supporting infrastructure will included water tanks, feed silos, access roads and manoeuvring areas, and other infrastructure and services.

2.3.2.3 Manager Residences

In accordance with animal welfare and biosecurity requirements a responsible person (farm manager or their delegate) is to be present on site at all times. As such, each farm will appoint 2 full time mangers who will reside within the Managers' Residences to be constructed at the entrances to each farm. The proposed managers residences are four bedroom, 1 storey houses with a double garage suitable to accommodate a manager and their family (refer to **Figure 20**). The proposed dwelling will be a slab on ground construction with face brick work, powder coated aluminium frame window and a colourbond roof (refer to **Figure 21**).

Detailed House plans and a Basix Certificate are provided in **Appendix 4**.

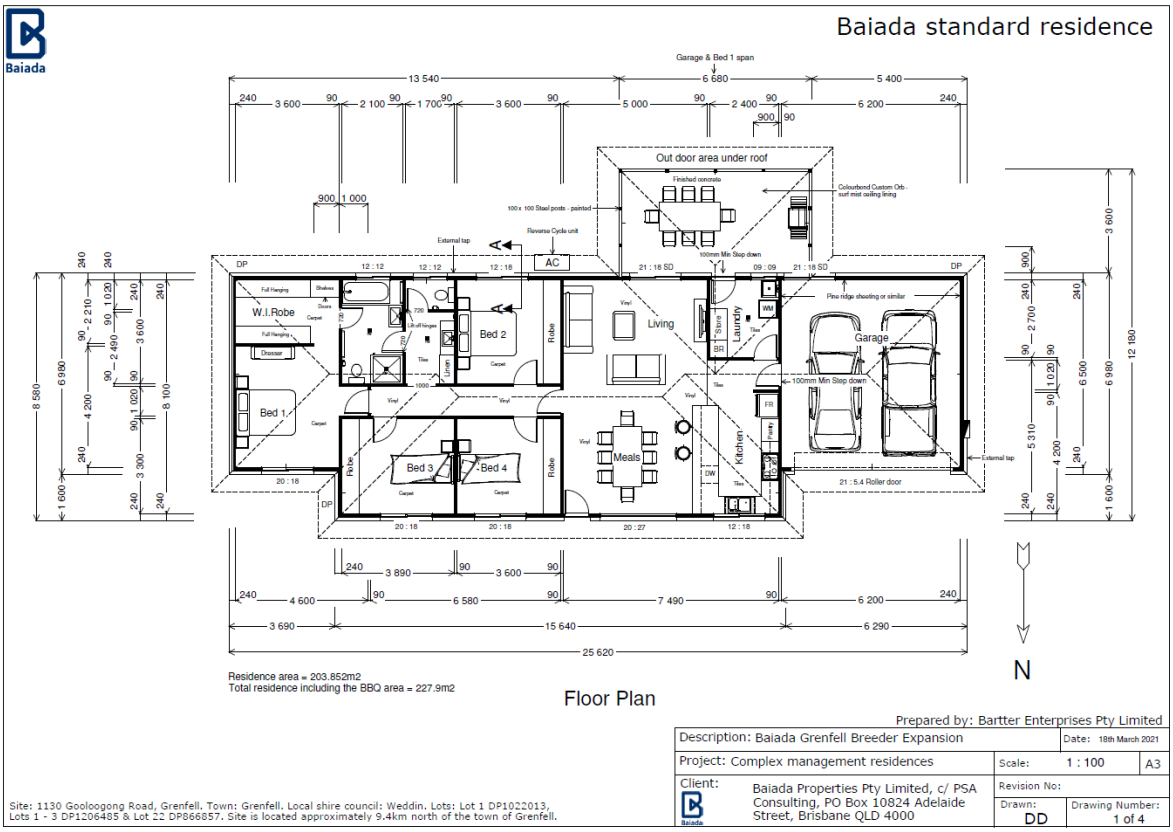


Figure 20: Manager's residence floor plan (Baiada, 2021)

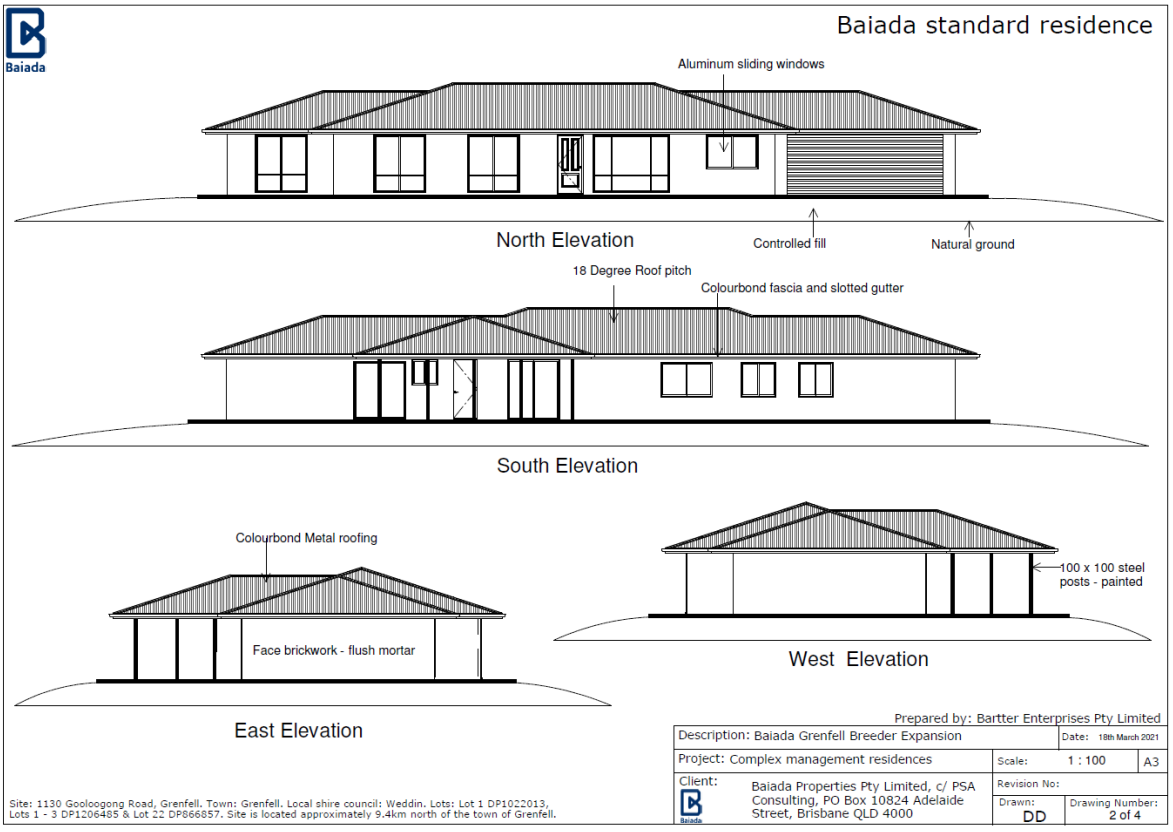


Figure 21: Manager's residence elevations (Baiada, 2021)

2.4 LANDSCAPE PLANTING

Vegetative screens around the sheds will be planted and maintained as soon as practicable following construction (refer to **Figure 22**. This will not only provide visual amenity relief but also assist with reducing the magnitude and frequency of any adverse air quality impacts by effectively slowing and filtering air movement, which enhances dust deposition and odour dispersion.

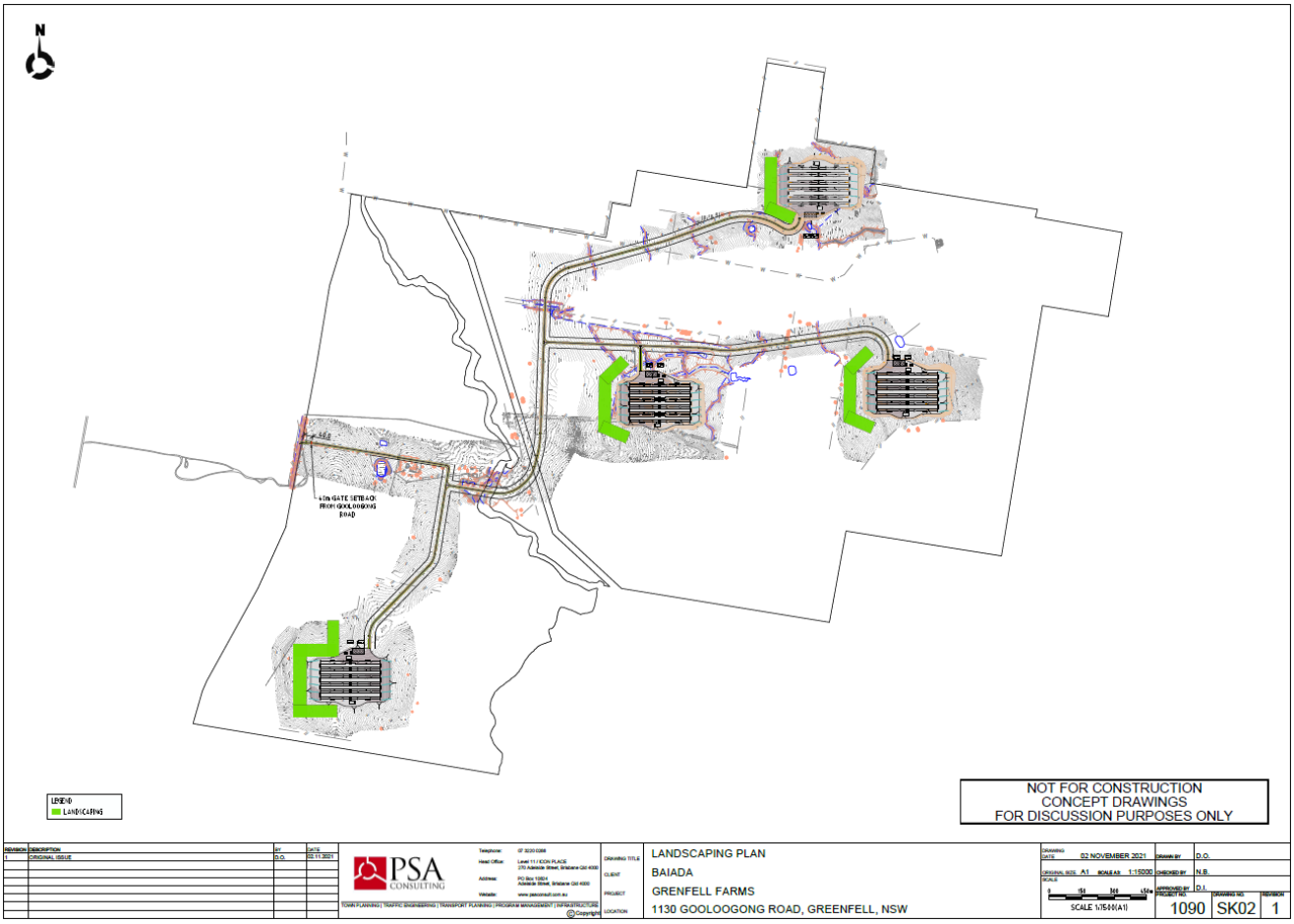


Figure 22: Proposed landscaping around the farms (Baiada, 2021)

The proposed vegetated buffers will be planted out with native species and are shown on the plans included in **Appendix 4**.

2.5 INFRASTRUCTURE PROVISION AND UPGRADES

The proposed development can be adequately connected to all necessary urban infrastructure and services. Additional information with respect to each network is provided below.

2.5.1 Water Supply

It is anticipated that 1ML of water will be required per day for the proposed development. The 1ML will be used by the four farms collectively and will be used for drinking water for the birds, cleaning, washdown water, staff drinking water and amenities.

Central Tablelands Water (CTW) is the relevant water supply authority and services the Shires of Blayney, Cabonne and Weddin. Preliminary discussions have been held with CTW regarding connection to the nearby water pipeline, the Gooloogong-Grenfell Water Pipeline. From these discussions, it is understood that water is available to be supplied in the quantity and quality required.

In accordance with the previous approval for the site an 80mm meter connection was established from the pipeline which was connected via a rising main to an on-site water tanks (~1ML). The proposed development will maintain this strategy

with water to be supplied to a central tank (2.18m in height, with a diameter of 12m) which will then be pumped to each via a pipeline following the proposed access roads. CTW indicated an actuator near the meter and a telemetry level on the first water tank may be required to control the flow and prevent any damage to the trunk main when turning water off.

Each of the farms will be provided with 2ML of storage (8 x 250,000L) tanks to provide enough back up water in an emergency situations (pump breakdowns, loss of supply) and for fire fighting purposes.

As part of the detailed design process for the site, the applicant will engage with CTW to finalise the design and confirm the necessary upgrades to the existing infrastructure servicing the site.

2.5.2 Electricity

The existing homestead on the site is supplied with electricity supply. There is an existing electricity line that crosses the site from north to south across Lot 22 DP866857 and Lot 1 DP1022013 (refer to **Figure 11**).

Power to the site electricity upgrades and a new high voltage internal network is required. The electricity will be used to power each of the farms and will be co-located with the proposed access roads.

2.5.3 Gas

Gas is required to provide heating within the poultry sheds during cooler temperatures. Liquified petroleum gas (LPG) will be stored on site in tanks supplied and installed by a licensed gas provider. The LPG will be transported to the site by tanker trucks via the Gooloogong Road on an as required basis.

Liquified petroleum gas tanks will be installed on each of the farms as follows:

- Farm 1 (Rearing Farm) - 3 x 7,000 litre LPG tank
- Farms 2 and 3 (Production Farms) - 1 x 7,000 litre LPG tank on each farm
- Farm 4 (Day Old to Death farm) - 3 x 7,000 litre LPG tank

2.5.4 Stormwater Drainage

A Stormwater Management Plan has been prepared for the project (refer to **Appendix 6**). Stormwater detention and quality treatment will be provided for each of the four proposed farms. Farm 1 will have two bioretention/detention basins located to treat stormwater runoff prior to discharge from the site, whilst Farms 2, 3 and 4 will have a single bioretention/detention basin to treat each site. The basins have been oversized to compensate for the area of internal road which bypasses detention.

Swales located between the sheds within the farms will convey the stormwater and roof water runoff to the basins. A roadside swale is also proposed along the low side of the internal roads to provide stormwater treatment and ensure "non-worsening" before discharging to Wallah Creek. Stormwater diversions and roadside swales will be conveyed under the new access roads by culvert systems which are sized to ensure conveyance of flows whilst achieving an appropriate level of flood immunity.

2.5.5 Sewerage Treatment

Standard on site septic systems will be installed for the treatment and disposal of sewerage from the staff and the managers residences as follows:

- 4 systems for each farm complex.
- 1 system for each manager's residence.
- 1 system for each egg packing room.
- 1 system for each amenities building.

This wastewater will be disposed of via irrigation of gardens and lawn areas on the site. Weddin Shire Council has confirmed that section 68 applications under of the *Local Government Act 1993* will be required for the on-site sewerage waste management systems.

2.6 CAPITAL INVESTMENT VALUE

The Capital Investment Value (CIV) of the project has been calculated in accordance with the *State Environmental Planning Policy Amendment (Capital Investment Value) 2010* by Wilde and Woollard and is included as **Appendix 7**). As shown in the CIV Report, the project is estimated to be **$64,124,200** (excluding GST).

2.7 EMPLOYMENT

The proposed development will also employ up to an additional 50 full time equivalent (FTE) local workers (at full operation). Up to 60 FTE persons will be employed during construction.

2.8 PROJECT STAGING

Staging on the proposed development will occur as follows:

Stage 1: Lead in infrastructure upgrades including water, power upgrades.

Stage 2: Farm 1 Complex including extensions to supporting infrastructure (roads, power, water etc).

Stage 3: Farm 2 Complex including extensions to supporting infrastructure to connect the farm (bridge over Wallah Creek, roads, power, water etc).

Stage 4: Farm 3 Complex including extensions to supporting infrastructure to connect the farm (roads, power, water etc).

Stage 5: Farm 4 Complex including extensions to supporting infrastructure to connect the farm (roads, power, water etc).

It is important to note that dependent on the final placement schedule for the project, stages may be run concurrently and in an alternate order. Each farm Complex will take approximately 9 months to construct.

A Staging Plan is included in Detailed Development Plan in **Appendix 4**.

2.9 CONSOLIDATION OF LAND

Subject to receipt of Development Consent and commencement of the Development, the land can be consolidated into a single allotment. This can be conditioned accordingly.

3 CONSULTATION

In accordance with Schedule 2, Section 3(1) of the *Environment Planning & Assessment Regulation 2000*, a request for the Secretary's Environment Assessment Requirements (SEARs) was submitted to the Department of Planning, Industry and Environment (DPIE) on 22 September 2020. The SEARs was followed by a Scoping Report which was submitted to DPIE in 29 January 2021. The SEARs were received by the Applicant on 1 March 2021 and are included as **Appendix 8**.

The SEARs requested that the Application consult with the relevant Local and State government authorities, service providers and community groups, and address any issues they raise in the EIS. The surrounding landowners and occupiers that are likely to be impacted by the proposed were recommended to be consulted. The SEARs also requested that details of the consultation that has been carried out and issues raised must be included in the EIS.

This section outlines the consultation activities undertaken to inform the scope of this EIS.

3.1 GOVERNMENT DEPARTMENTS AND AGENCIES

3.1.1 Secretary's Environmental Assessment Requirements

A summary of the SEARs requirements from the Department of Planning, Industry and Environment (DPIE) is provided in Table 4.

Table 4: SEARs Requirements from DPIE

ISSUE	SPECIFIC REQUEST	INFLUENCE ON EIS	RELEVANT EIS SECTION

General Requirements	The environmental impact statement (EIS) must be prepared in accordance with, and meet the minimum requirements of clauses 6 and 7 of Schedule 2 of the Environmental Planning and Assessment Regulation 2000 (the Regulation).
	In addition, the EIS must include:
	• a detailed description of the site, including any existing or approved operations, site history and development consents
	• a detailed description of the development, including:
	  ○ the need for the proposed development
	  ○ alternatives considered
	  ○ justification for the proposed development
	  ○ likely staging of the development, including earthwork, construction and operational stage/s
	  ○ likely interactions between the development and existing, approved and proposed operations in the vicinity of the site
	  ○ plans of any proposed building works
	  ○ infrastructure upgrades or items required to facilitate the development, including measures to ensure these upgrades are appropriately maintained.
	• consideration of all relevant environmental planning instruments, including identification and justification of any inconsistencies with these instruments
		This EIS has been prepared in accordance with the EP & A Regulation	

ISSUE	SPECIFIC REQUEST	INFLUENCE ON EIS	RELEVANT EIS SECTION

	• consideration of issues discussed in Attachment 2 (public authority responses to key issues)
	• a risk assessment of the potential environmental impacts of the development, identifying the key issues for further assessment
	• a detailed assessment of the key issues specified below, and any other significant issues identified in this risk assessment, which includes:
	  ○ a description of the existing environment, using sufficient baseline data
	  ○ an assessment of the potential impacts of all stages of the development, including any cumulative impacts, taking into consideration relevant guidelines, policies, plans and statutes
	  ○ a description of the measures that would be implemented to avoid, minimise, mitigate and if necessary, offset the potential impacts of the development, including proposals for adaptive management and/or contingency plans to manage significant risks to the environment
	  ○ a consolidated summary of all the proposed environmental management and monitoring measures, highlighting commitments included in the EIS.
	The EIS must also be accompanied:
	• high quality files of maps and figures of the subject site and proposal
	• a report from a qualified quantity surveyor providing a detailed calculation of the capital investment value (CIV) of the proposal (as defined in clause 3 of the Environmental Planning and Assessment Regulation 2000) of the proposal, including details of all assumptions and components from which the CIV calculation is derived. The report shall be prepared on company letterhead and indicate the applicable GST component of the CIV
	• an estimate of the jobs that will be created by the development during the construction and operational phases of the proposed development and certification that the information provided is accurate at the date of preparation.		

KEY ISSUES **The EIS must address the following specific mat**			
Strategic and statutory context	Including: • detailed justification for the proposal and the suitability of the site, including a Land Use Conflict Risk Assessment to identify potential land use conflict with	Land Use Conflict Risk Assessment	7

ISSUE	SPECIFIC REQUEST	INFLUENCE ON EIS	RELEVANT EIS SECTION
	sensitive receivers and surrounding agricultural land uses		
	• consideration of all relevant environmental planning instruments, including identification and justification of any inconsistencies with these instruments	Statutory Planning Assessment	4.1
	• details of any proposed consolidation or subdivision of land.	Consolidation of land	2.9
Air quality and odour	Including: • a quantitative odour and air quality impact assessment in accordance with the relevant Environment Protection Authority (EPA) guidelines	Odour and Dust Impact Assessment	4.7 Appendix 9
	• evidence of appropriate meteorological data for use in dispersion modelling, using real and local meteorological data where possible		
	• an investigation and assessment of odour impacts likely to be associated with 'cold air drainage' effects on all identified and potential receivers		
	• inclusion of 'worst case' emission scenarios and sensitivity analyses		
	• a contingency plan to address unpredicted operational odour impacts		
	• a description and appraisal of air quality and odour impact monitoring, emission control techniques and mitigation measures.		
Transport and road traffic	Including: • a quantitative traffic impact assessment prepared in accordance with the relevant Council, Austroads and Transport for NSW guidelines	Traffic Impact Assessment	4.9 Appendix 10
	• details of all daily and peak traffic and transport movements likely to be generated during construction and operation of the development, including a description of haul routes, vehicle types, all over-size and over-mass vehicles, materials to be transported, vehicle access routes and potential queuing impacts		
	• an assessment of the predicted impacts of this traffic on road safety and the capacity of the road network, including consideration of cumulative traffic impacts at key intersections using SIDRA or similar traffic modelling		
	• details of key transport routes, site access, internal roadways, infrastructure works and parking		
	• identification and assessment of potential impacts of the development on the function and integrity of all affected public roads		

ISSUE	SPECIFIC REQUEST	INFLUENCE ON EIS	RELEVANT EIS SECTION
	• identification of local climate conditions that may affect road safety during the life of the project.		
Soil and water	Including: • an accurate description of operational water demands, a breakdown of water supplies (including any water licensing or approval requirements), a description of measures to minimise water use and evidence of an adequate and secure water supply	Water use calculated. Flood Impact Assessment Stormwater Management Plan	2.4.1 4.3 Appendix 5 4.4 Appendix 6
	• a detailed site water balance		
	• details of erosion, sediment, stormwater and leachate control during construction		
	• an assessment of potential surface water, flooding and groundwater impacts, including impacts on nearby waterbodies (including Warranderry Creek, Wallah Creek and any associated non-perennial watercourses), riparian land, surrounding properties, any licensed water users, landholder rights or groundwater dependent ecosystems		
	• a description of surface, groundwater and stormwater management systems, including on site detention, surface water diversions, flood impact mitigation and measures to treat or reuse water		
	• a description and appraisal of impact mitigation, management, maintenance and monitoring measures		
Waste and wastewater management	Including: • identification and classification of waste streams that would be generated at the site in accordance with the Waste Classification Guidelines (EPA, 2014)	Waste Management Plan	4.13 Appendix 11
	• a description of waste transport, storage, handling, processing and disposal		
	• a description of proposed management and disposal of wastewater, leachate, effluent and poultry litter		
	• details on containment and monitoring of wastewater		
	• a description and appraisal of waste impact mitigation, contingencies and management.		
Biodiversity	Including: • an assessment of the proposal's biodiversity impacts in accordance with the Biodiversity Conservation Act 2016, including the preparation of a Biodiversity Development Assessment Report (BDAR) where required under that Act, except where a waiver for preparation of a BDAR has been granted.	Biodiversity Development Assessment Report	4.6 Appendix 12
Heritage	Including:		

ISSUE	SPECIFIC REQUEST	INFLUENCE ON EIS	RELEVANT EIS SECTION
	• an assessment of Aboriginal and non-Aboriginal heritage items and values of the site and surrounding area in accordance with the relevant Energy, Environment and Science guidelines • an Aboriginal Cultural Heritage Assessment Report (ACHAR) that outlines procedures to be followed if Aboriginal objects, burials or skeletal material are found at any stage of the life of the project to formulate appropriate measures to manage unforeseen impacts. • Consultation with Aboriginal people must be undertaken and documented in the ACHAR	Cultural Heritage Assessment	4.4 Appendix 13
Animal welfare, biosecurity and disease management	Including: • Details of how the proposed development would comply with relevant codes of practice and guidelines • Details of all biosecurity and disease control measures • A detailed description of the contingency measures that would be implemented for the mass disposal of livestock in the event of a disease outbreak.	Details of animal welfare, biosecurity	4.15 4.16 Appendix 14
Noise and vibration	Including • a quantitative noise and vibration impact assessment undertaken by a suitably qualified acoustic consultant in accordance with the relevant Environment Protection Authority guidelines and Australian Standards • details of noise monitoring survey, background noise levels and noise emission levels of proposed activities • the identification of impacts associated with site emission and traffic generation at noise affected sensitive receivers during construction and operation, including the provision of operational noise contours • a detailed description of noise and vibration monitoring, management and mitigation measures.	Noise Impact Assessment	4.8 Appendix 15
Hazards and risk	Including: • a preliminary risk screening completed in accordance with State Environmental Planning Policy No. 33 – Hazardous and Offensive Development and Applying SEPP 33 (DoP, 2011), with a clear indication of class (and any subsidiary hazard), quantity and location of all dangerous goods and hazardous materials associated with the development, including those that may be stored within cooling or heating systems and pipes. Should preliminary screening indicate that the project is "potentially hazardous" a Preliminary Hazard Analysis (PHA) must be prepared in accordance with Hazardous Industry Planning Advisory Paper No. 6 – Guidelines for	SEPP 33 Risk Screening Preliminary Hazard Assessment	4.14 Appendix 16 Appendix 17

ISSUE	SPECIFIC REQUEST	INFLUENCE ON EIS	RELEVANT EIS SECTION
	Hazard Analysis (DoP, 2011) and Multi-Level Risk Assessment (DoP, 2011).		
Visual impacts	Including: • A description of the visual catchment and visual impacts including lighting impacts on surrounding receivers and public areas • Appraisal of visual impact mitigation measures	Visual Impacts	4.12
Social and economic	Including: • An analysis of the economic and social impacts of the development, particularly of any benefits to the community in the Central West region.	Economic Impacts Social Impacts	4.10 4.11
Infrastructure	Including: • Details of any upgrade or extension to existing services infrastructure (e.g. electricity supply and water supply).	Infrastructure Upgrades	2.4
Bushfire risk	Including: • A bushfire assessment for the proposal, prepared in accordance with the requirements of *Planning for Bush Fire Protection* (RFS, 2019).	Bushfire Management Plan	4.15 Appendix 18
Contributions	Demonstration that satisfactory arrangements have been or would be made to provide, or contribute to the provision of, necessary local and regional infrastructure required to support the development.	Infrastructure Upgrades	2.4
Plans and documents			
The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Schedule 1 of the Regulation. Provide these as part of the EIS rather than as separate documents.		Development Plans	Appendix 4
Consultation			

During the preparation of the EIS, you must consult with the relevant local, State or Commonwealth Government authorities, service providers, community groups and affected landowners. In particular you must consult with:
- Weddin Shire Council
- The Department, including:
  o Environment Protection Authority
  o Environment, Energy and Science Group
  o Water Group
- Department of Regional NSW, including:
  o Department of Primary Industries
- Heritage NSW
- Essential Energy
- Central Tablelands Water
		Consultation Completed
		Consultation Report
			3.0
			Appendix 19

ISSUE	SPECIFIC REQUEST	INFLUENCE ON EIS	RELEVANT EIS SECTION
	- Transport for NSW - NSW Fire and Rescue - Rural Fire Service - Surrounding local landowners and stakeholders - Any other public transport, utilities or community service providers The EIS must describe the consultation process and the issues raised, and identify where the design of the development has been amended in response to these issues. Where amendments have not been made to address an issue, a short explanation should be provided.		
Further consultation after 2 years			
If you do not lodge a Development Application and EIS for the development within 2 years of the issue date of these SEARs, you must consult further with the Planning Secretary in relation to the preparation of the EIS		Noted	N/A
References			
The assessment of the key issues listed above must take into account relevant guidelines, policies, and plans as identified. While not exhaustive, the following attachment contains a list of some of the guidelines, policies and plans that may be relevant to the environmental assessment of this proposal.		Noted.	N/A
Attachment 1 – Technical and Policy Guidelines			
Plans and documents	The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Schedule 1 of the Environmental Planning and Assessment Regulation 2000. Provide these as part of the EIS rather than as separate documents.		
	In addition, the EIS must include the following: 1. An existing site survey plan drawn at an appropriate scale illustrating: - The location of the land, boundary measurements, area (SQM) and north point - The existing levels of the land in relation to buildings and roads - Location and height of existing structures on the site - Location and height of adjacent buildings and private open space - All levels to be to Australian Height Datum (AHD).	Survey Plan Development Plans	Appendix 3 Appendix 4
	2. Locality/context plan drawn at an appropriate scale should be submitted indication: - Significant local features such as heritage items - The location and uses of existing buildings, shopping and employment areas - Traffic and road patterns, pedestrian routes and public transport nodes		

ISSUE	SPECIFIC REQUEST	INFLUENCE ON EIS	RELEVANT EIS SECTION
	3. Drawings at an appropriate scale illustrating: - Detailed plans, sections and elevations of the existing building, which clearly show all proposed buildings - Detailed plans of proposed access driveways, internal roads, carparking and external alterations services infrastructure		
	4. Schedule of materials, colours and additions. Finishes.		
Documents to be Submitted	Documents to submit include: - One (1) hard copy and one (1) electronic copy of all the documents and plans for review prior to exhibition	Noted	N/A
	- Other copies as determined by the Department once the development application is lodged.		

3.2 COMMUNITY CONSULTATION

3.2.1 Community Consultation Activities

Baiada engaged The Comms Team to prepare and implement a Community Consultation Action Plan for the proposed development. A copy of the complete Consultation Report is included in **Appendix 19**. The results of their community engagement are summarised below.

Consultation was conducted over a three week period from 25 June-16 July 2021 and involved the activities outlined in Table 5.

Table 5: Community Consultation Activities

ACTIVITY/TOOL	DETAILS	TIMING
Media release	Media release provided to local media regarding Baiada's proposal to build breeding/rearing farms and detail how the community can provide feedback.	25 June 2021
Phone/email communication channels	Management of the consultation phone number and email.	25 June – 16 July 2021
Stakeholder letter	Letter sent to surrounding landowners detailing project information and offer to hold a virtual meeting with project team.	28 June 2021
Virtual meetings	Virtual meetings offered to surrounding landowners to discuss project and any concerns.	28 June – 16 July 2021
Print advertisement	Print advertisement (1/4 page) placed in EGN section of Grenfell Record newspaper to promote the proposed facility to the broader community and advise on how to provide feedback.	28 June – 2 July 2021

3.2.2 Summary of Community Responses

In response to the above community consultation activities, the following responses were received as shown in Table 6.

Table 6: Summary of Community Responses

DATE	TYPE	STAKEHOLDER	FEEDBACK
30/06/2021	Email	Local Resident	Concerns around animal welfare, workers and surveillance.
01/07/2021	Call	Local Resident	Supportive of project and contribution to Grenfell community.
02/07/2021	Email	Local Resident / adjoining landowner	Meeting request.
05/07/2021	Call	Local Resident / adjoining landowner	Call to request more information on project and impacts to property (surrounding landowner that did not receive original letter).
06/07/2021	Call	Local Resident	Surrounding landowner that wanted to confirm logistics of 500m buffer zone proposed to come across his paddock and what this means/how it will impact the land.
06/07/2021	Call	Potential contractor	Call to confirm expression of interest (EOI) process.
06/07/2021	Email	Potential contractor	Email to register EOI for project.
07/07/2021	Email	Potential contractor	Email to register EOI for project.

3.2.3 Stakeholder meetings

Two virtual stakeholder meetings were held with surrounding landowners. The offer was made to a total of four stakeholders, however not all requested a meeting. Overall, meetings were generally supportive of the project and its contribution to the local economy, subject to some matters of concern being addressed as part of the detailed design / assessment process. Items of concern raised in the stakeholder meetings included:

- Potential for odour / air pollution impacting on nearby houses;
- Potential visual impacts on views;
- Road access and retention of the unconstructed road reserves;
- Maintenance of boundary fencing;
- Potential impacts on adjoining farming operations.

3.2.4 Community Consultation Outcomes

At the completion of the consultation process, the Comms Team concluded that "*The process undertaken was thorough and enabled a genuine opportunity for consultation. Stakeholders were provided with multiple channels to receive information and provide feedback. Those located nearby were provided with direct communication and an invitation to meet with the project team*".

There appears to be general interest in the project and the activities undertaken increased community awareness about the proposed development. Nearby landholders who raised questions in regard to the project have been provided with responses to their concerns and questions.

In response to landowner feedback, additional landscaping has been added on the western side of each of the farms to provide additional visual screening between the proposed sheds and public vantage points including the nearest dwellings and Gooloogong Road.

Baiada will continue to engage with these landholders in both an informal and formal basis moving forward as the project progresses.

3.2.5 Engagement Activities for Construction and Operational Phases

3.2.5.1 Construction

The nearest residents to the site will be provided with a project update at key stages throughout construction and be provided with contact details for the Construction Manager who can be contacted as required.

Baiada will also prepare and implement a Construction Management Plan to ensure the potential impacts associated with the construction phase are appropriately mitigated and managed. The Construction Management Plan will include the requirements for project updates and a procedure for receipt of feedback from the community and provision of a response.

3.2.5.2 Operational Phase

Ongoing consultation during the operational phase of the project will not be undertaken. However, the Environmental Management Plan prepared for the site will include a standard process for receipt of enquiries, questions and complaints, handing, responding and recording.

3.3 PUBLIC NOTIFICATION

In accordance with Part 4 of the *Environmental Planning and Assessment Act 1979*, the EIS will be publicly notified during which time the general public will be invited to make comment and forward submissions to the Consent Authority (Weddin Shire Council) in relation to the proposed development. Advertising will occur for a minimum period of 30 days.

4 ASSESSMENT OF ENVIRONMENTAL IMPACTS

4.1 STATUTORY PLANNING ASSESSMENT

4.1.1 State Significant Development

In accordance with s8(1) and Schedule 1 3(a) *State Environmental Planning Policy (SEPP) (State and Regional Development) 2011*, development for the purpose of Agricultural produce industries and food and beverage processing that has a Capital Investment Value (CIV) of more than $30 million is declared to be State Significant Development for the purpose of the *Environmental Planning and Assessment Act 1979.*

The Capital Investment Value (CIV) of the project has been calculated in accordance with the *State Environmental Planning Policy Amendment (Capital Investment Value) 2010* by Wilde and Woollard and is included as **Appendix 7**). As shown in the CIV Report, the project is estimated to be **$64,124,200** (excluding GST) and accordingly is classified as a State Significant Development.

Under section 4.5(a) of the *Environmental Planning and Assessment Act 1979,* the Minister is the Consent Authority for State Significant Development, unless the Independent Planning Commission has been declared to the be the consent authority.

Under the State and Regional Development SEPP (Part 2, 8A), the Independent Planning Commission is the consent authority in the following circumstances:

- An objection from the relevant council is made;
- At least 25 people lodge objection submissions; or
- Political donations are made by the Applicant.

4.1.2 Designated Development

The development also falls within the scope of Designated Development under *Item 21 Intensive Livestock Agriculture* of Schedule 3 of the *Environmental Planning and Assessment Regulation 2000*. However, in accordance with 4.10(2) of the *Environmental Planning and Assessment Act 1979* designated development does not include state significant development despite any such declaration.

4.1.3 Integrated Authorities

Under Clause 4.46 of *Environment Planning and Assessment Act 1979*, this DA trigger is Integrated Development based on the following triggers:

- The Environment Protection Agency is identified as an Integrated Authority with respect to the proposed development as the proposal involves a Premises Based Activity identified in Section 43 (b) of the *Protection of Environmental Operations Act 1997*, namely Schedule 1 Item 22 Livestock intensive activities.

As the project is a State Significant Development (SSD), if approved, Section 4.41 of the EP&A Act will apply and the following Integrated Development Triggers do not apply:

- an AHIP under section 90 of the NPW Act to harm Aboriginal objects is not required. Instead, all management related to Aboriginal cultural heritage within the study area will be governed by the policies within an approved *Aboriginal Cultural Heritage Management Plan* (ACHMP).
- an activity approval for works on waterfront land under section 91 of the *Water Management Act 2000* is not required.

4.1.4 Concurrence and Referrals

This DA does not trigger a requirement for concurrence or referral under any other Environmental Planning Instrument.

4.1.5 Central West and Orana Regional Plan 2036

The *Central West and Orana Regional Plan* (the Regional Plan) is a 20-year blueprint for the future of the Central West and Orana region. The vision for the region contained in the plan includes the following statements which align with the core objectives of the proposed development:

- *The region makes a major contribution to the State's economy, building on its proud agricultural heritage…*
- *Ongoing leadership in agricultural innovation makes the region a preferred destination for food processing, packaging and associated industries. These industries produce high-quality products that are distributed domestically and around the world.*
- *Improved transport connections with Sydney, Canberra and Newcastle… provide capacity and connectivity for agribusiness… Investment in roads and logistics facilities provide a more efficient network, making the region a nationally significant freight hub.*
- *Local service centres benefit from increased economic activity in the agribusiness, tourism and service sectors.*

Development of the Grenfell Breeder and Rearer Farm supports the vision for the region as it will provides for growth and diversification of agriculture, agribusiness and the poultry industry within the region. As noted above, at full operation the farms are expected to generate up to 50 FTE jobs for local workers.

The plan has identified four (4) specific goals for the region, which are:

- Goal 1 – The most diverse regional economy in NSW
- Goal 2 – A stronger, healthier environment and diverse heritage
- Goal 3 – Quality freight, transport and infrastructure networks
- Goal 4 – Dynamic, vibrant and healthy communities.

An assessment of the proposed development contribution towards achieving these goals in provided below.

Goal 1 – The most diverse regional economy in NSW

The Regional Plan recognises that agricultural production from the region accounts for 18% of the State's gross agricultural value. The directions for Goal 1 include protection of the region's diverse and productive agricultural lands and growth of the agribusiness sector and supply chains.

The proposed Grenfell Farm is required to support poultry production within the state through the production of fertile eggs which are hatched at a company hatchery and then grown at broiler farms across NSW. While supporting growth of the broader poultry industry in NSW (and Australia) the development will increase the diversity of agricultural production within poultry the region as relatively new local industry within the Weddin Shire.

The Regional Plan stresses the importance of minimising incompatible land uses on agricultural land and how vital biosecurity is for the region. The proposed development will meet both of these goals. As demonstrated in technical assessments submitted with this EIS, the proposed poultry farm can be constructed and operated in a manner with minimal impacts on the surrounding rural properties or agricultural practices. Further, the proposed poultry farms occupy only a small portion of the property with the remaining area able to be used for cropping and grazing.

With respect to biosecurity, Baiada have a National Livestock Animal Welfare and Biosecurity Manual (Issue No 1, dated 13 November 2019) which contains a comprehensive biosecurity management program which will be applied to the site. In accordance with the Manual, a HACCP Plan will be developed for site operations to identify hazards and risks that have the potential to compromise biosecurity and food safety and document relevant risk management and mitigation procedures.

Goal 2 – A stronger, healthier environment and diverse heritage

The Biodiversity Development Assessment Report (BDAR) confirms that due to the careful location of the proposed farms within the historically cleared and cropped areas, the development will have a minimal impact upon significant flora and fauna in the local area.

The Aboriginal Cultural Heritage Assessment Report found one Aboriginal cultural heritage site on the site near Wallah Creek. The report provides recommendations to manage the Aboriginal cultural heritage values of the site, including salvage methodology and an unanticipated finds protocol.

This EIS report assesses potential environmental impacts related to the proposed development, and identifies mitigating and management measures to reduce or resolve these impacts.

Goal 3 – Quality freight, transport and infrastructure networks

The development will utilise heavy vehicles to transport birds, eggs, feed and other supplies to and from the subject site. The subject site is immediately adjoining the Gooloogong Road which is an existing B-Double route. The farm will form

part of Baiada's poultry supply network, linking with poultry growing regions including Tamworth, Griffith and Newcastle. The development does not rely on rail, air travel or public transport for movement of goods.

Goal 4 – Dynamic, vibrant and healthy communities

The subject site is located within the Grenfell Statistical Area Level 2 (SA2) which includes the town of Grenfell and the surrounding rural area. The 2016 census confirms that the population of this SA2 is 3,652 persons (50/50 split between male and female). Of these 3,038 persons were aged over 15 years. 885 persons were employed full time and 462 were employed part time. In addition to this, a further 92 were employed away from work and 79 were unemployed looking for work. Of those people over the age of 15 years, 1,511 were considered to be in the labour force and 1,245 were not in the labour force.

It is anticipated that the project will provide 50 full time equivalent (FTE) positions at full operation. This project will go towards assist in a reduction of local unemployment opportunities. 60 construction jobs will also be created as part of the project, as well as indirect positions for local tradespersons.

This will offer significant employment opportunities in the area, as well as providing money for the local economy. Where possible, Baiada (and sub-contractors) will also purchase goods and services from the local area, to re-invest in the local community.

4.1.6 State Environmental Planning Policies

4.1.6.1 SEPP (State and Regional Development) 2011

This SEPP identifies that the development of Intensive livestock agriculture with a Capital Investment Value (CIV) of more than $30 million is classified as State Significant Development. As the CIV for the is **$64,124,200** the development is considered to be State Significant.

4.1.6.2 SEPP No. 33 – Hazardous and Offensive Development

In accordance with the requirements of *State Environmental Planning Policy 33* (SEPP33), a screening assessment of the dangerous goods (DGs) to be stored on site has been undertaken by Lote Consulting and is included as **Appendix 16**.

This screening assessment found that the bulk storage of LPG (a Class 2.1 flammable gas) would exceed the storage thresholds listed in the SEPP and as such, the site would be regarded as being potentially hazardous. Accordingly, a Preliminary Hazard Assessment (PHA) was required for the project. Vehicle movements as a result of DG storage was also assessed and the thresholds for these vehicular movements was not exceeded.

A PHA was required for the project by Lote Consulting and is included as **Appendix 17.**

As part of the PHA, the potential hazards associated with the operations or storage of materials have been identified. Based on the identified hazards, scenarios were postulated which may result in an incident with potential offsite impacts, which were then carried forward for consequence analysis. The consequence analysis undertaken by Lote Consulting shows that no scenarios had the potential to impact offsite and as such, frequency analysis was not required to be conducted as the probability of a fatality at the site boundary was already minimised to within the acceptable risk criteria.

The assessment concludes that the risk at the site boundary do not exceed the acceptable risk criteria. Hence the proposed development would only be classified as potentially hazardous and would be permitted within the current land zoning for the site.

4.1.6.3 State Environmental Planning Policy (Koala Habitat Protection) 2020

The Koala SEPP continues the scope of the old SEPP 44 and does not apply to State Significant Development or State Significant Infrastructure. It only applies to local development where the council is the consent authority.

4.1.6.4 State Environmental Planning Policy (Remediation of Land)

This SEPP provides state-wide planning controls for the remediation of contaminated land. The policy states that land must not be developed if it is unsuitable for a proposed use because it is contaminated. If the land is unsuitable, remediation must take place before the land is developed.

A search of the NSW EPA Contaminated Land Record of Notices shows that the subject site is not listed as being contaminated. Furthermore, the site has been historically to be used for agriculture (cropping and grazing) and these activities are ongoing. These activities are low risk in terms of contamination. No further assessment under the SEPP is required.

4.1.6.5 State Environmental Planning Policy (Infrastructure) 2007

SEPP (Infrastructure) 2007 provides a consistent planning regime for infrastructure and the provision of services across NSW. The SEPP supports greater flexibility in the location of infrastructure and service facilities along with improved regulatory certainty and efficiency.

Clause 104 of the SEPP specifies that DAs for new premises of relevant size or capacity must be referred to the RMS for comment and must take into consideration the accessibility of the site and any potential safety, congestion, or parking implications. The proposed development, which falls under the definition of intensive livestock agriculture, does not match any of the traffic-generating development categories as listed in Schedule 3 of the SEPP.

It is considered that adequate information regarding the traffic and transport issues associated with the proposed development is contained within this EIS report to enable meaningful consideration of the proposal by both the consent authority and Transport for NSW, as may be required under SEPP (Infrastructure) 2007. A Traffic Impact Assessment has been prepared by PSA Consulting and is included as **Appendix 10**.

4.1.6.6 Other SEPPs

The remaining SEPPs are not applicable.

4.1.7 Weddin Local Environmental Plan 2011

The proposed development is located within the RU1 Primary Production Zone under the *Weddin Local Environmental Plan 2011* (LEP). The proposed development is defined as **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—*
>
> *(a) dairies (restricted),*
>
> *(b) feedlots,*
>
> *(c) pig farms,*
>
> *(d) poultry farms,*
>
> *but does not include extensive agriculture, aquaculture or the operation of facilities for drought or similar emergency relief.*
>
> ***Note—***
>
> *Intensive livestock agriculture is a type of* ***agriculture****—see the definition of that term in this Dictionary.*"

The objectives of the RU1 zone as outlined within the LEP are:

- *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 poultry farm is a suitable use in the rural zone. The development will add to the diversity of agricultural products in the local area and will be provide an appropriate agricultural use on quality agricultural land.

As demonstrated in this EIS, the proposed development has been subject to a rigorous environmental assessment which confirms the project can be undertaken in a manner which minimise potential conflict with adjoining zones and sensitive receptors. Similarly, the Traffic Impact Assessment has demonstrated that the proposed access arrangements and development traffic can be suitably and safely accommodated within the existing network. As such the proposed development is considered to comply with the objectives of the zone.

4.1.8 Weddin Shire Development Control Plan

The applicability of the DCP Chapters is provided in **Table 7**.

Table 7: Applicability of the DCP Chapters

DCP CHAPTER	APPLICABILITY
Chapter 3 – Subdivision	**Not Applicable –** the development does not involve subdivision.
Chapter 4 – Flooding and Flood Affected Land	**Not Applicable –** the development is not located within an area bordering the Emu Creek system within the Grenfell township. This does not mean that the site is not flood affected, but is not located within this area. Flooding of the site is addressed in Section 1.8.5. A flood assessment has been undertaken (refer to **Appendix 5**) given the topographical characteristics of the site and the nearby Wallah and Warraderry Creeks within the vicinity of the site. A hydrologic analysis determined that the flood risks to occupants of the site are low, subject to an appropriate bridge design and adoption of a flood emergency management plan for the site. The proposed development works are deemed to comply with the Weddin Shire Council LEP and the provisions set out in the NSW Floodplain Development Manual 2005.
Chapter 5 – Urban Residential Development	**Not Applicable –** the development does not involve urban residential development in the R1 or R5 zones.
Chapter 6 – Multi Housing, Second Dwellings and Dual Occupancy Development	**Not Applicable –** the development does not involve multi housing, second dwellings and dual occupancy development.
Chapter 7 – Large Lot Residential	**Not Applicable –** the development does not involve Large Lot Residential development.
Chapter 8 – Village Development	**Not Applicable –** the proposed development does not involve village development.
Chapter 9 – Rural Development	**Applicable –** the proposed development triggers this chapter of the DCP. Refer to assessment in Table 8.
Chapter 10 – Commercial Development	**Not Applicable –** the development does not involve commercial development.
Chapter 11 – Industrial Development	**Not Applicable –** the development does not involve industrial development.
Chapter 12 – Demolition	**Not Applicable –** the development does not involve demolition.
Chapter 13 – Heritage	**Not Applicable –** the development is not mapped as having any heritage significance.
Chapter 14 – Salinity	**Applicable –** this chapter of the DCP applies to all land in Weddin Shire.
Chapter 15 – Public Consultation	**Applicable –** this chapter applies to the development. The application will be notified in accordance with this chapter, the *Environmental Planning and Assessment Act 1979* and *Environmental Planning and Assessment Regulation 2000.*

An assessment of the development against the applicable Weddin Shire Development Control Plan (DCP) provisions is provided in Table 8.

Table 8: Assessment against the DCP Provisions

DCP PROVISIONS	ASSESSMENT
Chapter 9 – Rural Development	
Objectives:	

DCP PROVISIONS	ASSESSMENT
The Objectives of this section of the Weddin Development Control Plan are to: (a) To protect the agriculturally productive capacity of our rural land; (b) Ensure that rural living developments are integrated with the landscape; (c) Ensure subdivision potential is compatible with the capability of the land; (d) To minimise rural land use conflict; and (e) Maintain existing stands of vegetation.	
Minimum Allotment Size	**Not Applicable** – the proposed development does not involve any creation of new allotments or alterations to the current allotment arrangements.
Location within Agriculturally Productive Area Objectives • To recognise and protect the valuable agriculturally productive land of the Weddin Shire. • To increase awareness of the realities of developing and living in the country. Standards • Applicants need to recognise they are proposing to develop within an agriculturally productive area. • Council may impose conditions or requirements upon development consents or land covenants acknowledging the diversity of agriculture and potential external impacts.	**Complies** – the development is an appropriate rural use within the RU1 Zone. The development will not introduce any sensitive land uses or operations which may limit agricultural activities on surrounding properties. In addition, the technical studies submitted with this EIS demonstrate the development will not result in any unacceptable amenity impacts on the nearest rural dwellings.
Rural Land Use Conflict Objectives • To acknowledge rural land use conflict as a major threat to the sustainability of agriculture within the Weddin Shire. • To minimise the opportunities for rural land use conflicts. • To maintain the rural visual character of agriculture within the Weddin Shire. • To provide separation between residential uses and noise generating sources. **Standards** a. A minimum separation distance of 150 metres as well as landscape screening shall be provided in new developments which adjoin incompatible land uses to accommodate noise, odours and chemical spray. b. A minimum set back of 30 metres is required for all rural dwellings to all existing public roads	**Complies** – the development does not adjoin any incompatible land uses and as demonstrated in this EIS, the project will not result in any unacceptable amenity impacts on the nearest rural dwellings. The proposed farms have a minimum boundary setback of 50m and the nearest sensitive receptor is approximately 1.5km from the closest poultry shed proposed as part of the development. In response to feedback from the neighbouring property, a vegetated buffer is proposed to create an additional visual buffer to aid in screening of the development.
Identification of Building Envelope Objectives • To plan for and consider the location of future buildings prior to establishing new allotment boundaries.	**Not Applicable –** the development does not involve subdivision.

DCP PROVISIONS	ASSESSMENT
Standards 1. All applications for subdivision shall identify future building envelopes prior to subdivision approval. Council may impose a restriction upon the title of any new allotments restricting buildings to within identified locations. 2. Building envelopes should be of sufficient size to accommodate a dwelling and associated outbuildings including adequate effluent disposal requirements taking into consideration the topography and soil conditions. 3. Building envelopes should be on land which is predominantly flat and clear to minimize surface runoff, cut, fill and stability issues. 4. Building envelopes should where possible avoid high quality agricultural land.	
Building Siting and Design **Objectives** • To minimise the impact of development upon the rural landscape • To encourage applicants to consider the overall layout of their development in conjunction with the site upon which it is proposed. **Standards** 1. The location of buildings should minimize the removal of existing vegetation. 2. Buildings should complement the characteristics of the landform as depicted below.	**Complies** – The Biodiversity Development Assessment Report confirms that due to the careful location of the proposed farms within the historically cleared and cropped areas, the development will have a minimal impact upon significant flora and fauna in the local area. The proposed sheds are low profile buildings and will be constructed in surfmist colour, which is used in poultry sheds because of its low visual impact and maximum thermal performance. In response to feedback from the neighbouring property, a vegetated buffer is proposed to create an additional visual buffer to aid in screening of the development.
Scenic and Landscape Quality **Objectives** • To minimise the impact of development upon the rural landscape • Retain existing stands of native vegetation. **Standards** 1. The scale, form, materials and colours of the development shall be appropriate to the character of the area and location of development site. Highly contrasting coloured bricks/finishes should be restricted to use on building elements such as sills, window heads, stringcourses etc. The body of external walls shall be consistent in colour. 2. All existing native vegetation shall be maintained where possible.	**Complies** – The Biodiversity Development Assessment Report confirms that due to the careful location of the proposed farms within the historically cleared and cropped areas, the development will have a minimal impact upon significant flora and fauna in the local area. The proposed sheds are low profile buildings and will be constructed in surfmist colour, which is used in poultry sheds because of its low visual impact and maximum thermal performance. In response to feedback from the neighbouring property, a vegetated buffer is proposed to create an additional visual buffer to aid in screening of the development.
Servicing **Objectives** • To ensure that an adequate level of services is provided to all allotments.	**Complies** - the proposed development will be adequately serviced with: • an adequate on-site effluent system; • electricity supply via extension of the existing network

DCP PROVISIONS	ASSESSMENT
• To ensure that block sizes in unsewered areas are of sufficient shape and size to accommodate on-site effluent disposal. • To ensure development does not place an unreasonable demand upon service authorities, Council and the community. **Standards** 1. An approved on-site effluent disposal system shall be installed in accordance with the requirements of "Environment and Health Protection Guidelines Onsite Sewage Management for Single Households 1998. 2. All septic tanks shall be provided with an overflow relief drain located between the dwelling and tank to protect the dwelling from septic surges and overflows. 3. Electrical Services are to be provided in accordance with the requirements of Essential Energy. Service availability is to be confirmed prior to approval of the associated development application. Telephone lines shall be installed in accordance with the requirements of Telstra. Service availability is to be confirmed prior to approval of the associated development application. 4. Where reticulated water is not available roof water collection tanks shall be installed capable of storing a minimum of 90,000 litres. A reduction in water storage capacity will only be permitted where approval of a stock and domestic bore can be provided and a dual (potable and non-potable) water reticulation system has been installed. All secondary roof structures in excess of 15 square metres shall be connected to the primary water reticulation system. 5. A secondary water source for collection of surface water in accordance with the Department of Natural Resources – Farm Dams Policy shall be provided on allotments greater than 2 hectares for stock water purposes. 6. An additional 22,000 litres of water storage shall be provided for bush fire fighting purposes.	• Water supply from the existing connection to the Central Tablelands Water Gooloogong-Grenfell Water Pipeline • On-site water storage for operations and firefighting (2ML per farm).
<u>9.12 Access</u> **Objectives** • Ensure satisfactory arrangements are made for access to new developments • Encourage the orderly and economic provision of roads • To minimise the potential impact upon the environment and rural aesthetic quality. **Standards** 1. Direct legal access to a public road is required to all new allotments and dwellings.	**Complies** – the development has direct legal access to Gooloogong Road and will utilise the existing driveway. Upgrade of the driveway will be undertaken to allow for all design vehicles to safely enter and exit the site. A Basic Right (BAR) and Basic Left (BAL) at the intersection of Gooloogong Rd and the development site access is proposed. The new internal driveways have been designed taking into account ecological considerations, topography and drainage.

DCP PROVISIONS	ASSESSMENT
2. The minimum rural road reservation shall be 20 metres. 3. New roads and access arrangements should be located to take account of the natural features of the site as well as existing vegetation. 4. Driveways should be designed to follow the contours of the land to minimize the visual impact of the development. 5. Roads that run with the contour of the land can be significantly cheaper and easier to construct and maintain. 6. Where development involves the increase in frequency or intensity of use on an existing road, upgrading of the road to Council standards may be required.	The Traffic Impact Assessment concludes that there are no major adverse traffic impacts on the surrounding road network caused by the proposed Grenfell Poultry Farm. Full details of the proposed access arrangements and on-site manoeuvring demonstrating their low impact can be found in the Traffic Impact Assessment in **Appendix 10**.
9.13 Separation **Objectives** • To minimise the impact of new development upon existing rural dwellings. **Standards** 1. A proposal for a dwelling house will have to demonstrate sufficient separation from existing rural dwellings and agricultural uses located upon adjoining properties. Each proposal will be assessed on its merits having regard to the varying considerations such as natural topography, prevailing winds, land uses and buffer treatments. 2. New development shall consider any potential impacts upon the visual and acoustic privacy of existing rural dwellings.	**Complies –** The nearest rural dwelling is located approximately 1.5km from the closest poultry shed proposed as part of the development. In response to feedback from the neighbouring property, a vegetated buffer is proposed to create an additional visual buffer to aid in screening of the development. As demonstrated in the technical studies submitted with this EIS, the proposed development will not result in any unacceptable amenity impacts (such as noise, dust etc) on the nearest rural dwellings.
9.14 Rural Development Generally **Objectives** • To minimise the impact of development upon the environment, prevent land degradation and protect natural water flows, streams and waterways. **Standards** 1. Development should not disturb existing natural watercourses 2. Development should not disturb or remove existing stands of native vegetation. (a) A maximum of 1 metre cut and 1 metre fill is allowed on sloping lands to avoid land degradation and stability issues. (b) The developer may be required to establish grassed waterways, diversion banks and sediment traps to reduce soil erosion and land degradation. (c) On undulating land, split level homes are generally more suited as they bind the building to the ground,	**Complies –** the development has been situated within the existing cleared and disturbed portions of the site to minimise impact on native vegetation and watercourses to the greatest extent possible. As number of existing, heavily disturbed, overland flow paths through the site proposed to be redirected around the farms. As demonstrated in the Stormwater Management Plan (**Appendix 6**) these changes will have no worsening impacts on the downstream receiving environment. In addition, the farms will include grass swales and detention basins to ensure that the development does not result in unacceptable impacts on stormwater quality. Impacts on Wallah Creek have been minimised through careful selection of a single crossing point and minimising the need for clearing of riparian vegetation. Due to the nature of the required poultry sheds, earthworks in excess of 1m of cut and fill required. Earthworks have been minimised through the location of farms on the flatter portions of the site and running the sheds along the contours. Cut and fill for the farm sites

DCP PROVISIONS	ASSESSMENT
minimise excavation and allow for a smaller staggered roofline	will be achieved with battered slopes (maximum 1: 4) rather than retaining walls. These slopes will be appropriately designed, compacted and grassed (or landscaped) to prevent erosion. Further details with respect to the earthworks are provided in the site plans provided in **Appendix 4**. Erosion and Sediment Controls during construction will be implemented in accordance with SWMP included as **Appendix 6**.
9.15 Landform and Stability **Objectives** • To minimise the potential impacts of soil movement. **Standards** 1. Slopes in Excess of 20% are considered unsuitable for development. 2. For developments upon slopes in excess of 15% a structural engineers certification shall be provided for all new structures. 3. Development should be designed having regard to existing drainage patterns of the area. 4. An erosion and sediment control plan shall be provided for all developments requiring excavation and/or fill.	**Complies –** Slopes in excess of 15% have been avoided by the development. The development has been situated within the existing cleared and disturbed portions of the site to minimise impact on native vegetation and watercourses to the greatest extent possible. As number of existing, heavily disturbed, overland flow paths through the site proposed to be redirected around the farms. As demonstrated in the Stormwater Management Plan (**Appendix 6**) these changes will have no worsening impacts on the downstream receiving environment. Impacts on Wallah Creek have been minimised through careful selection of a single crossing point and minimising the need for clearing of riparian vegetation. Erosion and Sediment Controls during construction will be implemented in accordance with SWMP included as **Appendix 6**.
9.16 Bushfire Objectives • To minimise the threat of bushfire to life and property. **Standards** 1. A Bushfire Hazard Assessment shall be provided for land identified by the NSW Rural Fire Service as being bush fire prone as identified in the map below: 2. The Bush Fire Hazard Assessment shall be prepared in accordance with the "Planning for Bushfire Protection" prepared by the NSW Rural Fire Service and Department of Planning.	**Complies -** A Bush Fire Hazard Assessment and Management Plan is provided in **Appendix 18**. The report provides a range of protection measures are identified for incorporation as part of the proposed development to aid in the defence against grass fire with respect to classifiable vegetation surrounding the development site.
Outdoor Advertising/Signage	**Not Applicable** – the proposed development does not involve any outdoor advertising or signage.
New Transportable Homes	**Not Applicable** – the proposed development does not involve a transportable home.
Relocation of Existing Dwellings – Relocated Homes	**Not Applicable** – the proposed development does not involve relocation of any dwellings.
Intensive Agriculture **Objectives** • To promote intensive agricultural development in appropriate locations.	**Complies –** The nearest rural dwelling is located approximately 1.5km from the closest poultry shed proposed as part of the development. As demonstrated in the technical studies submitted with this EIS, the proposed development will not result in any

DCP PROVISIONS	ASSESSMENT
• To minimise potential impacts upon surrounding properties and the environment. **Standards** 1. Separation of intensive agricultural developments from existing dwellings shall be based upon potential land use conflict investigations including noise, odour, spray drift etc. 2. Relevant industry guidelines should be followed in the design of intensive agricultural developments and will form an important part of Council's assessment of proposed developments. 3. Applications for development likely to generate noise, odour or other environmental nuisance shall be accompanied by an assessment report prepared by a suitably qualified practitioner considering the environmental standards of the Department of Environment and Conservation. Consideration should be given to amelioration techniques and the location of existing surrounding rural dwellings in regard to prevailing winds.	unacceptable amenity impacts (such as noise, odour, dust etc) on the nearest rural dwellings. This EIS is supported by a detailed Noise Impact Assessment (refer to **Appendix 15**) and Odour Report (**Appendix 9**). Both of these technical reports demonstrated compliance with the applicable standards and also provide additional mitigation and management measures.
Non-Agricultural Development **Objectives** • To permit non -agricultural development within the rural area where it will not adversely potential agricultural production nor impact upon adjoining properties. **Standards** 1. Developments which have the potential to generate traffic should consider the likely traffic generation and the condition and capacity of the road system. 2. Any necessary road upgrades to cater for the proposed development will be the responsibility of the applicant. 3. Applications for development likely to generate noise, odour or other environmental nuisance shall be accompanied by an assessment report prepared by a suitably qualified practitioner considering the environmental standards of the Department of Environment and Conservation. Consideration should be given to amelioration techniques and the location of existing surrounding rural dwellings in regard to prevailing winds. 4. Low scale rural tourist facilities are encouraged in the form of farm stay and bed and breakfast facilities. Larger proposals will be considered on their merits.	**Not Applicable –** the development involves agricultural development (as per the definition of 'agriculture') in the LEP.

4.2 WATER USE AND WASTE WATER TREATMENT

4.2.1 Consumption of Potable Water

It is anticipated that 1ML of water will be required per day for the proposed development. The 1ML will be used by the four farms collectively and will be used for drinking water for the birds, cleaning, washdown water, staff drinking water and amenities.

As noted in section, water will be sourced from the CTW water pipeline. CTW have confirmed that this amount of water supply is available. No water licence is required to connect to this pipeline.

Wastewater from the staff amenities and residences will be managed through a series of on-site environmental septic waste systems.

4.3 FLOOD IMPACT ASSESSMENT

A Flood Impact Assessment (FIA) has been prepared by Storm Engineering to investigate potential flooding impacts associated with the proposed development. The flood study analyses the local and regional flooding impacts on the site to appropriately address flood risks and impacts for the proposed development and its associated works and is included as **Appendix 5**.

4.3.1 Methodology

The *NSW Floodplain Development Manual 2005* and *Weddin Shire Council Local Environmental Plan 2011* (LEP2011) Planning Scheme was adopted as the relative planning assessment instruments.

To assess flood impacts, a baseline flood model has been built using BMT WBM's TuFLOW modelling software, in accordance with industry standards, to appropriately determine local and regional floodplain extents for the site. Hydraulic infrastructure for the site has been designed and assessed in conjunction with MPN Consulting, to determine flood impacts and risks for the proposed poultry farm.

Peak flood events assessed include the 39%, 5%, 1%, 0.5%, 0.2% and 0.05% AEP flood events, for the local and regional events. The identified duration flood events were combined into peak envelopes, in order to determine impacts due to the siting of farm sheds, roads and culverts via the localised peak flood, and the bridge impacts utilising the peak regional critical duration event. The shorter critical durations produced in the tributaries to Wallah Creek were deemed critical for the pads and road design, whereas the bridge had a higher likelihood to impact on Wallah Creek.

For flood planning purposes of the farm sheds, the 100 and 2000 year ARI (1% AEP and 0.05% AEP respectively) regional flood events were analysed, noting the Flood Planning Level (FPL) means the 100-year ARI (1% AEP) flood event.

4.3.2 Assessment Results

A pre-development scenario and a post-development scenario has been adopted, to determine the potential impacts as a result of development during the 39%, 5% and 1% AEP design events, and to review peak water levels in and around each proposed farm building during the peak 1% AEP event.

Additional sensitivity analysis has been undertaken for the 0.5% and 0.2% AEP events as proxies for Climate Change and the impacts as a result of the potential changes in rainfall intensity.

Other scenarios assessed also include:

- 100% Design Culvert blockage scenario;
- 0.05% AEP event peak water level assessment; and
- 0.05% AEP Climate Change event peak water level assessment (in-lieu of an extreme event), whereby a 20% increase in rainfall is added.

As shown in Figure 23, the proposed poultry farms are to be situated above the 1% AEP Flood Planning Level and therefore complies with the NSW Floodplain Development Manual and WSC LEP requirements. Furthermore, all proposed channels around the site are demonstrating efficient capture and release from external incoming sheet flow from local sub-catchments.

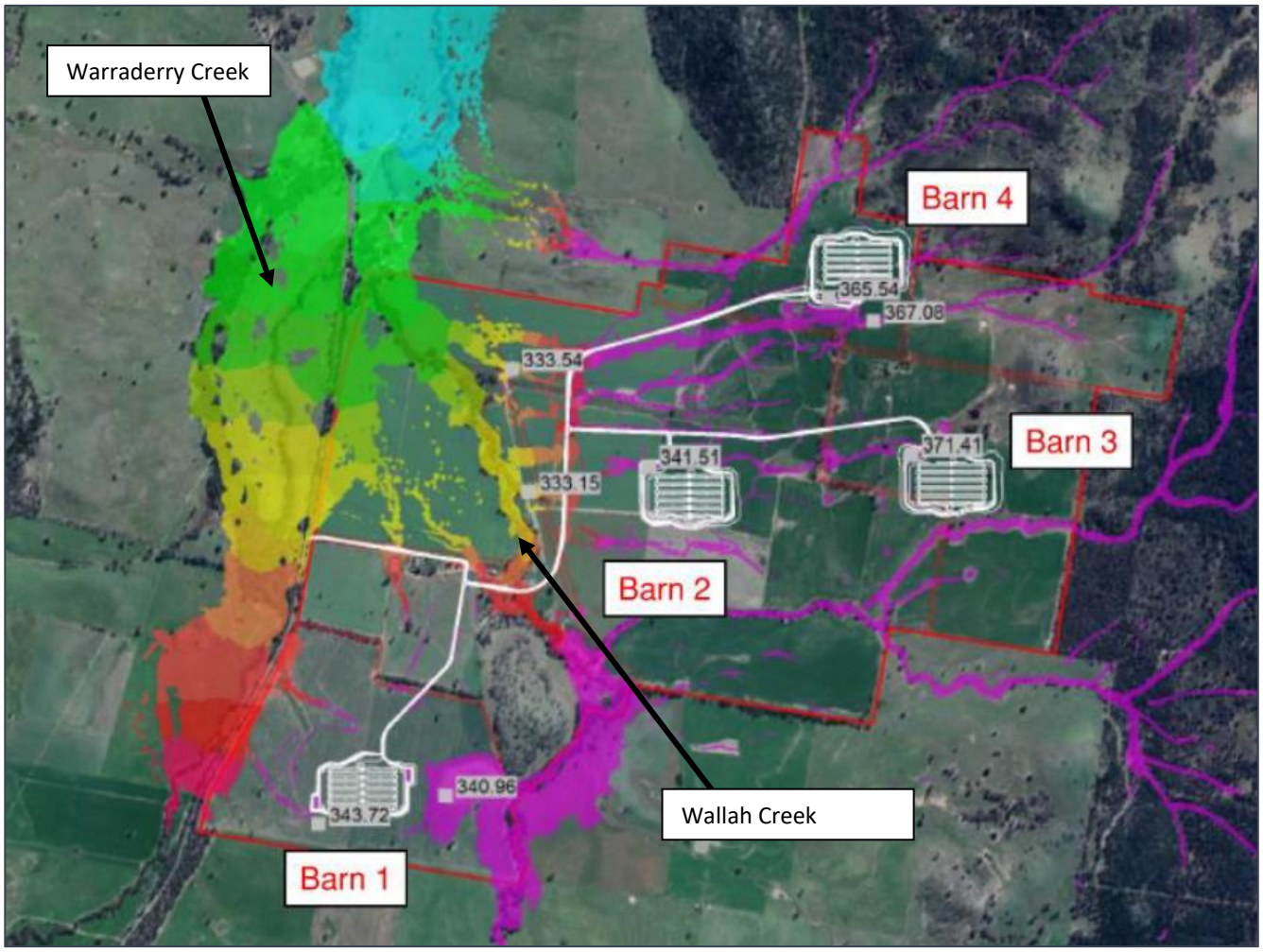


Figure 23: 1% AEP Post Development Flood Levels (Storm Flood Consulting, 2021)

The modelling also demonstrates that the proposed farm and road design is will not create adverse impacts externally to the site boundaries up to the 1% AEP peak flood event.

Proposed roads have demonstrated immunity against the design 1% AEP peak flood event, with the exception of the location where the proposed bridge shall cross the Wallah Creek location within the site. A sensitivity analysis of the 1% AEP 100% blockage scenario demonstrates there is low-risk flood hazards at the proposed culvert locations, given the upstream localised storage ability during an extreme event.

The proposed bridge will require further assessment to confirm no adverse impacts external to the site, and also to demonstrate minimal impacts within Wallah Creek itself. Detailed design of the bridge will be required to provide consideration for these requirements.

Flood risk management approaches should be adopted at the detailed design stage, with further consultation with NSW SES and council, to ensure occupants of the site are aware of their flood emergency management responsibilities and understanding of evacuation procedures.

Based on the preliminary review of results, the flood risk to occupants would be deemed quite low, as there is opportunity for evacuation (provided an appropriate bridge design) or shelter-in-place if the need arises. Flood Evacuation Management Plan is recommended to be adopted for the site.

The proposed development is not deemed to have any significant social or economic costs to the community, as a consequence of flood impacts associated with the development.

The proposed development works are deemed to comply with the WSC LEP2011, and the provisions set out in the NSW Floodplain Development Manual 2005, and therefore supports the Environmental Impact Statement for approval of the proposed poultry farm.

4.4 STORMWATER MANAGEMENT

A Stormwater Management Plan (SMP) has been prepared by MPN Consulting to support the proposed development as is attached as **Appendix 6**.

The aim of the SMP is to:

- Prevent or minimise adverse social or environmental impacts from stormwater runoff originating from the proposed development.
- Achieve acceptable levels of stormwater runoff quality and quantity.

The SMP covers both the operational phase and the construction phase.

4.4.1 Site Drainage

Roof water and stormwater runoff from each farm will be collected and conveyed in a new internal stormwater open swale and pit and pipe network, prior to discharge to five separate detention basins.

The runoff from the shed roof areas and surrounding pavements will discharge to swales between the sheds which will then be conveyed to the detention basins via a new pipe system under the surrounding road.

A separate stormwater system is proposed for each of the four farms. Roof water and stormwater runoff from each farm will drain to Wallah Creek with the exception of Farm 1 which is situated on top of a ridge. Flows from the eastern half of Farm 1 will drain to Wallah Creek, whilst the western half will drain to the west of the site where it enters Warranderry Creek.

Farm 1 will therefore have two separate detention basins and Farms 2-4 will have one basin each and treated stormwater will discharge from the basins via v-notch weirs into the existing natural overland flow paths as per the existing condition.

The existing overland flow paths will be diverted around the new building locations via open swales and channellised to new culvert systems constructed under the new access roads. The culvert systems will ensure the new roads are passable during the major flood events maintaining access to the new sheds.

A new bridge for the development will be constructed over Wallah Creek with immunity from the major flood events.

4.4.2 Stormwater Quantity

In order to limit the site stormwater discharge, stormwater runoff from each farm will be detained in five separate above ground basins. The basins have been oversized to compensate for the negligible increase in stormwater runoff from the internal roads which will bypass detention.

In order to manage stormwater quantity and provide appropriately sized detention basins for the farms' development, a DRAINs computer model was used to calculate the stormwater runoff quantity for the existing and post-development conditions. The modelling demonstrates that the runoff from each of the farms does not exceed peak runoff flows from the existing site.

4.4.3 Stormwater Quality

In order to reduce overall post-development pollutant loads and concentrations being discharged from the site, treatment solutions have been provided to remove hydrocarbons, suspended solids and nutrients prior to being discharged from site.

Stormwater runoff from the sheds will be treated by grassed swales and the bioretention/detention basins prior to discharge to receiving waters. Stormwater runoff from the internal roads will be treated by a roadside swale proposed along the low side of the road. Full details of this treatment plan can be found in **Appendix 6**.

MUSIC Modelling was undertaken to assess the percentage-based pollutant load reductions at the site outlet against the relevant Water Quality Objectives for the receiving waters. The assessment concludes that the proposed treatment train, as well as management practices to be implemented at each of the farms will achieve the relevant pollutant reduction targets.

4.4.4 Erosion and Sediment Control

Concept Erosion and Sediment Control plans have been prepared by MPN provided as part of this report to illustrate the design intent, with detail design to be completed as part of future works packages. The Erosion and Sediment Control concept plans are included within **Appendix 6**.

Erosion and Sediment Control will be implemented in accordance with the following guidelines and standards:

- Managing Urban Stormwater: Soils & Construction (Landcom, 2004)
- Soil and Landscape Issues in Environmental Impact Assessment (DLWC, 2000)
- Wind Erosion – 2nd Edition (DIPNR, 2003)

As shown on the plans, the proposed detention basins around the sheds will be utilised as sedimentation basins during the construction phase. Additional erosion management measures are documented in the Stormwater Management Plan (**Appendix 6**) as well as the Concept Erosion and Sediment Control plans including:

- 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.

4.5 CULTURAL HERITAGE ASSESSMENT

An Aboriginal Cultural Heritage Assessment Report (ACHAR) has been prepared by OzArk Environment and Heritage and is included as **Appendix 13**.

As the project is a State Significant Development (SSD), if approved, Section 4.41 of the EP&A Act will apply and an AHIP under section 90 of the NPW Act to harm Aboriginal objects is not required. Instead, all management related to Aboriginal cultural heritage within the study area will be governed by the policies within an approved *Aboriginal Cultural Heritage Management Plan* (ACHMP).

As the project is a State Significant Development (SSD), if approved, Section 4.41 of the EP&A Act will apply and an activity approval for works on waterfront land under section 91 of the *Water Management Act 2000* is not required.

4.5.1 Methodology

This ACHAR has been undertaken in accordance with the Secretary's Environmental Assessment Requirements (SEARs), the *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW*, and the *Code of Practice for the Investigation of Aboriginal Objects in New South Wales* (the Code of Practice). The Aboriginal cultural heritage assessment of the project has followed the *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*.

Field survey was undertaken on 26 August 2021 by an OzArk archaeologist and a representative of the Cowra Local Aboriginal Land Council (LALC). The areas that were traversed during the field work are shown in **Figure 24**.

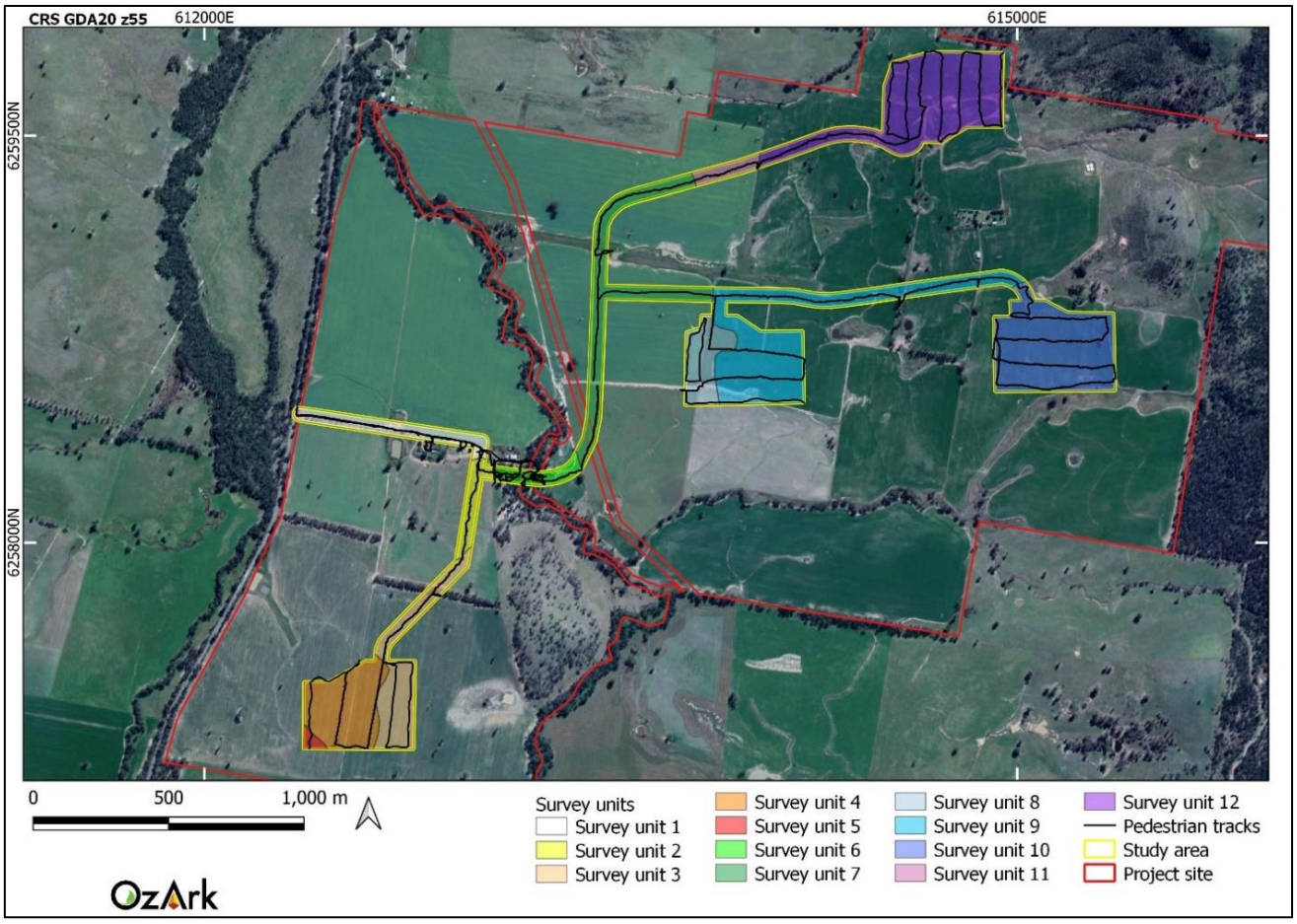


Figure 24: Pedestrian coverage across the survey units (OzArk, 2021)

4.5.2 Assessment Results

During the survey, one Aboriginal cultural heritage site (Wallah Creek OS-1) was recorded. Wallah Creek OS-1 is a low-density artefact scatter (stone flake artefacts, manufactured from aphanitic basalt were recorded) with associated potential archaeological deposit (PAD).

With respect to OS-1, the ACHAR states: *"Wallah Creek-OS1 is representative of artefact sites recorded elsewhere in the region. The site is a low-density scatter with a low complexity of tools and is manufactured from materials which are common in the region. In addition, the site is in a location where disturbances from the area's agricultural land use and/or erosion is prevalent. As the site has been recorded in association with PAD, the research potential is slightly raised, although intact stratified deposits are not expected due to disturbances from ploughing and deep deposits are not expected."*

The remainder of the study area has very low scientific value as it is confirmed to areas away from optimal occupation locations such as along reliable water sources or landforms which provide shelter.

As shown in Figure 25, Wallah Creek OS-1 is located within the impact footprint of the proposed access track and will be partially impacted by the project. As such, the site will require management and mitigation measures to be completed prior to commencement of works.

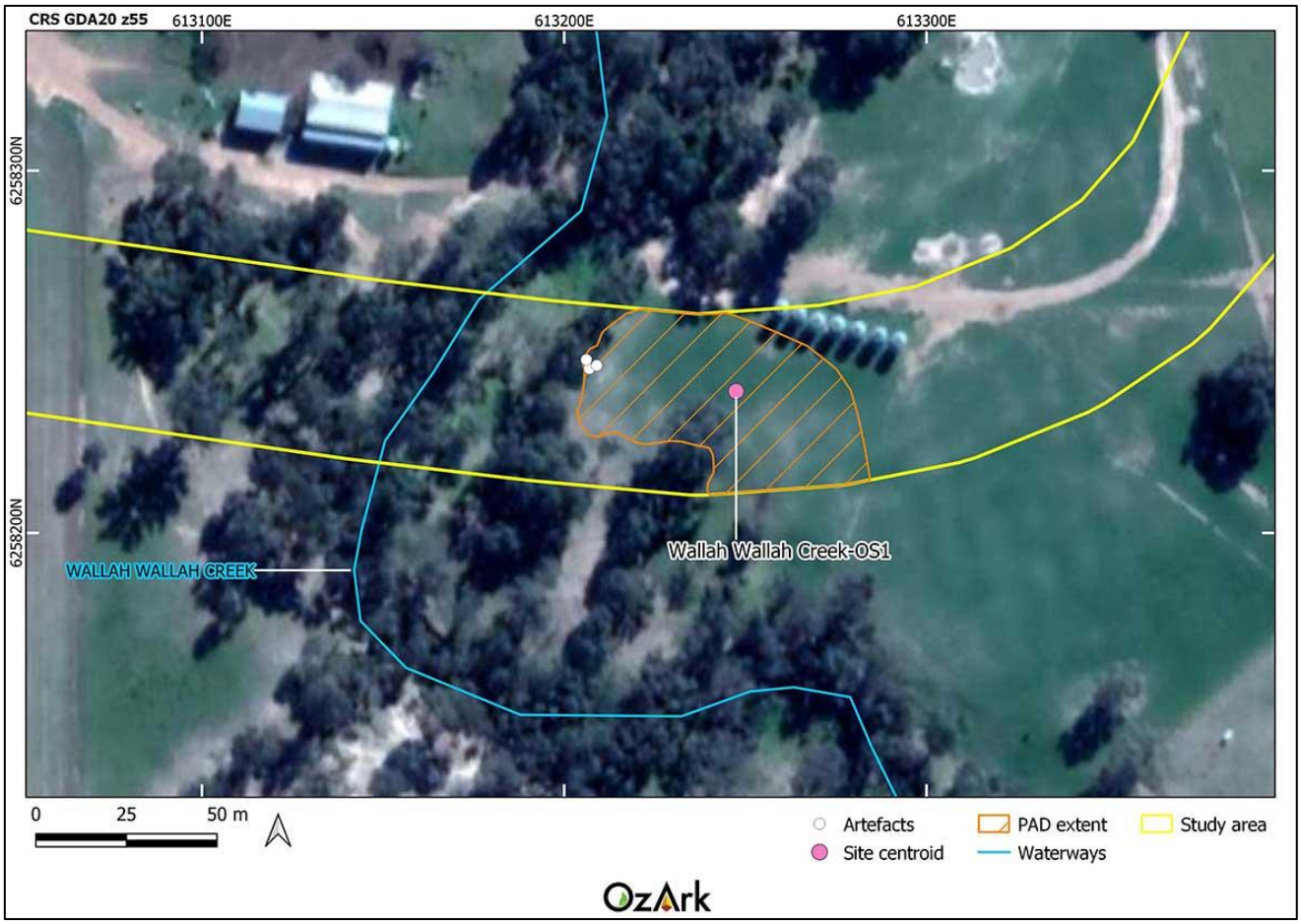


Figure 25: Location of the recorded artefacts (OzArk, 2021)

4.5.3 Recommendations

The ACHAR states: "*…surface collection and excavation are proposed to mitigate the impact from the project and loss of value of the Wallah Creek OS-1. A salvage report of the excavation findings would be produced to contribute to the archaeological record, which would also be available to future generations.*"

The report recommends that archaeological excavation be undertaken post approval and this would be designed to confirm that there are no subsurface archaeological deposits of conservation values are present.

Further to this Aboriginal site that was identified, the ACHAR also provides recommendations in relation to unanticipated finds, should this occur during construction.

Following development consent, the proponent will develop an Aboriginal Cultural Heritage Management Plan which would be agreed by all relevant parties and will include methodology for the archaeological excavation of Wallah Creek OS-1, as well as unanticipated finds process.

4.6 ECOLOGICAL IMPACT ASSESSMENT

In accordance with the SEARs and Section 7.9 of the NSW *Biodiversity Conservation Act 2016* (BC Act), a Biodiversity Development Assessment Report (BDAR) has been prepared for the project by Cumberland Ecology. A copy of the report is included in **Appendix 12**. The BDAR has been undertaken in accordance with the Biodiversity Assessment Method (BAM).

The purpose of the BDAR is to document the findings of an assessment undertaken for the Project in accordance with Stage 1 (Biodiversity Assessment) and Stage 2 (Impact Assessment) of the BAM. The development footprint assumed for the BDAR includes all areas of disturbance with an additional 10m buffer surrounding the development to account for any encroachment of construction activities into adjacent land.

Specifically, the objectives of this BDAR are to:

- Identify the landscape features and site context (native vegetation cover) within the subject land and assessment area.
- Assess native vegetation extent, plant community types (PCTs), threatened ecological communities (TECs) and vegetation integrity (site condition) within the subject land.
- Assess habitat suitability for threatened species that can be predicted by habitat surrogates (ecosystem credits) and for threatened species that cannot be predicted by habitat surrogates (species credit species).
- Identify potential prescribed biodiversity impacts on threatened species.
- Describe measures to avoid and minimise impacts on biodiversity values and prescribed biodiversity impacts during project planning.
- Describe impacts to biodiversity values and prescribed biodiversity impacts and the measures to mitigate and manage such impacts.
- Identify the thresholds for the assessment and offsetting of impacts, including:
    - Impact assessment of potential entities of serious and irreversible impacts (SAII);
    - Impacts for which an offset is required; and
    - Impacts for which no further assessment is required.
- Describe the application of the no net loss standard, including the calculation of the offset requirement.

4.6.1 Methodology

A number of databases and sources were utilised to inform preparation of the BDAR, including:

- Environment, Energy and Science (EES) BioNet Atlas.
- EES Threatened Biodiversity Data Collection (TBDC).
- EES BioNet Vegetation Classification database.
- Commonwealth Department of Agriculture, Water and the Environment (DAWE) Species Profile and Threat Database.
- DAWE Protected Matters Search Tool.
- DAWE Directory of Important Wetlands in Australia.
- This State Vegetation Type Map– Central West Lachlan v1 (OEH 2015).

Vegetation surveys were conducted on 19-21 April 2021 to revise and update the vegetation mapping – these involved random meander searches, soil inspections, and handheld GPS plant community boundary markings. A vegetation integrity assessment was undertaken, with nine BAM plots established within the subject site.

4.6.2 Native Vegetation

The native vegetation extent was determined to be approximately 1.42ha, representing 3.0% of the subject site. It is comprised of remnant woodland, scattered native trees, derived native grassland and planted native trees. The areas of each PCT are summarised in Table 9 below.

The remainder of the subject site is classified as Category 1 pastureland and does not require assessment under the BAM.

Note that the development site footprint comprises the 46.93 ha of land directly impacted by the project and is referred to within this BDAR as the subject land. All temporary/ancillary construction facilities and infrastructure will be contained within the operation footprint. Therefore, for the purposes of this assessment, the subject land comprises both the construction footprint and the operational footprint of the project.

The 'study area' is defined as the area surveyed for this assessment. It is 85.61 ha and is represented by the subject land plus a 50 metre buffer surrounding the farms and a 10 metre buffer either side of the outer edge of the access roads. The purpose of including and surveying the study area was to determine surrounding biodiversity values to inform the project in terms of avoiding and minimising the potential impacts.

Table 9: Plant community types within the study area. (Cumberland Ecology, 2021)

NAME	SUBJECT LAND (HA)	STUDY AREA (HA)
PCT 201 - Fuzzy Box Woodland on alluvial brown loam soils mainly in the NSW South Western Slopes Bioregion	0.21	0.48
PCT 267 - White Box – White Cypress Pine – Western Grey Box shrub/grass/forb woodland in the NSW South Western Slopes Bioregion	1.16	3.06
PCT 276 - Yellow Box grassy tall woodland on alluvium or parna loams and clays on flats in NSW South Western Slopes Bioregion	0.01	0.03
Planted Native Trees	0.04	0.13
Pastureland (Category 1 Land – not assessed)	45.52	81.90
TOTAL	**46.94**	**85.61**

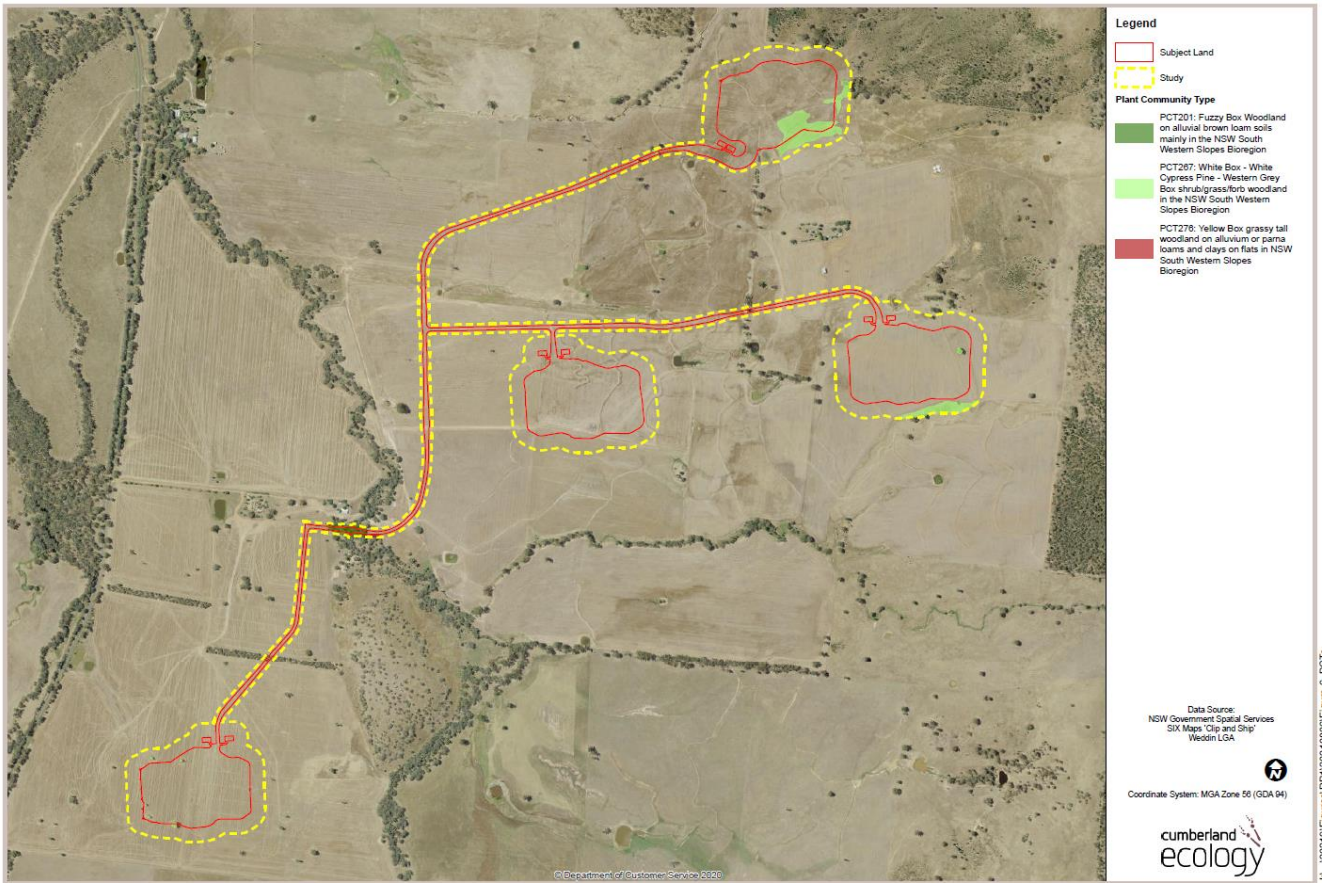


Figure 26: Plant Community Types (Cumberland Ecology, 2021)

All three PCTs conform to TECs listed under the BC Act, while only PCT 276 is considered to conform to a TEC under the EPBC Act.

4.6.3 Threatened Species

The Biodiversity Assessment Method calculator (BAMC) generated a list of threatened species requiring assessment which included 34 ecosystem credit species and 3 species credit species. With consideration of habitat constraints, geographic limitations, vagrancy and quality of microhabitats, all ecosystem species were retained within the assessment. No further assessment was required for the species credit species as the study areas does not contain important habitat or breeding areas.

4.6.4 Avoid and Minimise Impacts

The development footprint within the study area has been specifically located as to minimise impacts to biodiversity values by utilising Category 1 exempt land wherever possible, avoiding areas of TEC Box Gum Woodland and Fuzzy Box Woodland and by maintaining habitat connectivity within the area by locating the access road crossing Wallah Creek over the existing track.

Additional measures to mitigate biodiversity impacts such as weed management, tree protection measures, and clearing protocols will also be adopted.

Non-native vegetation within the development footprint is unlikely to be relied upon by native or threatened species, particularly given the vast areas retained both within the subject site and surrounding properties. Habitat connectivity – particularly that of the riparian corridor around Wallah Creek – is to be retained as the 10m wide access track that will intersect the north/south connectivity is not considered a break in patch size and would not impede species movement. This access track will be constructed as a bridge over the creek and will ensure adequate freeboard for access while minimising impacts to water movement and ecology.

4.6.5 Impact Assessment

4.6.5.1 Direct Impacts

The direct impact resulting from the development is the loss of a total of 1.42ha of native vegetation.

4.6.5.2 Indirect Impacts

Indirect impacts associated with the project include:

- Inadvertent impacts on adjacent habitat or vegetation
- Reduced viability of adjacent habitat due to edge effects
- Reduced viability of adjacent habitat due to noise, dust or light spill
- Transport of weeds and pathogens from the site to adjacent vegetation
- Increased risk of starvation, exposure and loss of shade or shelter
- Loss of breeding habitats
- Trampling of threatened flora species
- Inhibition of nitrogen fixation and increased soil salinity
- Fertiliser drift
- Rubbish dumping
- Wood collection
- Bush rock removal and disturbance
- Increase in predatory species populations
- Increase in pest animal populations
- Increased risk of fire
- Disturbance to specialist breeding and foraging habitat
- Inadvertent impacts to hydrological processes.

These potential indirect impacts are address in detail in the BDAR which concludes that due to the existing modified nature of the vegetation both within and adjacent to the subject land, the indirect impacts of the project are not considered to be significant.

4.6.6 Mitigation Measures

A variety of mitigation measures are proposed to minimise the risk and potential negative impacts of the development on biodiversity have been identified by Cumberland Ecology and will be adopted for the project. These measures are summarised below.

- **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).

4.6.7 Serious and Irreversible Impacts

Two entities have been identified as being affected by Serious and Irreversible Impacts (clearing) including Box Gum Woodland and Fuzzy Box Woodland. For the Box Gum, approximately 1.17ha will be removed, comprised by 0.09ha of woodland and 1.08ha of derived native grassland. For the Fuzzy Box, approximately 0.21ha will be removed, comprised entirely of woodland. A detailed assessment of the potential for this removal of this vegetation to constitute a serious and irreversible impact is provided in the BDAR which demonstrates the removal of the vegetation is not considered serious or irreversible when considering, the size of patches, connectivity, fragmentation and other factors.

4.6.8 Offset Liability

In accordance with the BAM, this project requires offsets due to the clearing of native vegetation. Table below identifies the affected PCTs and the required ecosystem credit requirements. In total,

Table 10: Summary of ecosystem credit liability. (Cumberland Ecology, 2021)

PCT #	PCT Name	TEC	Area (ha)	Biodiversity Risk Weighting	Credits Required
201	Fuzzy Box Woodland on alluvial brown loam soils mainly in the NSW South Western Slopes Bioregion	TEC	0.21	1.5	7
267	White Box – White Cypress Pine – Western Grey Box shrub/grass/forb woodland in the NSW South Western Slopes Bioregion (woodland)	TEC	0.08	2.5	2
267	White Box – White Cypress Pine – Western Grey Box shrub/grass/forb woodland in the NSW South Western Slopes Bioregion (derived native grassland)	TEC	1.08	2.5	14
276	Yellow Box grassy tall woodland on alluvium or parna loams and clays on flats in NSW South Western Slopes Bioregion	TEC	0.01	2.0	1
					24

4.6.9 EPBC Considerations

With respect to the PCT 276 (Yellow Box grassy tall woodland on alluvium or parna loams and clays on flats in NSW South Western Slopes Bioregion), this community conforms to the CEEC Box Gum Woodland under the BC Act. It also likely conforms to the listing under the EPBC Act, as it has a predominately native understorey and is part of a patch that is larger than 0.1 ha. Although the plot data only recorded 10 native understory species present (including one 'important species'), when the listing advice requires 12 (DECCW 2011), the plot in which the data was recorded (BAM plot) is

smaller than the plot utilised when determining listing status under the EPBC Act for Box Gum Woodland. Hence, it is likely that a further two native species may be present, which would make the occurrence of PCT 276 in the study area conform to the CEEC under the EPBC Act.

As a result, a conservative approach is taken, and it is considered this community meets the listing under the EPBC Act; however, the removal of such a small area of the community is not considered significant following a review of the Commonwealth Significant Impact Guidelines, and a Referral to the Commonwealth is therefore not required.

4.7 AIR QUALITY IMPACT ASSESSMENT

4.7.1 Methodology

An Odour and Dust Impact Assessment (ODIA) has been prepared by Astute Environmental Consulting to assess the potential impact of the development in terms of odour and dust. The assessment has been prepared in accordance with the *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (2005)* and is included as **Appendix 9**.

The scope of work for the odour impact assessment included:

- Obtaining information about the proposed sheds;
- Analysing regional weather data to select a representative year;
- Modelling meteorology for the area using TAPM/CALMET;
- Analysing data from the on site weather station;
- Comparing the TAPM/CALMET dataset with onsite weather observations;
- Estimating odour and dust emissions for the poultry breeder/rearer farm in line with industry standard methods;
- Predicting odour dispersion using CALPUFF; and
- Preparing a report.

The odour criteria used in New South Wales are detailed in the Approved Methods. For a complex mixture of odorants (i.e. odour measured as odour units), the criterion is selected based on the population density in an area. This is based on the concept that as population density increases, the number of people who may be sensitive to an odour increases. The impact assessment criteria for varying populations is shown in Figure 27 below.

Population of affected Community	Impact assessment criterion for complex mixtures of odorous air pollutants (ou)
Urban (≥~2000) and/or schools and hospitals	2.0
~500	3.0
~125	4.0
~30	5.0
~10	6.0
Single rural residence (≤~2)	7.0

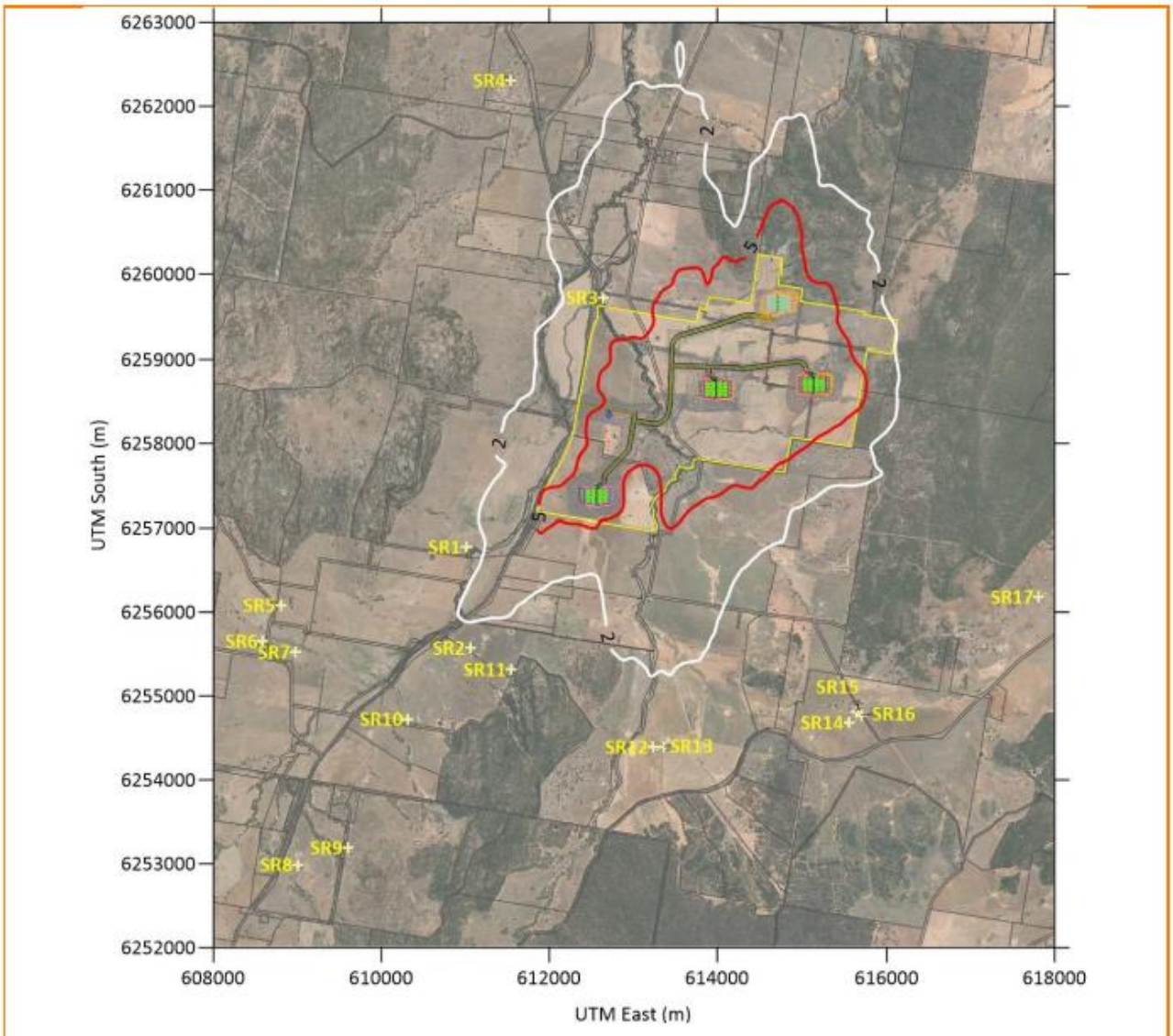
Figure 27: Odour Impact Assessment Criteria

As outlined in the Odour Impact Assessment, application of the standard methodology identifies that a criterion of 7 odour units (ou) would apply. However, to ensure conservatism in the modelling, an odour criterion of 5 ou has been adopted.

The K factor is a scaling factor which is used to reflect the performance of a farm. For the proposed farm, Astute have used a conservative K factor of 2.2, even though a K factor of approximately 1 may be more relevant for breeder farms based on test data collected at various farms over time. Astute also note that breeder farms typically have lower emissions, and less offensive odour than meat chicken farms with the same sized sheds.

4.7.2 Odour Impact Assessment Results

Modelling of the proposed development identified the cumulative site odour impact (odour footprint) at the NSW EPA Impact Assessment Criteria (IAC) of 5ou is shown in Figure 28. The modelling shows clear compliance with the NSW EPA odour IAC of 5ou. The predicted ground level 99th percentile 1 second concentrations are predicted to comply with the odour criterion at all receptors for the proposed farm. The highest predicted concentration is 3.9 ou (K=2.2) at sensitive receptor 3 (SR3).



Species:	Site:	Scenario:	Averaging Period:	Percentile:
Odour	Grenfell	Proposed K=2.2	1 second	99th
Criterion:	**Units:**	**Meteorology:**	**Model:**	**Author:**
5 ou	ou	2017	CALPUFF v 6.42	W. Shillito

Figure 28: Predicted 1 second 99th percentile Odour Concentrations K = 2.2 (Astute Environmental Consulting, 2021)

4.7.3 Dust Impact Assessment Results

Dust impacts from the proposed development have been assessed using the Approved Methods (NSW EPA, 2016) for assessment the impacts from dust generating activities. Particulate emissions from the proposed sheds and other activities were based on data collected at a meat chicken farm in New South Wales as well as theoretical considerations.

The modelling shows that no exceedances of the applicable criteria (24 hour PM10) were predicted to occur at any of the sensitive receptors.

4.7.4 Management and Mitigation Measures

Regardless of the Odour and Dust Assessment 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. These recommendations are documented in Section 5 of this EIS.

4.8 NOISE IMPACT ASSESSMENT

A Noise Impact Assessment report was prepared by Reverb Acoustics in accordance with the NSW Noise Policy for Industry (EPA, 2017) and the *NSW Road Noise Policy* (EPA, 2011). A copy of the Noise Impact Assessment is included as **Appendix 15**.

4.8.1 Methodology

The detailed methodology undertaken by Reverb is provided in by **Appendix 15**. In summary, the methodology utilised the following:

- For road traffic, the EPA approved US Environment Protection Agency's Intermittent Traffic Noise Guidelines;
- For activities and equipment noise on-site, noise levels were sourced from manufacturer's data or Reverb's library of technical data, accumulated from measurements taken at existing poultry farms in Tabbita and Manilla;
- For construction activities, noise and vibration levels produced by plant and machinery to be used on the site have been sourced from manufacturer's data and/or the Reverb library of technical data.

Modelling was performed with RTA Technology Environmental Noise Model computer software and INoise Environmental Modelling Package, which accepts information on ground type and topography, source and receiver locations, weather details and source sound power spectra. Ground contours were obtained from topographical maps of the site and surrounds.

4.8.2 Existing Acoustic Environment

The nearest receivers range from 1.5km to 3.9km, as shown below in **Figure 29**.

Long-term background noise monitoring was conducted in accordance with the NSW EPA's Noise Policy for Industry (NPfl) and AS1055-1997 "Acoustics – Description and Measurement of Environmental Noise, Part 1 General Procedures", with the results displayed in Error! Reference source not found. below. The North Logger was placed approximately 150m s outh of Residence 1 (R1) and the South Logger was placed opposite Residence 2 (R2).

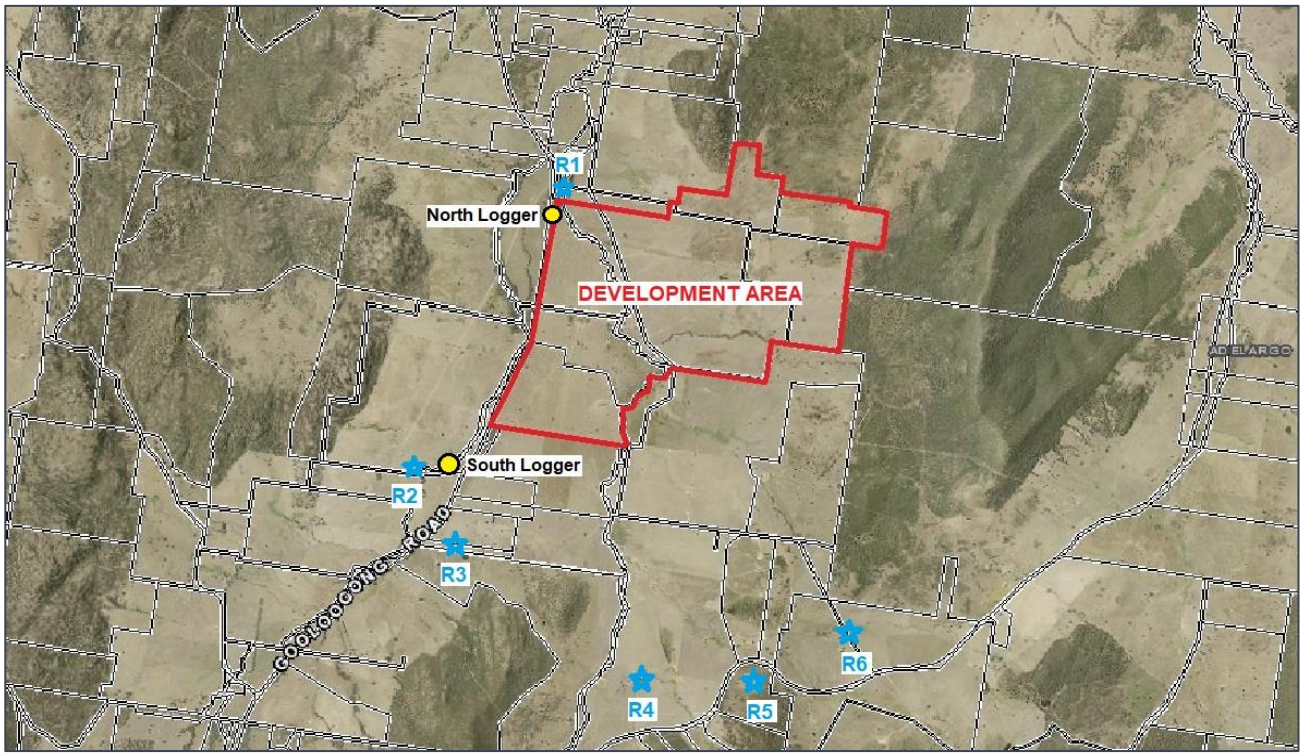


Figure 29: Locations of nearest receivers and noise loggers. (Reverb Acoustic, 2021)

Long-term monitoring was conducted along Gooloogong Road in April 2021. The first logger was placed approximately 150 metres south of Residence R1 (North Logger) and the second opposite Residence R2 (South Logger). Table 1 shows a summary of results, with high wind/rain periods excluded prior to analysis, including the Rating Background Level's (RBL's) which were calculated from Assessment Background Levels (ABL's), for the day, evening and night periods, according to the procedures described in the NSW Environment Protection Authority's (EPA's) Noise Policy for Industry (NPfI) and as detailed in Australian Standard AS1055-1997, "Acoustics - Description and Measurement of Environmental Noise, Part 1 General Procedures".

Table 1: Summary of Noise Logger Results – North Logger, dB(A)

Time Period	Background L90			Ambient Leq		
	Day 7am-6pm	Evening 6pm-10pm	Night 10pm-7am	Day 7am-6pm	Evening 6pm-10pm	Night 10pm-7am
19-20 Apr	-	12.3	6.7	-	57.0	48.8
20-21 Apr	28.4	24.2	16.9	60.6	59.4	49.8
21-22 Apr	25.1	-	-	60.5	-	-
RBL	**26.7**	**18.3**	**11.8**	--	--	--
LAeq	--	--	--	**60.6**	**58.4**	**49.3**

Table 1: Summary of Noise Logger Results – South Logger, dB(A)

Time Period	Background L90			Ambient Leq		
	Day 7am-6pm	Evening 6pm-10pm	Night 10pm-7am	Day 7am-6pm	Evening 6pm-10pm	Night 10pm-7am
19-20 Apr		20.4	18.6		55.2	47.9
20-21 Apr	29.4	26.7	21.0	60.0	58.4	50.0
21-22 Apr	26.9			59.9		
RBL	**28.2**	**23.5**	**19.8**	--	--	--
LAeq	--	--	--	**59.9**	**57.1**	**49.1**

Figure 30: Excerpt from Reverb Noise Impact Assessment (Reverb Acoustics, 2021)

The background noise levels observed were below the minimum assumed levels specified in the NSW EPA's NPfl – therefore, for the purposes of assessment, its assumed levels were adopted instead, i.e. 35dB(A),L90 for day (7am-6pm) and 30dB(A) for the evening and night (6pm -10pm and 10pm-7am).

4.8.3 Noise Criteria

Table 11 identifies the relevant policies and adopted criteria for the potential noise sources associated with the development of the poultry farm.

Table 11: Relevant Noise Criteria and Sources

POTENTIAL ACOUSTIC IMPACT	SOURCE OF CRITERIA
Road traffic	EPA's NSW Road Noise Policy (RNP)
Site activities / mechanical plant & equipment	EPA's Noise Policy for Industry (NPfI)
Maximum Noise Level Event Assessment – Sleep Arousal	EPA's NPfI Section 2.5
Modifying Factors – Tonality	EPA's NPfI Fact Sheet C
Construction Noise	EPA's Interim NSW Construction Noise Guideline (ICNG)

4.8.4 Assessment Results

4.8.4.1 Road Traffic Noise

Results from the acoustic modelling show that noise levels from cars and trucks travelling to and from the proposed poultry farms along Gooloogong Road are predicted to be compliant with the RNP day and night criteria for all residences.

4.8.4.2 Site Operation Noise

Reverb Acoustics completed compliance monitoring at four (4) existing poultry farms at Allwood near Tabbita, NSW. Near-field measurements were conducted for operation of tunnel ventilation fans, litter collection (bobcat), feedlines, feed pumps and augers, bird catching, etc. All measurements were taken during appropriate day and night periods during worst-case periods, i.e. during shed cleanout and restock. Additional measurements of egg collection, roosters crowing, truck movements and loading, etc, were measured at an existing poultry layer/rearing farm at Warrah Ridge, NSW.

For site operation noise, the sound power level of plant and equipment operating at the poultry complex during the day, evening, and night-time periods were calculated, taking into account heavy trucks, bobcats/forklifts, refrigeration plant, ventilation fans, generators, feed pump & auger, bird catching, loading/unloading, egg collection, roosters, and workshop activities. While there are other plant and noise sources – such as split system air conditions, small compressors, pumps, and so on – the sum of a number of these operating simultaneously would only be as high as 80dB. This sum is over 10dB below other significant sources at the site, as such they would not raise the sound level at nearby receivers.

Table 12 below shows results of the received noise levels for the proposed operations. They show that site operations are predicted to be compliant with the criteria at all nearby residential receivers during the day and night for neutral and adverse weather conditions.

A minor 2dB(A) exceedance is predicted at residence R1 during adverse weather conditions, however this assumes all ventilation fans, truck movements and the emergency generator are operating simultaneously – in reality, this is exceedingly unlikely, implying compliance.

Table 12: Received noise levels for proposed operations. (Reverb Acoustic, 2021)

	Received Noise Levels, dB(A),Leq				Received Noise Levels, dB(A),L1			
Receiver	**Neutral Conditions (DAY)**	**3m/sec Wind Source to Rec (DAY)**	**Neutral Conditions (NIGHT)**	**3°C/100m Inversion (NIGHT)**	**Neutral Conditions (DAY)**	**3m/sec Wind Source to Rec (DAY)**	**Neutral Conditions (NIGHT)**	**3°C/100m Inversion (NIGHT)**
R1 – Res. (W)	34	36	35	**37**	N/A	N/A	32	34
R2 – Res. (SW)	28	29	28	30	N/A	N/A	<30	<30

	Received Noise Levels, dB(A),Leq				Received Noise Levels, dB(A),L1			
Receiver	**Neutral Conditions (DAY)**	**3m/sec Wind Source to Rec (DAY)**	**Neutral Conditions (NIGHT)**	**3°C/100m Inversion (NIGHT)**	**Neutral Conditions (DAY)**	**3m/sec Wind Source to Rec (DAY)**	**Neutral Conditions (NIGHT)**	**3°C/100m Inversion (NIGHT)**
R3 – Res. (SW)	25	26	25	28	N/A	N/A	<30	<30
R4 – Res. (S)	19	20	20	24	N/A	N/A	<30	<30
R5 – Res. (S)	17	19	19	24	N/A	N/A	<30	<30
R6 – Res. (S)	15	17	16	21	N/A	N/A	<30	<30
	Criteria: Day=40dB(A),Leq, Evening=35dB(A),Leq, Night=35dB(A),Leq.				*Criteria: Night=52dB(A),Lmax.*			

4.8.4.3 Tonality Assessment

Noise emissions at nearest receivers are not expected to contain any significant tonal components, in accordance with the requirements of Fact Sheet C of the NPfI. No further adjustments or penalties are therefore required for noise predictions at residential receivers.

On site measurements at the existing Warrah Ridge poultry rearing/laying farm revealed that the C – A noise level difference in dB during the day and night was ≤5.2dB confirming adjustments for low frequency noise impacts is not required, in accordance with the requirements of Fact Sheet C of the NPfI. Furthermore, the dominant audible noise source from the farms at night is the ventilation fans, which can be considered quasi-steady state noise sources with no perceivable modulation of intermittent characteristics.

Full details of the tonality assessment can be found in **Appendix 15**.

4.8.4.4 Construction Noise

Noise levels for a variety of construction activities were modelled, including mobile crane, hammering, angle grinder, air wrench (silenced), compactor, road truck, grader, backhoe, air compressor, concrete agitator, concrete pump, pile boring machine, excavator, and circular saw.

The following worse case scenarios are possible during each phase of construction:

Stage	Item	Lw dB(A)
Stage 1: Initial Earthworks:	Road Truck	104
	Grader	102
	Backhoe	103
	Pile Boring Machine	113
	Excavator	104
	COMBINED	**115**
Stage 2: Building Foundations:	Compactor	111
	Concrete Agitator	112
	Concrete Pump	110
	COMBINED	**116**
Stage 3: Building Construction:	Mobile Crane	102
	Hammering	98
	Angle Grinder	106
	Air Wrench	98
	Circular Saw	108
	COMBINED	**111**

With the nearest residence being 1.5km away, it is expected that the majority of individual construction activities would comply with the criteria. However, the cumulative noise impact from several of these activities occurring at once has the

potential to exceed the criteria, particularly pile boring and mobile plant/equipment associated with major concrete pours.

It should be noted that these calculations are based on plant items operating in exposed locations and at full power, with no allowances made for intervening topography or shielding provided by intervening structures.

The ICNG recommends that as a first course of action, consideration is given as to whether there are feasible alternatives to the exceeding activity. Should no alternatives be feasible, the ICNG further recommends that the proponent communicates with the impacted residents by clearly explaining the duration and noise levels of the works, and any respite periods that will be provided.

4.8.5 Recommendations

Regardless of the acoustic assessment demonstrating compliance with the applicable criteria, a series of recommendations have been made by Reverb Acoustics to further minimise the risk of unacceptable noise levels during the construction and operational phases of the project. These recommendations are documented in Section 5 of this EIS.

4.9 TRAFFIC IMPACT ASSESSMENT

PSA Consulting has undertaken a Traffic Impact Assessment (TIA) for the proposed development, attached in **Appendix 10**, which assesses the potential impacts of the expected traffic generation on roads.

4.9.1 Existing Environment – Traffic

Historic traffic counts were obtained from Weddin Shire Council for Gooloogong Road, roughly 8km from the site access. While this is some distance from the site, due to the limited entry and exit points on the road between the count and proposed development, it is reasonable to assume that a similar volume of traffic will also be travelling through the Gooloogong Road / site access intersection.

In 2019, the bidirectional traffic Annual Average Daily Traffic (AADT) was 410 vehicles, with approximately 61 (15%) of these being heavy vehicles. It is assumed there is an equal split between northbound and southbound directions, meaning 205 vehicles per direction. The counts were not captured by time, so an assumption of 10% of traffic would travel during the AM and PM peaks.

Therefore, the bidirectional peak hour background traffic for 2019 is assumed to be 8 heavy vehicles and 18 light vehicles.

4.9.2 Vehicle Access

Vehicles will access the site via an existing entry point on Gooloogong Road. The road is currently an accepted route for B-double vehicles as per the Transport for NSW *Combined Higher Mass Limits (HML) and Restricted Access Vehicle (RAV) Map.*

Increasingly, transportation of the agricultural products is being undertaken by A-Doubles and as such, this has been adopted as the largest design vehicle for the site. However, it is noted that Gooloogong Road is not an approved route for A-Double vehicles and should the use be proposed, a permit will need to be acquired from the National Heavy Vehicle Regulator (NHVR) in order for the necessary vehicles to access the site.

4.9.3 Proposed Development Traffic Generation

Baiada Properties provided the anticipated total traffic generation for the development, shown below in Table 13.

Table 13: Daily Traffic Generation (Source: Baiada Properties & PSA Consulting)

VEHICLE TYPE	VEHICLES ENTERING DEVELOPMENT	VEHICLES EXITING DEVELOPMENT	TOTAL VEHICLE TRIPS
Light Vehicles	21	21	42
Heavy Vehicles	7	7	14
TOTAL	**28**	**28**	**56**

A conservative estimate of the traffic entering and exiting the development during the identified peak hour is shown below. It is assumed that all Light Vehicles will enter and exit the development site during the AM and PM Peak Hours respectively.

Table 14: AM and PM Peak Hour Traffic Generation (Source: Baiada Properties & PSA Consulting)

VEHICLE TYPE	AM PEAK		PM PEAK	
	VEHICLES ENTERING DEVELOPMENT	VEHICLES EXITING DEVELOPMENT	VEHICLES ENTERING DEVELOPMENT	VEHICLES EXITING DEVELOPMENT
Light Vehicles	21	0	0	21
Heavy Vehicles	3	3	3	3
TOTAL	**24**	**3**	**3**	**24**

The above estimates assume the following, which are considered to be conservative:

- All light vehicles will entering the development site during the AM Peak, and will leave the site during the PM Peak.
- Based on the information provided by Baiada Properties, 20% of Heavy Vehicles will enter/exit the site to/from the north, and 80% will enter/exit the site to/from the south.
- For Light Vehicles, 25% will enter from/exit to the north, and 75% will enter from/exit to the south.
- A background traffic growth rate of 3% per year will be applied to for the forecasted background traffic.

4.9.4 Future Traffic Conditions and Impact of Development

Using the above assumptions and calculations, **Figure 31** and **Figure 32** below detail the Gooloogong Rd intersection traffic volumes for year of development opening and the 10 year design horizon.

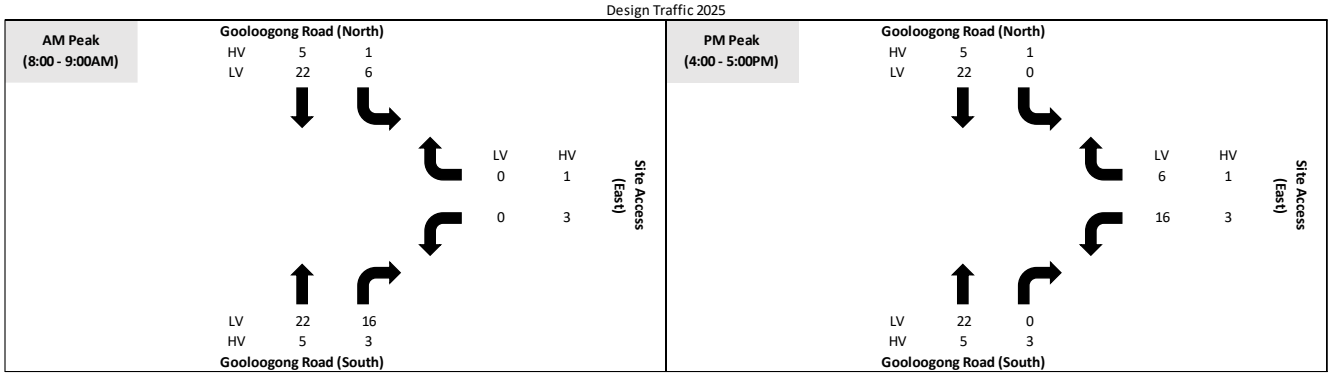


Figure 31: 2025 Year of Opening Design Traffic (Source: PSA Consulting)

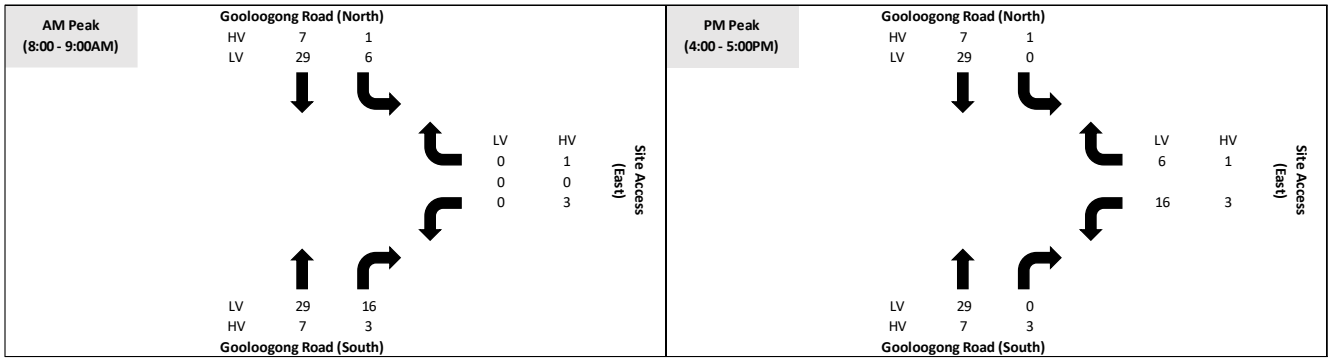


Figure 32: 2035 10-Year Design Horizon Traffic (Source: PSA Consulting)

Austroads *Guide to Traffic Management Part 3: Traffic Study and Analysis Methods (2009)* lists the intersection capacity – uninterrupted flow conditions for a range of traffic volumes for unsignalised intersections. This table is shown in Figure 33.

Figure 33: Intersection Capacity - Uninterrupted Flow Conditions

Major Road Types[1]	Major Road Flow (vph)[2]	Minor Road Flow (vph)[3]
Two-Lane	400	250
	500	200
	650	100
Four-Lane	1000	100
	1500	50
	2000	25

Notes
1. Major road is through road i.e. has priority
2. Major road design volumes include through and turning movements
3. Minor road design volumes include through and turning volumes

As the year of opening and 10-year design horizon traffic volumes are less than those in the table, it is deemed unnecessary to carry out further intersection analysis.

With the predicted traffic volumes, in line with the Austroads Guide to Road Design, it is recommended Basic Right and Basic Left turn treatments be applied to the intersection, as well as sealing the shoulder widening.

4.9.5 Sight Distance and On Site Manoeuvring

As per Austroads *Guide to Road Design Chapter 4A*, a safe intersection sight distance (SISD) for a 100km/h design speed road is 211m. Both north and south sight distances easily exceed this SISD. As such, the intersection is deemed to have no sight distance related issues.

Swept path analysis was conducted for the site access as well as manoeuvring to all 4 sheds within the farm using AutoCAD and Autoturn modelling software. A 26m A-Double vehicle template was used for the analysis – it was found that the A-Double could manoeuvre throughout the site, and was able to both enter and exit the site without leaving the existing driveway.

4.10 ECONOMIC IMPACT ASSESSMENT

The development will have a positive economic impact in terms of significant construction works and ongoing employment opportunities for local residents.

The subject site is located within the Grenfell Statistical Area Level 2 (SA2) which includes the town of Grenfell and the surrounding rural area. The 2016 census confirms that the population of this SA2 is 3,652 persons (50/50 split between male and female). Of these 3,038 persons were aged over 15 years. 885 persons were employed full time and 462 were employed part time. In addition to this, a further 92 were employed away from work and 79 were unemployed looking for work. Of those people over the age of 15 years, 1,511 were considered to be in the labour force and 1,245 were not in the labour force.

Once operational , the project will create 50 full time equivalent (FTE) positions. In addition to the direct employment, the additional farm will create additional opportunities for numerous contractors who support poultry farming including:

- Transport Contractors – transporting eggs, clean bedding material, poultry feed, live birds, gas, manure and litter;
- Live Bird Collection Crews;
- Shed cleaning and set up crews; and
- Local maintenance contractors including electricians and plumbers, etc.

The Capital Investment Value (CIV) of the project has been calculated in accordance with the *State Environmental Planning Policy Amendment (Capital Investment Value) 2010* by Wilde and Woollard and is included as **Appendix 7**). As shown in the CIV Report, the project is estimated to be **$64,124,200** a majority of which is associated with construction of the proposed farm.

In this regard, it is estimated that the project will create 60 construction jobs to deliver the project over a 26 month period. Indirect opportunities during construction will also be created for local tradespersons to assist with the build including electricians, plumbers, earthmovers and the like.

The project is anticipated to have a positive impact on the employment prospects for local residents. There is expected to be sufficient potential employees in the local area to fill the new jobs associated with the project.

4.11 SOCIAL IMPACT ASSESSMENT

Each of the technical assessments included in this EIS has confirmed that the development can be constructed and operated in such a manner that will have limited impact on the surrounding properties. As such, it can be concluded that the proposed development is unlikely to have significant, negative social impacts provided the proposed mitigation and management measures are implemented, however, it can be determined that the project will generate significant, positive impacts, particular in relation to economic impacts.

4.12 VISUAL IMPACTS

The subject site is located within a rural area with agricultural and animal husbandry operations. The farms will take similar form to other agricultural pursuits in the area, with the development including farm sheds being 4.5m in height, grain silos (which would be similar to other farms in the local area).

During the consultation with landowners, the visual impacts of the proposed development was raised by one of the nearby landholders. As a result of this, Baiada offered to install a pole at the location of the nearest shed. The pole is to be at a height of the tallest structure (silos of 7.6m). As a result of this feedback, the applicant is proposing the installation of vegetated buffers along each of the farms between the site and the nearest receptors. The proposed landscape buffer is shown on the plans in **Appendix 4**. **Figure 34** shows a view of the farm and the type of landscaping buffer that is proposed.

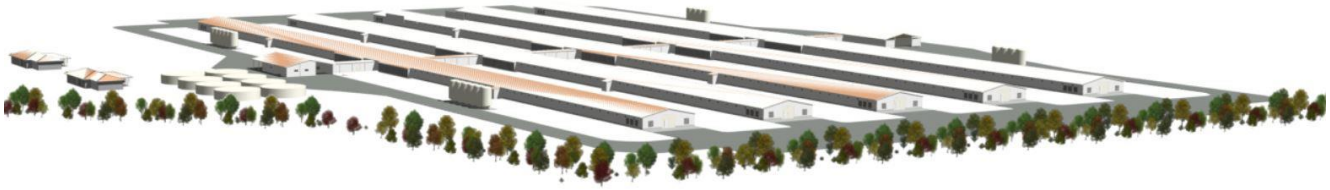


Figure 34: Impression of the farm layout (Baiada, 2021)

The visual impact of the proposed farms will be most prominent from Gooloogong Road, which is not a pedestrianised environment and the traffic using this road travels at 100km/hr. View of the facility will be broken up by the proposed landscaping treatments, including buffer vegetation along the site boundary (refer to **Figure 35**). As such, the proposed building is not expected to have an unacceptable impact in terms of visual impacts.

Figure 35: View of the farm looking south from Gooloogong Road (Baiada, 2021)

4.13 WASTE MANAGEMENT

The *NSW Waste Avoidance and Resource Recovery Strategy 2014–21* outlines the State's long term commitments and strategies to encourage resource recovery and prevent unnecessary wastes from being generated. The strategy includes 6 central strategy areas including:

- Avoid and reduce waste generation;

- Increase recycling;
- Divert more waste from landfill;
- Manage problem wastes better;
- Reduce litter; and
- Reduce illegal dumping.

Waste management is critical to the operation of an efficient poultry farm. As per the Baiada standard operating procedures, measures will be adopted to ensure that all waste generated from activities on the site are reuse or recycled (where practical). Where this is not possible, waste will be managed and disposed of in a manner that will not cause environmental harm. Waste management actions are detailed in the Waste Management Plan included as **Appendix 11** and are summarised below.

4.13.1 Solid and Packaging Waste

The farm is anticipated to create the following types of solid waste:

- Litter;
- Site bird mortalities;
- Used chemical containers;
- Aluminium drink cans and glass bottles;
- Plastic drinkers/feeders;
- Toner cartridges;
- Light globes (fluorescent tube and energy saving globes;
- Obsolete machinery;
- Waste oil; and
- Egg waste.

As noted above, these waste streams will be recycled, where possible. If this is not possible, these will be removed to a licenced waste facility.

4.13.2 Shed Litter Material

All shed litter is removed during cleanout of the sheds and taken from site in a timely manner and not stored on site. The waste is sent for beneficial re-use by a contractor and loaded directly from the sheds into a truck. This procedure to mitigate environmental risk is controlled in the following manner:

- Generation of dust – monitored by on site staff during clean out with appropriate wetting down action taken if required;
- Generation of odour - monitored by on site staff during clean out with appropriate action taken if required;
- Trucks removing the litter waste must cover the load prior to leaving the farm.

It is evident that this method of management is applied successfully as no complaints have ever been recorded relating to this type of activity.

Dockets for waste are supplied to the farm stating location the litter waste is being delivered to with approximate m^3. A check is made of trucks leaving site to ensure the load is adequately covered and is also checked in relation to CoR requirements if it is a heavy vehicle. The average volumes of this material is approximately 400 litres per week.

4.13.3 Moralities

The waste management for the farm will be covered by a site based Waste Management Plan. Manure and floor litter is removed from the sheds at the end of each cycle and taken off site in covered trucks to be used as a soil amendment material on farms in the region. A small number of mortalities will be collected and stored in freezers on-site for collection on a regular basis. These mortalities will be taken to the company rendering plant or other licenced facility for disposal.

All other solid wastes produced by operations on the site will continue to be stored in impermeable and covered waste containers and regularly removed from site to an approved waste disposal facility or taken for recycling where appropriate.

4.13.4 Mass Mortalities

In the unlikely event of a notifiable disease outbreak on the any of the farms, the Department of Primary Industry (DPI) will be contacted as soon as the outbreak is suspected. In most instances, the DPI will assume control of the site and order appropriate management actions to be undertaken.

If disease is suspected, immediate measures will be implemented to lock down and isolate the infected farm(s) and strict quarantine procedures to prevent the spread of the disease off the site will be implemented.

If disease is confirmed, slaughter and disposal of birds will undertake in accordance with the instruction of the DPI. It is expected that bird carcasses will be collected in sealed trucks, and taken to a rendering plant, a licensed composting facility, or licensed disposal facility.

4.13.5 Waste Water

As noted previously, sewerage will be managed through a series of on-site environmental septic waste systems. Water will be used to clean out the sheds at the end of each cycle. This will be minimal and will be managed through the stormwater management infrastructure on-site.

4.14 CHEMICAL USE AND STORAGE

4.14.1 Chemical Storage

Chemical handling and storage procedures will be undertaken in accordance with the applicable Safety Data Sheets (SDS), good manufacturing practice and all relevant Australian Standards. Chemical handing, use and storage procedures will also be documented in a comprehensive Environment Management Plan which will be prepared for the site. The chemicals outlined in **Table 15** will be stored on the site.

Table 15: Chemical register (Baiada, 2021)

Product Name	Location of Chemical	Quantity Kept	Packaging Group Number (PG 1, 2 or 3)	Dangerous Goods Class (if applicable)
Agriphor	Chemical Store	2 X 25L	-	-
Aqriquat	Chemical Store & Front gate	2 x 25L	-	-
Brigand Rodenticide Block	Chemical Store	2 x 8kg	-	-
Bromakil Super Rat Drink	Chemical Store	1 x 5L	-	-
Blumajic Laundry Powder	Laundry Room	2 x 10kg	-	-
Cleera - Bathroom cleaner	Amenities	4x1L	-	-
Cleera – Toilet bowl and urinal cleaner	Amenities	5x1L	-	-
Cleera Floor Cleaner	Amenities	5x 1L	-	-
Circacid S	Chemical Store	2 x 20L	-	-
Diesel	Chemical Store	5 x 20L	III	9
Fresha Perfumed Deodorant Blocks	Rice hull shed	6 x 15kg	-	-
Foam Clean S	Chemical Store	10 x 20L	-	-
Fulaseal Foam	Chemical Store	1 box	-	-
Glade Country Garden	Amenities	3 x 400g	-	-
Glyphosate	Chemical Store	1 x 20L	-	-

Product Name	Location of Chemical	Quantity Kept	Packaging Group Number (PG 1, 2 or 3)	Dangerous Goods Class (if applicable)
Glutachem/Glutaplus	Chemical Store	10 x 20L		
Hyperox	Chemical Store	1 x 20L	II	5.1
Inox mx3 – FG aerosol	Chemical Store	6 x 300g	II	2.1
Lavender Shower Gel/ Body Wash	Chemical Store	6 x 25L	-	-
LP Gas	External Tanks	8 x 7000L	-	2.1
Polyphen	Chemical Store	2 x 25L	-	-
Prolong	Chemical Store	10 x 100g	III	9
Quatrakill	Chemical Store	2 x 20L	-	-
Quicksan 75	Chemical Store	2 x 20L	-	-
Selontra Soft Bait	Chemical Store	6 x 5 kg	-	-
Sanimist	Chemical Store	2 x 5lts	-	-
Strike Force	Chemical Store	2	-	-
Total Kleen	Chemical Store	20 x20L	-	-
Unleaded Petrol	Ricehull Shed	2 x 20L	II	3
Silastic 747 Sealant	Chemical Store	2 x 450gm	-	-
Raid Insecticide	Chemical Store	6 cans	-	-
Lemon Dishwashing	Amenities	6	-	-
ViralFX	Amenities	4 x 10kg	-	-
Virogard	Chemical Store	4 x 20L	-	-
Ditrac	Chemical Store	2 x 4kg	-	-
Pipegrip	Chemical Store	1 x 200g	-	-

4.14.2 SEPP 33 Screening

In accordance with the requirements of *State Environmental Planning Policy 33* (SEPP33), a screening assessment of the Dangerous Goods (DGs) to be stored on site has been undertaken by Lote Consulting and is included as **Appendix 16**. The maximum quantities of DGs on the site are documented in **Table 16**.

Table 16: Proposed quantities of Dangerous Goods stored and handled (Lote Consulting, 2021)

CLASS	PG	DESCRIPTION	QUANTITY
2.1	N/A	LPG Tank	60,000L
2.1	N/A	LPG (aerosols)	1.8kg
3	II	Unleaded Petrol	40L
5.1	II	Hyperox	40L
9	III	Prolong	1 kg
Combustible liquid	III	Diesel	100L

This screening assessment found that the bulk storage of LPG (a Class 2.1 flammable gas) would exceed the storage thresholds listed in the SEPP and as such, the site would be regarded as being potentially hazardous. Accordingly, a Preliminary Hazard Assessment (PHA) was required for the project. Vehicle movements as a result of DG storage was also assessed and the thresholds for these vehicular movements was not exceeded.

4.14.3 Preliminary Hazard Assessment

A PHA was required for the project by Lote Consulting and is included as **Appendix 17.**

As part of the PHA, the potential hazards associated with the operations or storage of materials have been identified. Based on the identified hazards, scenarios were postulated which may result in an incident with potential offsite impacts, which were then carried forward for consequence analysis. The consequence analysis undertaken by Lote Consulting shows that no scenarios had the potential to impact offsite and as such, frequency analysis was not required to be conducted as the probability of a fatality at the site boundary was already minimised to within the acceptable risk criteria.

The assessment concludes that the risk at the site boundary do not exceed the acceptable risk criteria. Hence the proposed development would only be classified as potentially hazardous and would be permitted within the current land zoning for the site.

4.15 BUSHFIRE MANAGEMENT

A Bushfire Fire Hazard Assessment and Management Plan (Bushfire Report) has been prepared by Meridian Urban and is included as **Appendix 18**.

The report identifies that a very small portion of the site is mapped as Bushfire Prone Land in the non-EPI mapping (see **Figure 36**). The mapping is largely reflective of the site's historic agricultural use and the presence grass and cropping land. The Wallah Creek corridor is less than 50m in width and therefore not mapped as a hazard source.

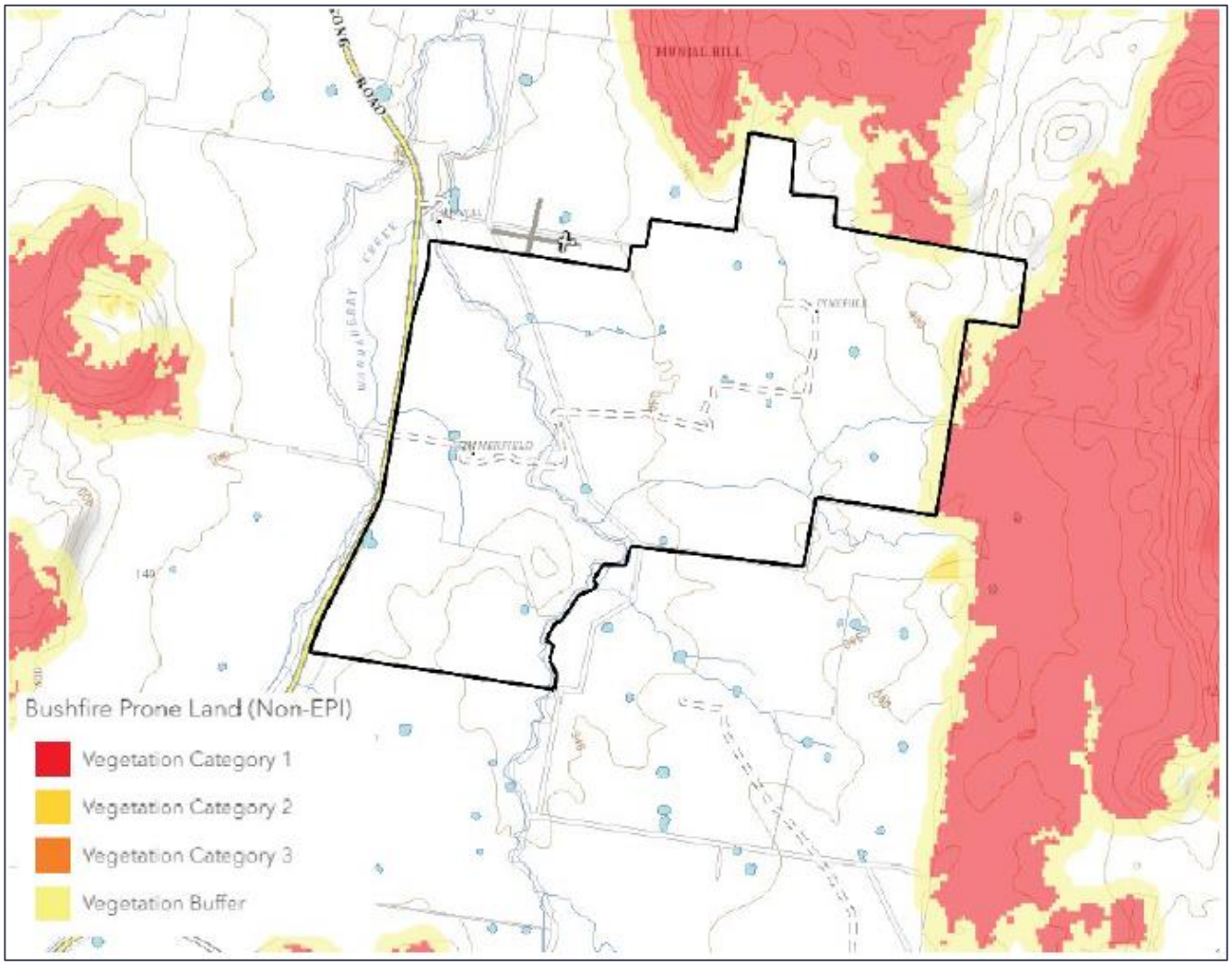


Figure 36: Bush Fire Prone Land Map (Non-EPI) (DPIE, 2021)

The bush fire assessment considers the bush fire risk to the proposed manager residences to be constructed on each farm. These dwelling are classified as rural worker's dwelling pursuant to section 8.2 'Other residential development' of the *Planning for Bush Fire Protection (PBP) 2019* (PBP). Bush fire protection measures specified by PBP for new rural workers dwellings include Asset Protection Zones, Bush Fire Attack Level (BAL) construction, installation of utilities that include water supply for fire-fighting, landscaping provisions and access requirements.

The poultry farm operation is classified as 'other development' under the PBP and there are no specific performance requirements for this class of buildings.

4.15.1 Methodology

A range of sources has been utilised to perform a desktop analysis of the site to complement available site data including:

- local bush fire hazard mapping.
- proposal plans and supporting documentation.
- aerial imagery.
- Mid Lachlan Valley Bush Fire Risk Management Plan.
- PBP 2019; and
- AS3959-2009 – Construction of Buildings in Bushfire Prone Areas.

The assessment takes into account various aspects of bushfire risk including fuel loads on the site and adjoining la, prevailing breezes and the slope of land. As shown in **Figure 37** the proposed farms are surrounded by grasslands and

cropping with some elevated woodlands to the east. In terms of slope site is broadly characterised as comprising vast, flat valley plains which transition to slightly undulating topography to the east and west as part of the Warraderry Range.

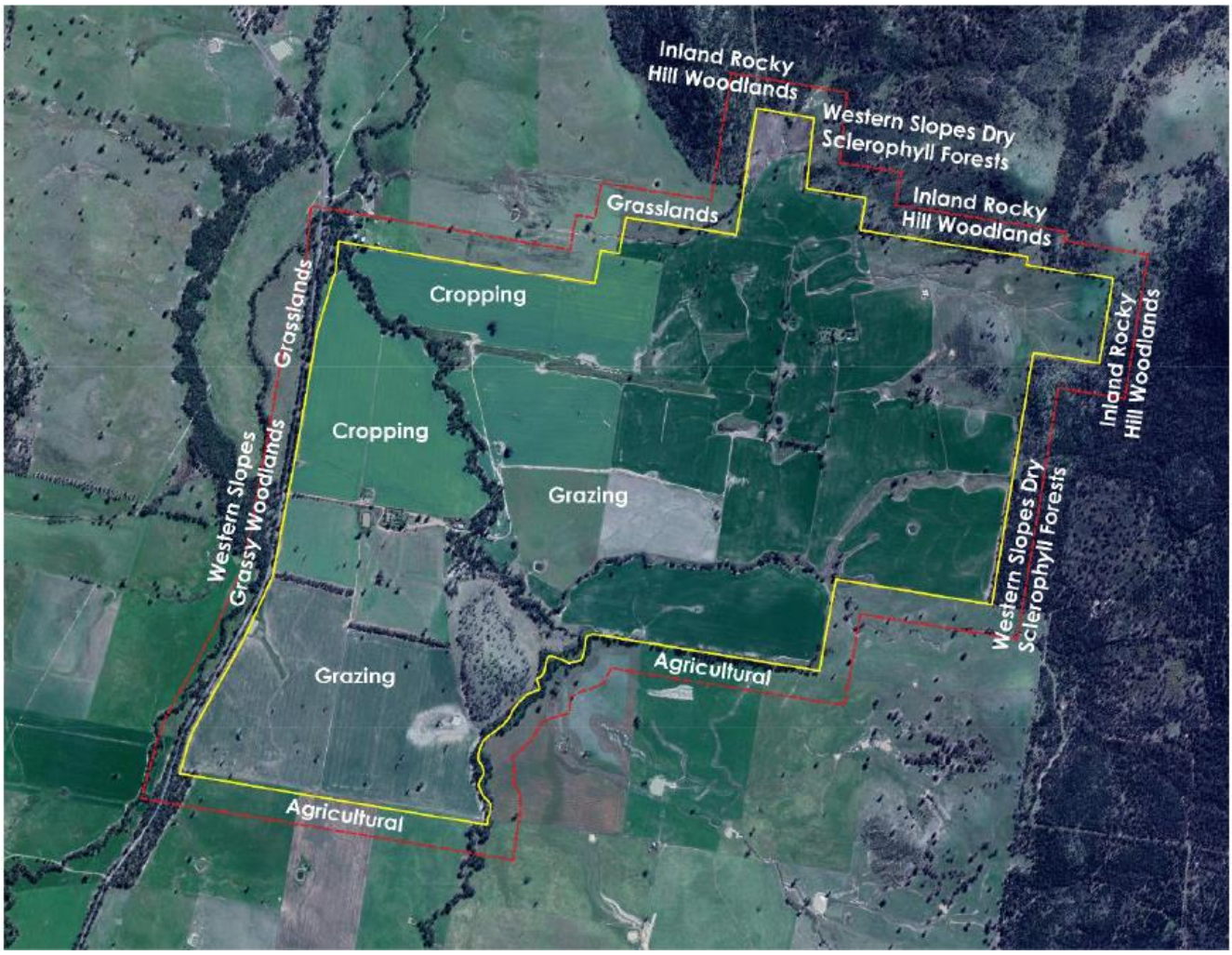


Figure 37: 140m vegetation assessment polygon around area of development (Meridian Urban, 2021)

4.15.2 Assessment findings

The Bush Fire Report found that it is possible that grass fire could advance toward the operation from almost any direction, but dry north to north westerly winds are more likely, noting the fire wind observations of the Mid Lachlan Valley BFRMP. From this direction, a grass fire is likely to advance towards all four (4) farms through the valley.

The pockets of semi-arid trees across the broader subject site and to the immediate west may generate localised instances of increased fire intensity; however, these pockets are not sufficiently substantial to warrant a change in vegetation classification over the broader prevailing vegetation communities.

The proposed access road is of a dimension which provide sufficient width for the purposes of the evacuation. The development also complies with property access compliance assessment.

From these findings, it is recommended that bush fire protection measures are adopted to enhance the resilience of the operation to the potential impact of the grass fire including the retention of a minimum of 23m Asset Protection Zone (APZ) around all rural workers dwellings to achieve the BAL requirements as per the PBP 2019.

Whilst there is no minimum APZ for the poultry farm sheds, a defensible space is to be provided in accordance with the aim and objectives of the PBP 2019. Defensible space is an area between the buildings and hazard source which is capable of providing a relatively safe environment in which firefighters can undertake operations to defend an asset or structure. The defensible space for the farms is the loop road and earthworks batter. Additional defensible space areas are required around the amenities, services, water tanks and LPG gas facilities. The APZs for these facilities must measure a minimum

dimension of 6 metres, and a minimum of 10 metres around the LPG tanks. A radiant heat shield of Besser block construction is also required around the LPG tanks.

It is also recommended that a bush fire emergency management and evacuation plan be prepared for the site.

4.16 ANIMAL WELFARE

Baiada currently have in place a National Livestock Animal Welfare and Biosecurity Manual (Issue No 1, dated 13 November 2019) which contains a comprehensive biosecurity management program which will be applied to the site. Baiada is committed to achieving high standards of bird welfare and the company understands that bird welfare and economic performance go hand-in-hand. As well as being in the birds' best interest, it makes sound economic sense to ensure that flocks are maintained in an environment in which they are safe, comfortable and free from injury or harm.

Baiada operate numerous facilities across the country where the highest level of animal care is demonstrated and maintained.

All measures will be taken to best ensure these animals are thermally comfortable, protected from injury and kept healthy. All measures will be taken to best ensure these animals are not subjected to avoidable stress, cruelty or harm.

Baiada has an approved Animal Welfare Policy, which states that Baiada will ensure that the treatment of all birds will be ethical and humanely treated throughout all stages of production. A copy of this Policy is included as **Appendix 21**. This will be achieved through providing animal husbandry, technical and veterinary advice is sought and implemented. Baiada will also use a scientific approach to welfare and comply with all legislation. They will seek to exceed these standards, where possible.

The conditions under which poultry are managed during their growing phase, transportation and slaughter are set down in several statutory and industry endorsed codes of practice designed to safeguard their health and welfare. In this regard, Baiada is committed to meet or exceed the standards of care detailed in the following Primary Industries Standing Committee documents:

- *Model Code of Practice for the Welfare of Animals - Land Transport of Poultry (2006)*; and
- *Model Code of Practice for the Welfare of Animals - Livestock at Slaughtering Establishments (2002)*.

4.17 BIOSECURITY

Baiada currently have in place a National Livestock Animal Welfare and Biosecurity Manual (Issue No 1, dated 13 November 2019) which contains a comprehensive biosecurity management program which will be applied to the site.

Biosecurity will be managed in accordance with a Hazard Analysis and Critical Control Points (HACCP) Plan which will be developed for the site. The HACCP Plan will identify hazards and risks that have the potential to compromise food safety and outlines the relevant risk management and mitigation procedures. The HACCP Plan will identify a range of specific food safety procedures, including the following critical actions in relation to biosecurity:

- Live bird transport crates are thoroughly washed, sanitised, disinfected and dried before re-use;
- Road transport and live bird collection equipment is washed and disinfected at the completion of the collection cycle;
- Birds are grown then processed from the local growing region. Poultry is not usually transported to or from other growing regions, except in extenuating circumstances and with full control and management or Baiada's veterinary services and livestock management; and
- Staff members are restricted from keeping any avian species at their place of residence and must wear clean company-provided uniform and personal protective equipment while on site.

While on site all staff are required to operate in accordance with a strict Personnel Hygiene Standard Operating Procedure (SOP).

4.18 WEED MANAGEMENT

In order to minimise the spread of weeds throughout the subject land and adjoining areas, appropriate weed control activities will be undertaken during the construction period in accordance with the Central West Local Land Services Area

and is subject to the *Central West Regional Strategic Weed Management Plan 2017 – 2022* under the *NSW Biosecurity Act 2015.*

The *Biosecurity Act 2015* and regulations provide specific legal requirements for state level priority weeds and high risk activities, as provided in the Appendices of the Central West Regional Strategic Weed Management Plan 2017 – 2022. In order to comply with the objectives of the Central West Regional Strategic Weed Management Plan, it is recommended the following measures be implemented as part of weed management for the subject land.

- Appropriate construction site hygiene measures will be implemented to prevent entry of new weeds to the area such as the cleaning of equipment prior to entering the subject land. All vehicles and machinery must be cleaned prior to entering the site and again if travelling between sites and returning to the property.
- All ground layer vegetation removed for the project will be contained and discarded appropriately due to the high density of exotics present. The method for disposal will be detailed in the Construction Environmental Management Plan to be prepared for the project.

Baiada also has its own noxious weeds management program which will be implemented on the farms.

4.19 ENVIRONMENTAL MANAGEMENT

Baiada has implemented an Environmental Management System across approximately 30 company sites that are certified to AS/NZS/ISO 14001 Standard and is progressively bringing the remaining sites up to this Standard.

Baiada has an extensive ISO14001 certified Environmental Management System which will guide all on-site actions on the farm and specifically addresses the following:

- Responsible operation of all aspects of the site;
- Management of Solid Wastes;
- Management of Liquid Wastes;
- Waste Management Plan;
- Prevention of Water Pollution;
- Use of Water and Energy;
- Prevention of Air Pollution;
- Management of Emergency Situations;
- Management of Other Environmental Issues;
- Management of Noxious Weeds.

4.20 BEST PRACTICE GUIDELINES

While noting the *Best Practice Management for Meat Chicken Production in NSW* Guidelines were produced in 2012 and are currently under review, an assessment against the Best Management Practice Checklist has been prepared and is included as **Appendix 21**. As noted, the proposed farm generally meets or exceeds the relevant practices.

Figure 38 shows the subject site with a buffer of 3,000m. The subject site is not located in close proximity to any large bodies of standing water such as wetlands or large dams. Warraderry and Wallah Creek are ephemeral and flow during significant rain events.

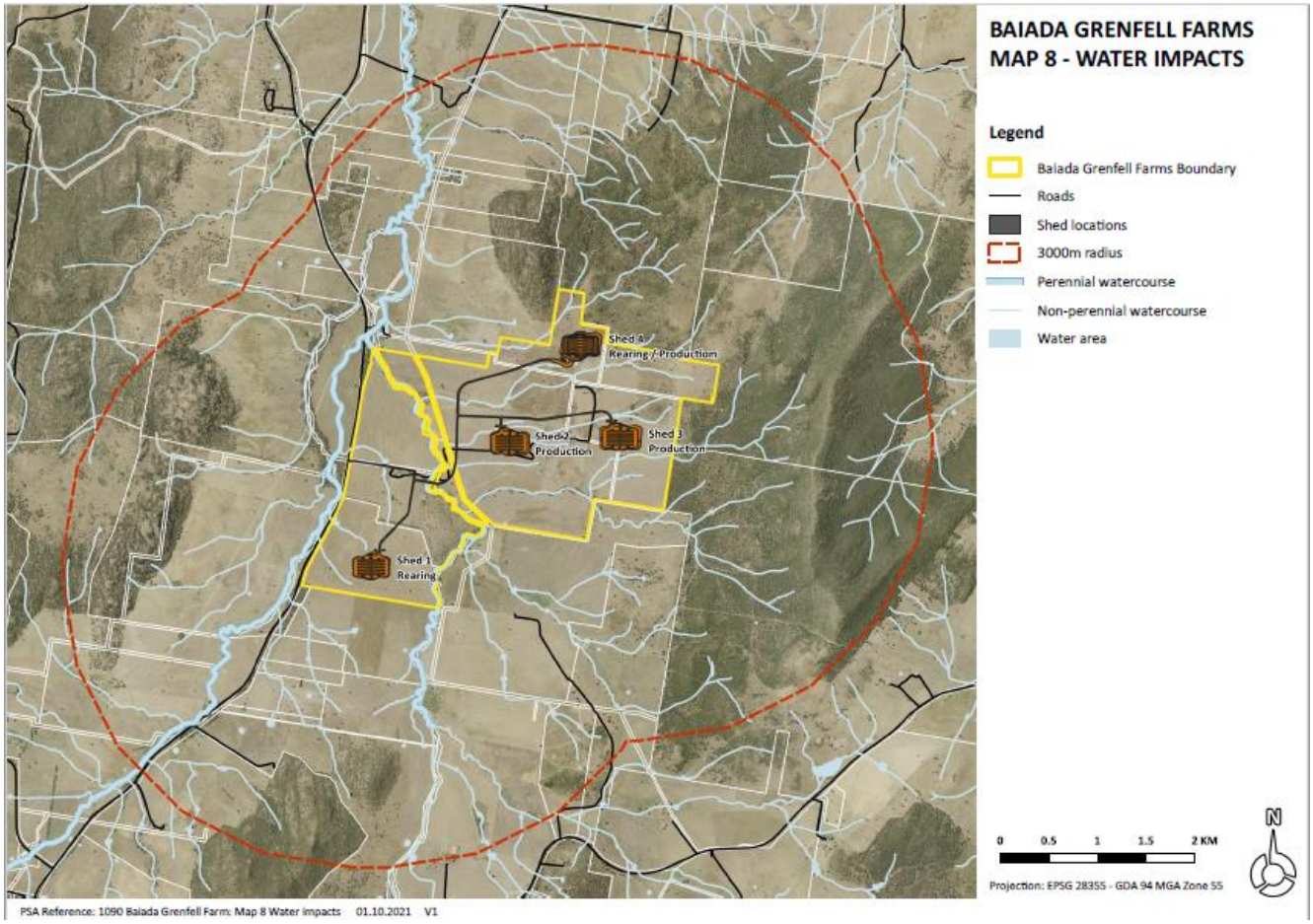


Figure 38: 3,000m Radius from the site (PSA Consulting, 2021)

4.21 AGRICULTURAL IMPACTS

The proposed development footprint has been carefully located taking into account a range of factors including areas of ecological significance, watercourse, biosecurity and amenity considerations, cultural heritage, topography, earthworks and the like. As a result, the proposed farms will result in the loss of approximately 47ha of agricultural land (used for cropping and grazing. However, this represents less than 7% of the cropping and grazing land available on the site (approximately 680ha), which can continue to be used in the current manner.

The proposed development of the poultry rearing and breeding farms on the site, will restrict continual agricultural operations on the site and strengthen the overall agricultural productivity and value of the sites.

In addition, it is noted that the surrounding properties can continue to be used for cropping and grazing and the development will not introduce any limitation on these practices.

More broadly, the proposed Grenfell Farm is required to support poultry production across the State through the production of fertile eggs which are hatched at company hatcheries and then grown at broiler farms across NSW. Whilst supporting growth of the broader poultry industry in NSW (and Australia), the development will increase the diversity of agricultural production within the region as poultry is a relatively new local industry within the Weddin Shire.

5 MANAGEMENT AND MITIGATION MEASURES

Table 17 presents a summary of the impact management and mitigation measures proposed to be implemented in associated with the proposed development.

Table 17: Management and Mitigation Measures

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. • 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.

IDENTIFIED IMPACT	MITIGATION MEASURES AND MANAGEMENT MEASURES
	• 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 little 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). • 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 15**) shows some common construction equipment, together with noise control options and possible alternatives.

IDENTIFIED IMPACT	MITIGATION MEASURES AND MANAGEMENT MEASURES

	• 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).
	• 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.

IDENTIFIED IMPACT	MITIGATION MEASURES AND MANAGEMENT MEASURES
	• 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).
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.
	• 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.

IDENTIFIED IMPACT	MITIGATION MEASURES AND MANAGEMENT MEASURES
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: o 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. o Install and maintain appropriate sediment fences around construction areas. o Divert clean stormwater runoff, using catch drains, around construction areas to existing or new stormwater drainage system. o Install sandbags and other pollution containment devices around stormwater drains and any other locations where required to prevent sediment entering the trunk stormwater system. o Cover open earth/ soil areas progressively (with concrete slabs and pavements or mulch) to minimise areas of bare earth/ soil. o 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. o 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. o Provision of spill/ pollution control equipment that is readily accessible to clean up spills and leaks. o Ensure spill/ pollution control measures are available and maintained in working condition. o 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. o 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. • 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: o Installation of proprietary ARMCO barriers or equivalent to protect tanks from impact. o Hydrant protection as per AS2419:1:2005.

IDENTIFIED IMPACT	MITIGATION MEASURES AND MANAGEMENT MEASURES
	○ 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.

6 APPROVALS AND LICENCES

This section addresses the approvals and licences that will be required as part of the Development Application.

6.1 ENVIRONMENTAL PROTECTION AUTHORITY

The EPA is identified as an Integrated Authority with respect to the proposed development as the proposed involves a Premise Based Activity identified in Section 43 (b) of the *Protection of Environmental Operations Act 1997*, namely *Schedule 1 Item 22 Livestock Processing Activities*.

6.2 OTHER APPROVALS

The following approvals and/or variations to existing licenses and approvals are required prior to commencement of the use:

- Weddin Shire Council approvals for works within Council road reserves, water and sewer works (s68 of the *Local Government Act 1991*).
- A section 68 application under the *Local Government Act 1993* will be required to be submitted to Council for the proposed septic systems.
- Construction Certificates and Occupation Certificates for all building works.
- Dangerous Goods Licences for proposed storage of Dangerous Goods.

7 SUMMARY AND CONCLUSIONS

7.1 SITE SUITABILITY

In response to the projected demand for poultry products nationally, Baiada foresee the need to increase the production capacity in the New South Wales region and have identified the Grenfell farm as an ideal location for this. Without the benefit of the additional farm, it is highly likely that there will be a significant shortfall in the availability of poultry products in Australia.

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 proposed development site has been carefully chosen based on consideration of a number of factors including:

- The site has sufficient land size to accommodate 4 separate poultry farms that with appropriate biosecurity separation.
- The site is free from environmental (significant flora or fauna or threatened ecological communities) and physical constraints (steep gradient, unsuitable geology, flooding and other natural hazards).
- The site is appropriately zoned and free from planning constraints which enable a development application to be considered.
- The site has suitable road access allowing for the movement of heavy vehicles and staff to and from the site.
- The farm is located within a grain growing region to minimise transport costs associated with feed.
- The farm is located in proximity to a population centre which can provide employees and accommodation to support the operation.
- The farm will have access to adequate and reliable water supply.
- The site has suitable separation distances to sensitive receptors to ensure no unacceptable amenity impacts.
- Have suitable separation distances to other poultry farms, intensive livestock operations and other land uses which may introduce a biosecurity risk.
- The site has proximity to major poultry production clusters at Tamworth and Griffith with capacity to grow to meet projected demand for poultry meat production.

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.

With respect to potential amenity impacts, detailed investigations have been undertaken with respect to noise, odour, traffic, social and economic aspects which have shown the proposed development will operate within the relevant statutory criteria and will have positive economic impacts in terms of employment, capital expenditure and local spending on goods and services.

Accordingly, the proposed site is considered to be an ideal location for the establishment of a breeder / rearer farm.

7.2 ALTERNATIVES TO THE PROPOSAL

Research undertaken by the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) indicates that the total chicken meat consumption in Australia has increased by an average of 5% per annum over the 10 years to 2022-23, representing 45% of the total meat consumption. This historical trend and projected increase in the consumption of chicken meat is projected to continue in Australia well beyond 2020.

As a result of the ongoing and predicted growth in demand for poultry meat products in Australia, significant expansion of the industry is required. The proposed development of the Grenfell Breeder / Rearing Farm is a direct consequence of this increase in demand and will provide an increase in fertile eggs supply for the company hatcheries, and ultimately additional meat chicken birds (broilers) which will be grown at the company and contract grower broiler farms.

The alternatives to the proposed development include:

1. Do nothing;
2. Construction of a breeder / rearer farm in an alternate location; or
3. Development of 3 breeder / rearer farms in accordance with the existing approval.

These alternatives are considered in **Table 18** below.

Table 18: Proposal Alternatives

PROPOSED ALTERNATIVE	DISCUSSION
1. Do nothing	As outline above, as a result of the ongoing and predicted growth in demand for poultry meat products in Australia, significant expansion of the industry is required. As such, doing nothing is not an option for Baiada. Baiada is currently expanding existing breeder and rearing facilities in other regions to meet this growth and needs additional supply beyond the current operations.
2. Construction of a poultry farm in an alternate location.	Construction of a new farm on an alternate site within the region would require the identification and purchase of an alternate site as well as losing the benefit of the existing infrastructure available to the subject property, particularly the high quality water supply. There are limited sites available which satisfy the specific locational the requirements to allow the development of a new breeder / rearer farm, which includes: • The site has sufficient land size to accommodate 4 separate poultry farms that with appropriate biosecurity separation. • The site is free from environmental (significant flora or fauna or threatened ecological communities) and physical constraints (steep gradient, unsuitable geology, flooding and other natural hazards). • The site is appropriately zoned and free from planning constraints which enable a development application to be considered. • The site has suitable road access allowing for the movement of heavy vehicles and staff to and from the site. • The farm is located within a grain growing region to minimise transport costs associated with feed. • The farm is located in proximity to a population centre which can provide employees and accommodation to support the operation. • The farm will have access to adequate and reliable water supply. • The site has suitable separation distances to sensitive receptors to ensure no unacceptable amenity impacts. • Have suitable separation distances to other poultry farms, intensive livestock operations and other land uses which may introduce a biosecurity risk. • The site has proximity to major poultry production clusters at Tamworth and Griffith with capacity to grow to meet projected demand for poultry meat production. With consideration of the above factors, the construction of a similar facility on an alternate property, while technically possible, is unlikely to meet all the above criteria and be available for purchase, approval and delivery within the necessary timeframes.
3. Development of 3 breeder / rearer farms in	The site has an existing approval for Poultry Breeder / Production Farm issued by Weddin Shire Council in 2002 (DA Reference 75/2002). Construction of the approved

PROPOSED ALTERNATIVE	DISCUSSION
accordance with the existing approval	development (3 farms) in accordance with the existing current consent does not reflect current best practice or provide the operational efficiencies or necessary egg supply to make the project financially viable. The proposed complex has been designed based on Baiada's preferred model to breeder / rearer farms, taking into account all necessary animal welfare, biosecurity and operational considerations.

The alternatives to the proposed development are either financially unviable, unlikely to succeed or do not represent an efficient approach to meet the necessary expansion of poultry production in Australia. Further, as demonstrated within the EIS, the proposed development can be undertaken in a manner consistent with applicable environmental and planning safe-guards and standards and as such, the project is clearly the best option to achieve the core objectives.

7.3 JUSTIFICATION

In response to an increase in demand for their poultry products in Australia, Baiada is now seeking Development Consent for a new breeder/rearer farm at the subject site. In accordance with Schedule 2, s7 1(f) of the *Environmental Planning and Assessment Regulation 2000*, justification of carrying out the proposed development is provided below.

7.3.1 Biophysical Considerations

Based on the assessments undertaken by the relevant technical specialists, it has been demonstrated that the proposed development can be undertaken in a manner consistent with the statutory obligations in relation to:

- Stormwater management and treatment;
- Ecological impacts;
- Acoustic impact;
- Odour impact;
- Cultural heritage impact;
- Chemical use and storage;
- Waste management; and
- Biosecurity management.

As such, it is considered that there are no bio-physical considerations which would preclude approval of the proposed development.

7.3.2 Economic Considerations

The development will have a positive economic impact in terms of significant construction works and ongoing employment opportunities for local residents.

The Capital Investment Value (CIV) of the project has been calculated in accordance with the *State Environmental Planning Policy Amendment (Capital Investment Value) 2010* by Wilde and Woollard and is included as **Appendix 7**). As shown in the CIV Report, the project is estimated to be **$64,124,200** a majority of which is associated with construction of the proposed farm.

It is estimated that the project will create 60 construction jobs to deliver the project over a 26 month period. Indirect opportunities during construction will also be created for local tradespersons to assist with the build including. electricians, plumbers, earthmovers and the like.

Once operational , the project will create 50 full time equivalent (FTE) positions. In addition to the direct employment, the additional farm will create additional opportunities for numerous contractors who support poultry farming.

The project is anticipated to have a positive impact on the employment prospects for local residents. There is expected to be sufficient potential employees in the local area to fill the new jobs associated with the project.

With respect to social impacts, the findings of the detailed technical assessments undertaken in relation to proposed farm demonstrate that construction is unlikely to have significant, negative social impacts provided the proposed mitigation and management measures documented in this EIS are implemented.

7.3.3 Social Considerations

As noted above, the proposed development will increase investment, expenditure and employment opportunities within the Grenfell area which will have a positive social benefit. As shown in the various technical assessments undertaken, the processing plant can also be constructed and operated in a manner with minimal amenity or infrastructure impact to surrounding businesses or residents. As such, the project is considered to have a net positive social impact.

7.3.4 Principles of Ecologically Sustainable Development

A discussion of the proposal's compliance with the principles of Ecologically Sustainable Development is also provided in **Table 19**.

Table 19: Principles of Ecological Sustainability

PRINCIPLE	APPLICANT'S RESPONSE
(a) the precautionary principle, namely, that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation. In the application of the precautionary principle, public and private decisions should be guided by: *(i) careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment, and* *(ii) an assessment of the risk-weighted consequences of various options,*	**Complies.** There are no threats of serious or irreversible environmental damage that have been identified as part of the detailed assessments undertaken with respect to the project. A number of mitigation, management and monitoring measures are also applied to the existing and proposed operation to ensure that it continues to perform in accordance with all relevant environmental standards.
(b) inter-generational equity, namely, that the present generation should ensure that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations,	**Complies.** The proposed development will not result in the impacts that will reduce the health, diversity and productivity of the environment or reduce the potential benefits of future generations. Conversely, the proposed development will maximise the economic and operational efficiency of the site and support the broader growth and economic development associated with poultry production in the Grenfell region.
(c) conservation of biological diversity and ecological integrity, namely, that conservation of biological diversity and ecological integrity should be a fundamental consideration,	**Complies.** The Biodiversity Development Assessment Report confirms that due to the careful location of the proposed farms within the historically cleared and cropped areas, the development will have a minimal impact upon significant flora and fauna in the local area. Approximately 0.21ha of Fuzzy Box Woodland, 1.16ha of White Box woodland, and 0.01ha of Yellow Box woodland will be removed under the proposed development. The removal of these areas occurs for the construction of narrow access tracks – as such, it is not anticipated that their removal will result in isolation of areas of woodland from other areas, nor will it have impacts on the long-term survival of the TECs. Nevertheless, the removal of the native vegetation within the subject land requires a total of 24 ecosystem credits for PCT 201, 267, and 276.

PRINCIPLE	APPLICANT'S RESPONSE
(d) improved valuation, pricing and incentive mechanisms, namely, that environmental factors should be included in the valuation of assets and services, such as: *(i) polluter pays, that is, those who generate pollution and waste should bear the cost of containment, avoidance or abatement,* *(ii) the users of goods and services should pay prices based on the full life cycle of costs of providing goods and services, including the use of natural resources and assets and the ultimate disposal of any waste,* *(iii) environmental goals, having been established, should be pursued in the most cost effective way, by establishing incentive structures, including market mechanisms, that enable those best placed to maximise benefits or minimise costs to develop their own solutions and responses to environmental problems.*	**Complies.** Baiada has been a signatory to the National Packaging Covenant since September 2001 and the strengthened Australian Packaging Covenant in 2010 and is committed to initiatives that will reduce impacts on the environment and lead to sustainability through responsible corporate activities. Baiada has prepared an Australian Packaging Covenant Action Plan which outlines the steps that the company will undertake to meet the expectations of the Covenant. All operations at the farms will be undertaken in accordance with this Covenant.

In accordance with, Schedule 2, s7 1(f) of the *Environmental Planning and Assessment Regulation 2000,* the proposed development complies with the relevant statutory planning instruments and will not result in significant adverse environmental impacts on the receiving environment. The proposal capitalises on the existing investment in the site and supports the ongoing expansion of the broader poultry industry and economic development in the Central NSW Region. Where potential impacts have been identified, suitable mitigation and management measures have been implemented. Accordingly, approval of the proposed development is justified.

7.4 CONCLUSION

This Environmental Impact Statement has been prepared in accordance with the requirements of the relevant State and Local statutory planning requirements and assesses all relevant impacts of the proposed development. Where impacts have been identified, appropriate management and mitigation measures have been prescribed. Provided that the management and mitigation measures described in this EIS are adhered to, the proposed development is not predicted to result in unacceptable impacts on the receiving environment or local community. Accordingly, the development is recommended for Approval, subject to relevant and reasonable conditions.

APPENDIX 1: CERTIFICATES OF TITLE

AP01

APPENDIX 2: EXISTING CONSENT

AP02

APPENDIX 3: SITE SURVEY

AP03

APPENDIX 4: DEVELOPMENT PLANS

AP04

APPENDIX 5: FLOOD IMPACT ASSESSMENT

AP05

APPENDIX 6: STORMWATER MANAGEMENT PLAN

AP06

APPENDIX 7: CAPITAL INVESTMENT VALUE REPORT

AP07

APPENDIX 8: SEARs

AP08

APPENDIX 9: ODOUR AND DUST ASSESSMENT

AP09

APPENDIX 10: TRAFFIC IMPACT ASSESSMENT

AP10

APPENDIX 11: WASTE MANAGEMENT PLAN

AP11

APPENDIX 12: BIODIVERSITY DEVELOPMENT ASSESMENT REPORT

AP12

APPENDIX 13: ABORIGINAL CULTURAL HERITAGE ASSESSMENT REPORT

AP13

APPENDIX 14: ANIMAL WELFARE POLICY

AP14

APPENDIX 15: NOISE IMPACT ASSESSMENT

AP15

APPENDIX 16: SEPP 33 SCREENING ASSESMENT

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APPENDIX 17: PRELIMINARY HAZARD ASSESSMENT

AP17

APPENDIX 18: BUSHFIRE MANAGEMENT PLAN

AP18

APPENDIX 19: CONSULTATION REPORT

AP19

APPENDIX 20: LAND USE CONFLICT RISK ASSESSMENT

AP20

APPENDIX 21: BEST PRACTICE MANAGEMENT CHECKLIST

AP21