PSA CONSULTING

# Goolgoowi Poultry Farm

## SSD-8036 MODIFICATION APPLICATION

## FINAL

**18 January 2023**

AGRIGHT

# Document Control

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# Revision History

| VERSION | DATE | DETAILS | AUTHOR | AUTHORISATION |
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# EXECUTIVE SUMMARY

On March 2020, the Department of Planning, Industry and Environment (now DPE) issued an SSD-8036 for the development of the Goolgowi Poultry Complex on the subject site. The consent allows for the staged construction of five poultry farms (20 sheds each) on the site accommodating a total population of up to 6 million birds.

As a result of some uncertainty in the odour modelling, the approved farms were to be delivered in 2 Stages as follows:

- **Stage 1** - five poultry farms each comprising 12 sheds (total of 60 sheds) housing a maximum population of up 3.6 million broilers at any one time.
- **Stage 2** – five poultry farms each comprising 20 sheds (total of 100 sheds) with a maximum population of 6 million broilers at any one time.

Since acquisition of the site, the Applicant has entered into commercial negotiations with Baiada Poultry (the processor) to determine the actual demand within the region and how the proposed Goolgowi Farm would best support growth of the poultry processing. As a result of these negotiations and based on the Applicant's extensive experience in design and operation of broiler farms the approved development is proposed to be modified to meet the process or requirements, improve efficiency of the operation and enhance bio-security and risk management.

The proposed development involves the modification of the SSD-8036 to allow for construction of only 2 poultry broiler farms with 20 sheds (each), accommodating a maximum of 2,480,000 birds on the site.

This modification report and supporting documentation demonstrates that the modified development complies with the relevant statutory planning instruments and will not result in unacceptable adverse environmental impacts on the receiving environment. In addition, the proposed modification will lessen predicted impacts, improve efficiency of the operation, enhance bio-security and risk management and creates a more viable operation compared to that which was approved.

The proposal capitalises on and improves the existing approvals on the site, and supports the ongoing expansion of the broader poultry industry and economic development in the Riverina. Where potential impacts have been identified, suitable mitigation and management measures have been implemented. Accordingly, approval of the modification is justified.

# TABLE OF CONTENTS

# Table of Appendices

# List of Figures



# List of Tables



# List of Acronyms

| | |
|---|---|
| ABARES | Australian Bureau of Agricultural and Resource Economics and Sciences |
| BAL | Bushfire Attack Level |
| BFAR | Bushfire Assessment Report |
| BFPM | Bushfire Protection Measures |
| CIV | Capital Investment Value |

| | |
|---|---|
| DPE | Department of Planning and Environment |
| EPA | Environmental Protection Agency |
| Ha | Hectare |
| LPG | Liquified Petroleum Gas |
| MI | Murrumbidgee Irrigation |
| NIA | Noise Impact Assessment |
| NPfI | Noise Policy for Industry |
| PHA | Preliminary Hazard Assessment |
| PNTL | Project Noise Trigger Levels |
| RNP | Road Noise Policy |
| SEPP | State Environmental Planning Policy |
| SSD | State Significant Development |
| TIA | Traffic Impact Assessment |

# 1 INTRODUCTION

## 1.1 SITE OVERVIEW

| | |
|---|---|
| **Address** | 375 McRaes Road, Goolgowi |
| **Property** | Lots 1 and 2 DP749831 |
| **Land Owners** | Aright Griffith Pty Ltd as trustee for Agright Griffith Unit Trust |
| **Applicant** | Aright Griffith Pty Ltd as trustee for Agright Griffith Unit Trust |
| **Consent Authority** | Department of Planning and Environment |
| **Local Government Area** | Carrathool Shire |
| **Zoning** | RU1 Primary Production Zone |
| **Total Site Area** | 619.87 ha |

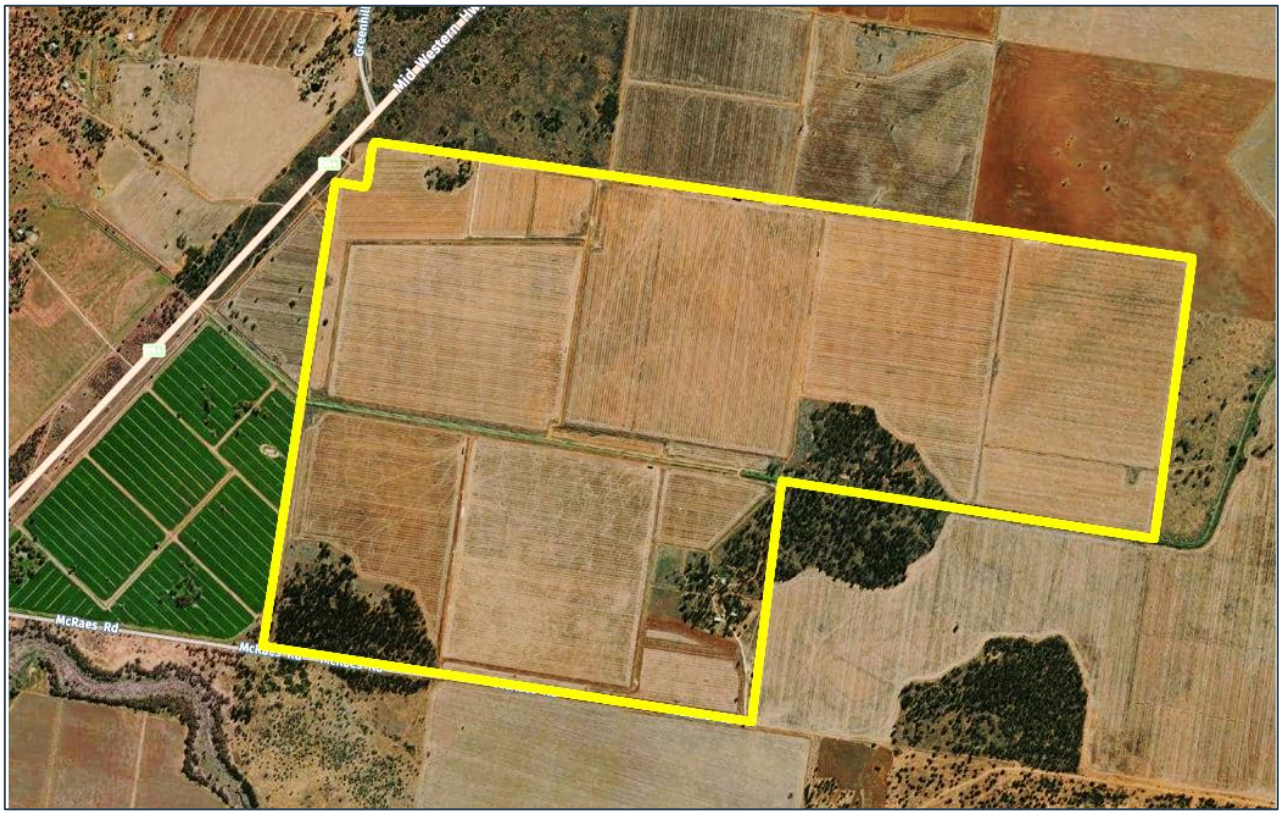



**Figure 1: Site and Surrounds (Nearmap, 2022)**

The subject site has an area of 619.87 ha and is situated approximately 11km south west of the town of Goolgowi. The site has been predominantly cleared for historic agricultural cropping. The site is accessed via McRaes Road in the south and the Mid-Western Highway to the West. The site contains an existing dwelling and several outbuildings and rural infrastructure.

## 1.2 THE APPLICANT

The proponent of the proposed development is Agright Griffith Pty Ltd as trustee for Agright Griffith Unit Trust (herein referred to as Agright) and purchased the site for the purpose of establishing 2 poultry broiler farms. The managing director of Agright (Daniel Bryant) has over 25 years' experience in intensive animal husbandry and Agribusinesses, including 15 years managing ProTen Limited which is one of Australia's largest growers of broiler chickens, producing around 133 million Chickens per year and representing 19% of Australia's total flock.

## 1.3 THE APPROVED PROJECT

On March 2020, the Department of Planning, Industry and Environment (now DPE) issued an SSD-8036 for the development of the Goolgowi Poultry Complex on the subject site. The consent allows for the staged construction of five poultry farms (20 sheds each) on the site accommodating a total population of up to 6 million birds. A copy of this approval is provided in **Appendix 1**.

As a result of some uncertainty in the odour modelling, the approved farms were to be delivered in 2 Stages as follows:

- **Stage 1** - five poultry farms each comprising 12 sheds (total of 60 sheds) housing a maximum population of up 3.6 million broilers at any one time.
- **Stage 2** – five poultry farms each comprising 20 sheds (total of 100 sheds) with a maximum population of 6 million broilers at any one time.

In order to obtain approval for Stage 2 of the development, the Applicant is required to prepare an updated Air Quality Impact Assessment, demonstrate compliance with the applicable odour impact assessment criteria and undertake the work to the satisfaction of the Planning Secretary, in consultation with the EPA.

As the design and structure of this approval does not align with Agright's plans for the site, the site the SSD in its current form is no longer proposed and the Applicant is seeking to modify the current consent.

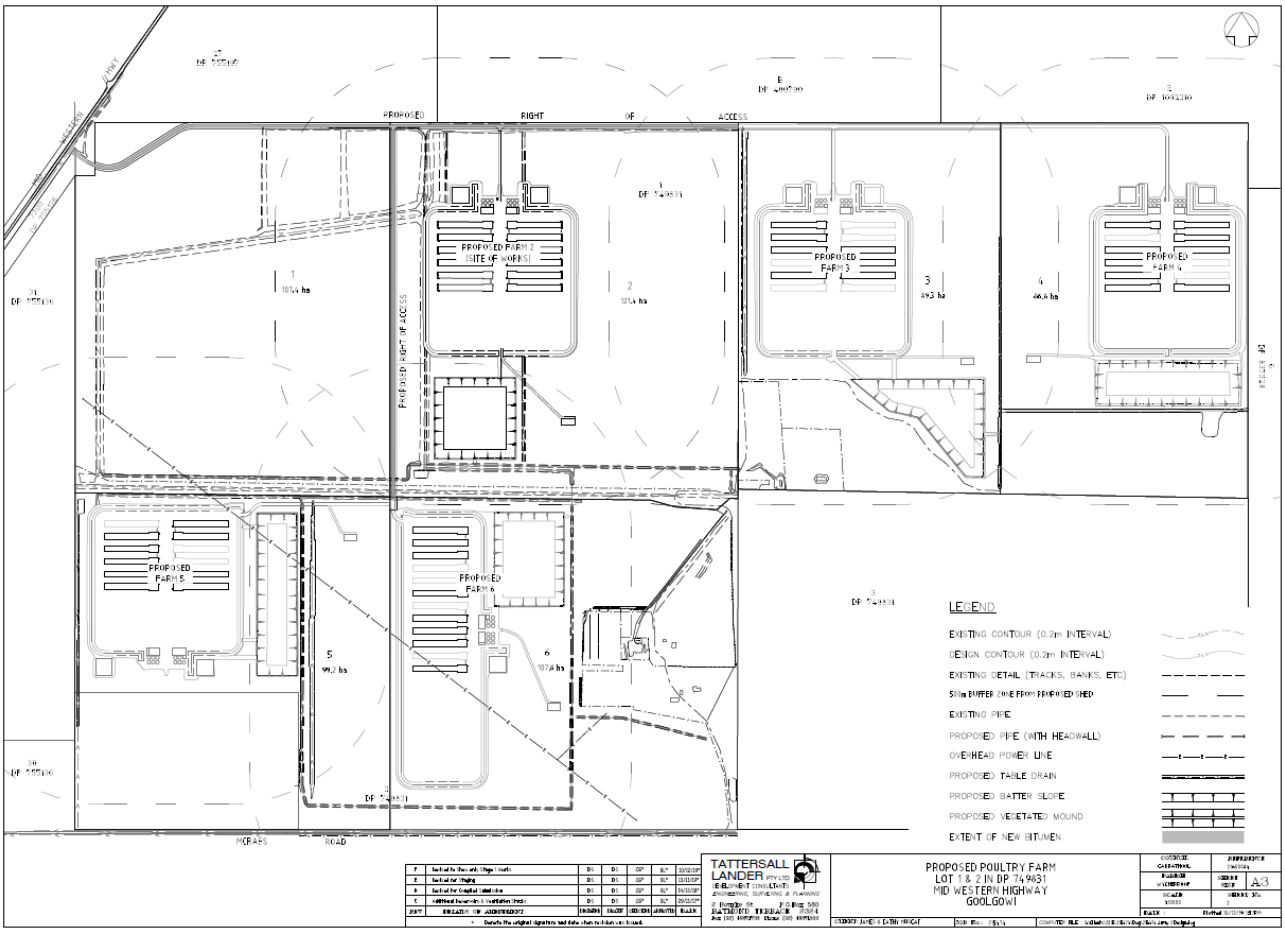



**Figure 2: SSD8036 – Approved Development Plan**

## 1.4 PROPOSED MODIFICATION

The proposed development involves the modification of the SSD-8036 to allow for construction of only 2 poultry broiler farms with 20 sheds (each), accommodating a maximum of 2,480,000 birds on the site. As shown in Figure 3, the proposed broiler farms are generally located as per the approved Farms 2 and 4.

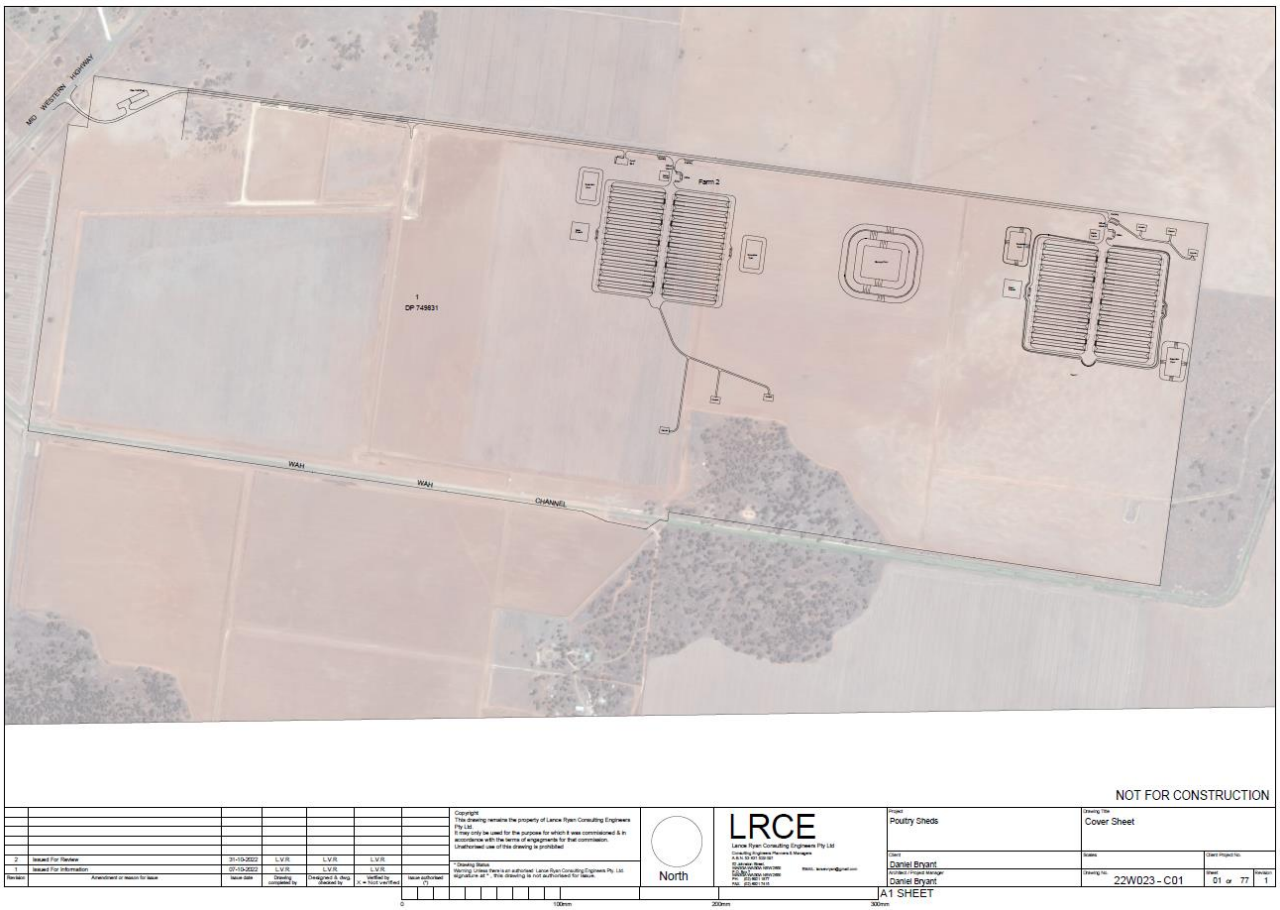



**Figure 3: Proposed Modification Plan**

The proposed farms will consist of twenty (20) poultry sheds each which will be constructed in two rows running east-west. Each shed will be 172.2m long, 18.3m wide and will accommodate a floor area of 3,096m². The sheds have a ridge height of 5m. The proposed sheds will be constructed with concrete floors, insulated panel walls and zincalume roofs and will be fitted with purpose-built infrastructure associated with poultry production including fans, heaters, water and feed lines, lighting and cooling systems. Due to the reduction to the total bird numbers on the site, non-conventional ventilation stacks are no longer required to achieve compliance with the Odour Impact criteria. As such, the proposed sheds will adopt the industry standards tunnel ventilation system.

Other ancillary buildings and supporting infrastructure for each farm will include:

- 3 manager residences (manufactured dwellings) for each farm.
- Staff amenities.
- Gas storage Infrastructure.
- Ancillary solar farm, battery storage and back-up generators.
- Water storage pond and water treatment infrastructure.
- Site access road.
- Other ancillary infrastructure and services.

Updated Development Plans are provided in **Appendix 2**.

# 2 STRATEGIC CONTEXT

## 2.1 ORIGINAL CONTEXT AND CHANGES

As noted in the submitted EIS, the poultry industry in Australia is experiencing ongoing growth and public demand for poultry products has resulted in expansion of poultry production and processing activities across Australia, including the Riverina. In order to meet demand, poultry meat growers are being encouraged by poultry processors to expand operations to provide additional growing capacity.

Since approval and acquisition of the site, the Applicant has entered into commercial negotiations with Baiada Poultry (the processor) to determine the actual demand within the region and how the proposed Goolgowi Farm would best support processing activities. As a result of these negotiations, as well as the Applicant's experience in design and operation of broiler farms, the approved development is to be modified to meet the processor requirements, improve efficiency of the operation, enhance bio-security, reduce impacts, and improve risk management.

An update to the broader national and regional context which support the proposed development is also provided below.

## 2.2 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.

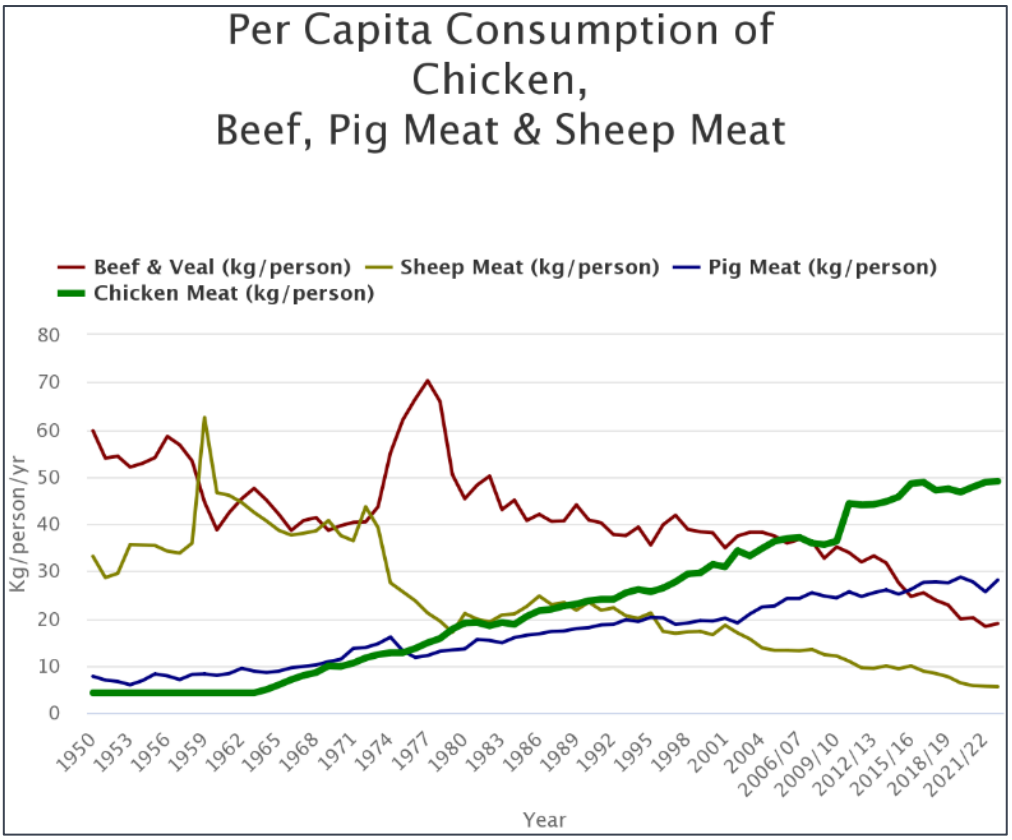



**Figure 4: Consumption of various meats in Australia (ABARES, 2022)**

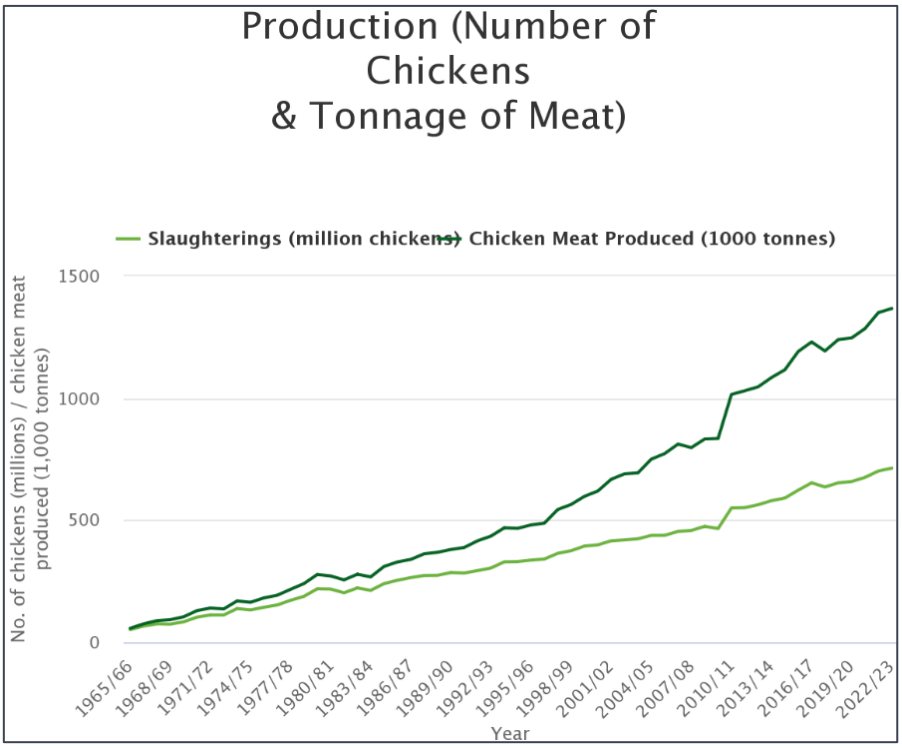



**Figure 5: Chicken Meat Production in Australia (ABARES, 2022)**

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 Goolgowi Farm is a direct consequence of this increase in demand and will provide an increase in broilers (meat chicken), which are available for processing at the nearby Hanwood Processing Plant in Griffith.

## 2.3 REGIONAL CONTEXT

The response to the project demand for poultry products in the Australian marketplace, there is a need to increase poultry production in Australia. Australia's largest poultry producer (Baiada Poultry) has a major processing hub located in Griffith centred around the Hanwood Processing Plant which has a production capacity increasing to 3.0 million birds per week. The proposed broiler farms will provide additional broiler capacity within the region and will capitalise on the site characteristics which make it an ideal location for the modified poultry farming. These characteristics include:

- The site has an existing consent for a much larger poultry farm, is appropriately zoned and free from planning constraints.
- The site has sufficient land size to accommodate the proposed 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 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 centres (Carrathool and Griffith) which can provide employees and accommodation to support the operation.
- The farm will have access to adequate and reliable water supply through Murrumbidgee Irrigation.
- The site has suitable separation distances to sensitive receptors to ensure no unacceptable amenity impacts.
- The site is appropriately separated from 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 Griffith with capacity to process the additional broilers provided by the proposed farm.

# 3 DESCRIPTION OF THE MODIFICATIONS

## 3.1 MODIFICATION OVERVIEW

A comparison of the approved development (in 2 stages) and the proposed modification is provided in Table 1.

**Table 1: Modified Project Summary Table**

| ISSUE | APPROVED STAGE 1 | APPROVED STAGE 2 | PROPOSED MODIFICATION |
|---|---|---|---|
| **Farm Design** | 5 Farms<br>60 sheds<br>3.6 Million Birds. | 5 Farms<br>100 sheds<br>6 Million Birds. | 2 Farms<br>40 Sheds<br>2.48 Million Birds |
| **Shed Dimensions**<br>**Internal Floor area** | 168m Long x 18.5m wide<br>3108m2 | 168m Long x 18.5m wide<br>3108m2 | 172.2m long x 18.3m wide<br>3,096m2 |
| **Supporting Infrastructure** | 2 Managers Residences per farm<br>Staff Amenities<br>Water storage / Stormwater Retention Dam<br>Access Roads<br>Dead Bird Compost Shed<br>Gas Tanks | 2 Managers Residences per farm<br>Staff Amenities<br>Water storage / Stormwater Retention Dam<br>Access Roads<br>Dead Bird Compost Shed<br>Gas Tanks | 3 Manager Residences Per Farm<br>Staff Amenities<br>Water storage Pond<br>Stormwater Retention basins<br>Access Roads<br>Dead Bird Chiller Storage<br>Gas Tanks |
| **Site Cover** | 167 Ha | 167 Ha | 41 Ha |
| **Water Supply** | Est. 200ML / Year<br>Source: Murrumbidgee Irrigation | Est. 300ML / Year<br>Source: Murrumbidgee Irrigation | 260ML / Year<br>Source: Murrumbidgee Irrigation |
| **Water Storage** | 5 Above Ground<br>Storage Dams<br>(280 – 350ML) | 5 Above Ground<br>Storage Dams<br>(280 – 350ML) | 1 Above<br>Ground Storage Dam.<br>(150ML) |
| **Traffic** | Average 42 HV Trips / Day | Average 70 HV Trips / Day | Average 32 HV Trips / Day |
| **Access** | Mid Western Way Entrance (As Approved by TfNSW). | Mid Western Way Entrance (As Approved by TfNSW). | Mid Western Way Entrance (As Approved by TfNSW). |
| **Staff** | 20 full time<br>25 part time<br>Contract staff are also used to assist with placement of day | 20 full time<br>40 part time<br>Contract staff are also used to assist with placement of day | 14 full time<br><br>Contract staff are also used to assist with placement of day |

| ISSUE | APPROVED STAGE 1 | APPROVED STAGE 2 | PROPOSED MODIFICATION |
|---|---|---|---|
| | old chicks, clean out and set up the sheds for new batches. | old chicks, clean out and set up the sheds for new batches. | old chicks, clean out and set up the sheds for new batches. |

## 3.2 DETAILED PROJECT DESCRIPTION

As a result of the proposed modification, the project will involve the construction of only 2 poultry broiler farms with 20 sheds (each) accommodating a maximum of 2,480,000 Birds across the entire site. The proposed broiler farms are generally located as per the existing Farms 2 and 4.

Other ancillary buildings and supporting infrastructure for each farm will include:

- 3 manager residences (manufactured dwellings) for each farm.
- Staff amenities.
- Gas storage Infrastructure.
- Ancillary solar farm, battery storage and back-up generators.
- Water storage pond and water treatment infrastructure.
- Site access road.
- Other ancillary infrastructure and services.

A copy of the Farm Layout Plans for Farms 1 and 2 are provided in Figure 6 and Figure 7 below. Updated Development Plans are attached as **Appendix 2**.

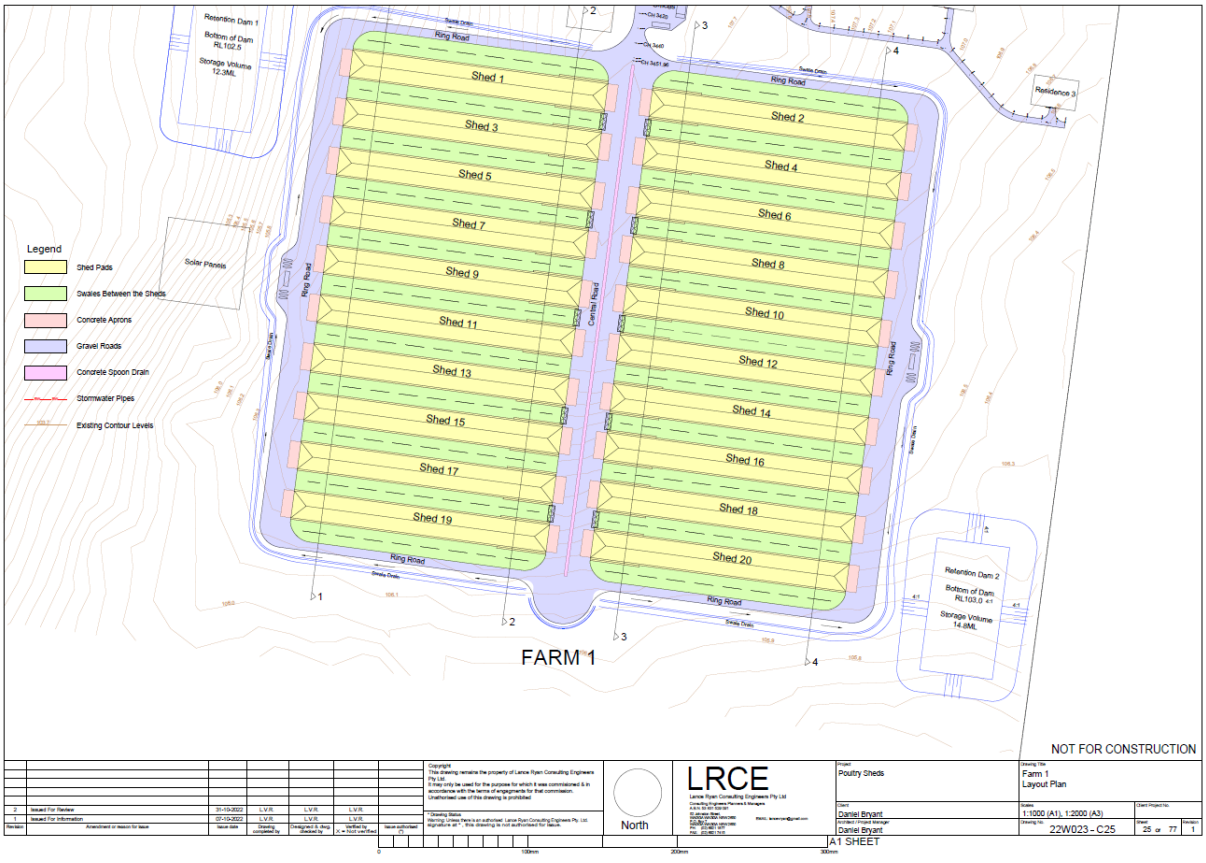



**Figure 6: Farm 1 Layout Plan**

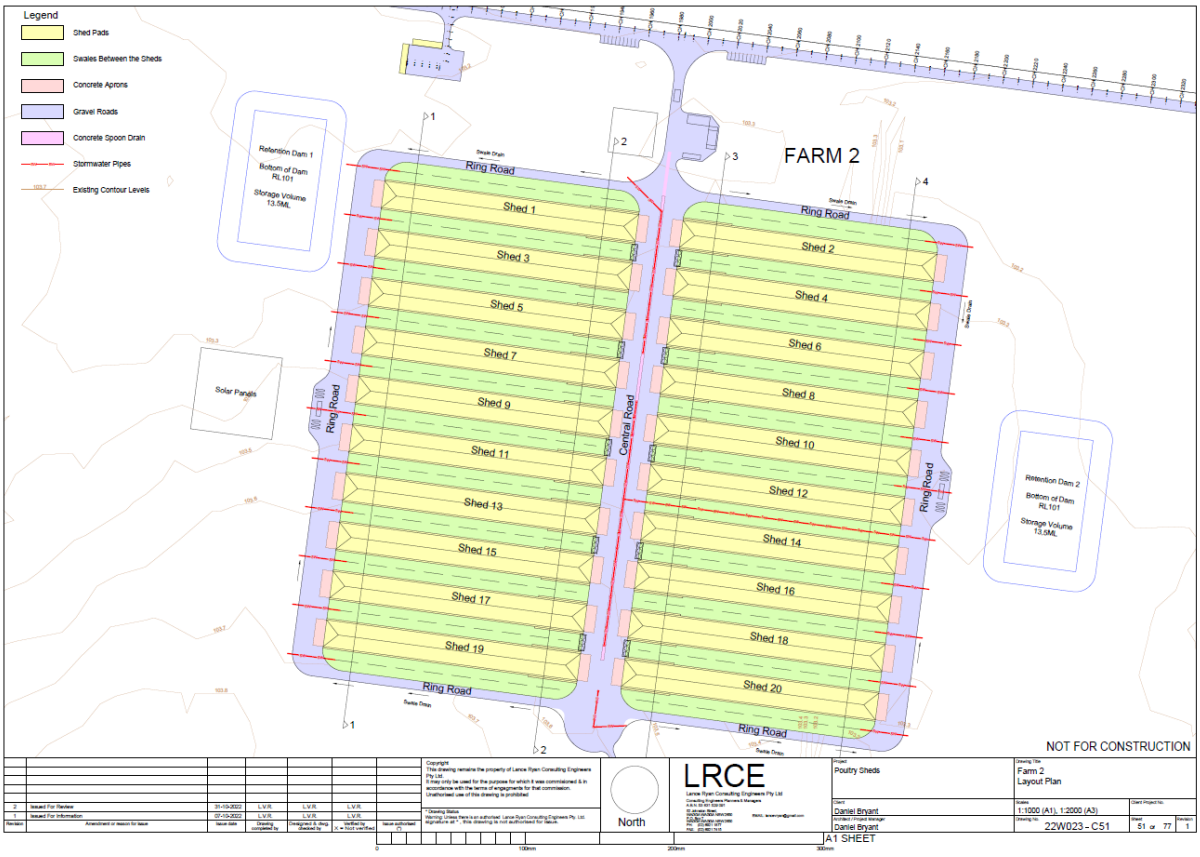



**Figure 7: Farm 2 Layout Plan**

### 3.2.1 Farm Operations

Consistent with the approved operations, the production of broilers on the farm will occur in cycles with each production cycle completed over 8 – 9 weeks. As such, there is an average of 5.8 production cycles each year. The production cycle generally follows the following steps:

- Placement of day old chicks within the sheds (Day 1).
- Birds are grown on an approximate 50 – 52 day cycle with live bird collections or 'thinning' occurring from around day 30 to 32 and from day 42.
- Live bird collections occur mostly at night in response to animal welfare requirements and birds will be transported to the Baiada Poultry abattoir at Hanwood for processing.
- Clean out of sheds and set up for new batch is then undertaken prior to placement of a new batch of day old chicks.

Each farm will be overseen by 3 on-site managers and 4 full time staff per farm. Contract staff are also used to assist with placement of day old chicks, clean out and set up the sheds in between batches.

### 3.2.2 Building Works

#### 3.2.2.1 Poultry Sheds

The proposed farms will consist of twenty (20) poultry sheds each which will be constructed in two rows running east-west. Each shed will be 172.2m long, 18.3m wide and will accommodate a floor area of 3,096m². The sheds have a ridge height of 5m. The proposed sheds will be constructed with concrete floors, insulated panel walls and zincalume roofs. The poultry sheds will be fitted with purpose-built infrastructure associated with poultry production including fans, heaters, water and feed lines, lighting and cooling.

Due to the reduction to the total bird numbers on the site, non-conventional ventilation stacks are no longer required to achieve compliance with the Odour Impact criteria. As such, the proposed sheds will adopt the industry standards tunnel ventilation system.

#### 3.2.2.2 Rice Hull Shed

The Rice Hull Shed is located at the entrance to the site on the northern side of the proposed site access road. The rice hull shed will be used to store bedding materials (rice hulls, wood shavings etc) which are spread in the clean shed prior to placement of a new batch of day old chicks. The proposed Rice Hull Shed will be 40m long, 17m wide and with maximum height of 7.5m to the roof peak. The rice hull shed will be constructed with a compacted clay floor, metal frame, zincalume sheeting and roof.

#### 3.2.2.3 Water Storage Dam

The proposed water storage dam is located to the South of Farm 1 and has a capacity of 120ML. The proposed turkey nest dam will have dam wall built with a batter 6:1 rising to a height of 3m above current ground level. The dam will have a maximum storage capacity 120ML with an additional 1m of free broad storage. The dam will be finished with a clay liner to reduce leakage.

Consistent with the current approval, water for the farm will be supplied by Murrumbidgee Irrigation (MI). Unlike the previous approval, the turkey nest design adopted for the water storage dam will exclude stormwater inflows.

Please note that the location of the dam has been changed based on additional geotechnical information received prior to lodgement of this modification application. As such, the final location of the water storage dams as shown in **Appendix 2** is different to the location shown in some of the supporting technical reports. While having improved geotechnical characteristics to assist in the construction, the site is also entirely located within the existing, cleared and cultivated land and as such will not impact on any areas of ecological significance, historic or cultural heritage.

#### 3.2.2.4 Manager Residences

Each farm will be overseen by 3 on-site managers who will reside on site within the proposed managers dwellings. The scale of the proposed farm requires oversight from at least 2 managers at all times. The provision of 3 on-site managers and provides sufficient flexibility for the staff and their families to undertake day to day activities and take annual leave, while ensuring operational oversight is retained at all times.

Consistent with the current approvals, the dwellings will only be occupied by persons employed by the Applicant, their partner and dependants in conjunction with the operation of a poultry farm for the operational life of the development and shall not be occupied or let for any other purpose.

As per the current approval, the proposed dwellings will be installed in accordance with Division 4 of the *Local Government (Manufactured Home Estates, Caravan Parks, Camping Grounds and Moveable Dwellings) Regulation 2005,* will be provided with a 20,000L rain water tank and an on-site septic system (1 per dwelling). The Applicant will be required to obtain approval from Council under section 68 of the *Local Government Act 1993* for the installation of the farm manager accommodation.

## 3.3 LANDSCAPE PLANTING

In order to provided additional visual screening and in accordance with the best practices recommendations of the updated Air Quality Impact Assessment (**Appendix 8**) it is now proposed to install a vegetated buffer around the fan ends of each farm. In addition to providing a visual screen, vegetative buffers reduce the magnitude and frequency of any adverse air quality impacts by effectively slowing and filtering air movement, which enhances dust deposition which reduces the movement of dust offsite.

The vegetated buffers will be planted and maintained at the fans ends of each farm. The buffers will be constructed around the footprint of the farm and setback a minimum of 20m from the sheds to retain the Asset Protection Zone as required by the Bushfire Assessment (**Appendix 13**). VEB will consist of a minimum of 2 rows of native trees with overlapping, bushy, foliage to achieve a porosity of 50%. Details of the proposed buffer including species selection and planting can be provided prior to issue of a construction certificate.

The location of the proposed VEBs is shown in Figure 8, with an example of similar, established buffer surrounding a broiler farm in Tamworth shown in Figure 9.


**Figure 8: VEB Locations (PSA, 2022)**

**Figure 9: Example Vegetated Environmental Buffer (PSA, 2022)**

# 3.4 INFRASTRUCTURE AND SERVICES

## 3.4.1 Water Supply

Water supply for poultry production (drinking water, cooling and cleaning) will be provided via a connection to the existing Murrumbidgee Irrigation (MI) Wah Wah Channel to the south of the proposed farms which currently supplies the property with irrigation water. Water from the pipeline will be pumped from the channel into the proposed 120ML above ground storage dam to be constructed to the south of Farm 1. Water from this dam will be pumped to the water storage tanks on each farm, for treatment (filtration and chlorine dosing) and storage prior to use on the sheds.

Based on the operation of similar sized farms within the region, the proposed water demand for the 2 broiler farms is expected to be a maximum of 260ML / Year. The applicant has obtained a high security license for 260ML from Murrumbidgee Irrigation to supply the proposed farms.

Water supply for the proposed managers residences and staff amenities will be provided by rain water tanks which can be topped up by tanker as required.

## 3.4.2 Sewerage Treatment

Standard onsite septic systems will be installed for the treatment and disposal of sewerage from the staff and the managers residences. The Applicant will be required to obtain approval from Council under Section 68 of the *Local Government Act 1993* for the installation of the septic systems.

## 3.4.3 Electricity

In accordance with the Applicant's sustainability policy and in response to market demand for consideration of greenhouse gas reduction in food production, each farm is now proposed to be serviced by a 2.1MV solar farm. The solar farm will include tracking panels linked to a 2.5MW storage battery on each farm. The broiler farms, manager residences and supporting infrastructure will be run solely off the solar power, with no connection to the grid required.

Back up diesel generators will be provided at the each of the solar farm sites to cater for prolonged periods of inclement weather (low sunlight) or emergency situations. Modelling undertaken by the supplier using local weather data indicates that the generators are expected to be run for a maximum of 166 hours per year.

## 3.4.4 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. 8 x 7500L LPG gas tanks will be installed on each of the farms with a combined total storage capacity of 120,000L on the greater site. The LPG will be transported to the site by tanker trucks via Mid-Western Highway on an 'as required' basis.

## 3.4.5 Stormwater Management

Stormwater runoff from the shed roofs and other impervious areas will be directed to swales running between and away from the sheds. As per the approved development, stormwater retention basins will be provided to ensure there is no nuisance associated with post development flows.

Stormwater runoff generated from the proposed developed is captured in a perimeter swale drain that directs runoff to the retention dams for both Farm 1 and Farm 2. Each Farm is provided with 2 retention dams with a total capacity of 27ML, which is capable of capturing the 1 in 100 year, 72 hour storm event (requiring 23,944m$^3$) of storage.

Runoff from outside the proposed development footprint is diverted away from the site and the retention dam via a combined swale / bund bank. This ensures the retention dam is only capturing runoff from the proposed development footprint. Due to the size of surrounding agricultural paddocks and separation to points of discharge, the minor diversions of stormwater around the development footprint will have negligible impact on the downstream receiving environment.

The stormwater retention basins are shown on the development plans included in **Appendix 1**. Updated stormwater retention calculations have been prepared by Lance Ryan Consulting Engineers (LCRE) and are included as **Appendix 3**.

With respect to stormwater quality, all sheds are constructed on an elevated pad and concrete slab and surrounded by a waterproof concrete nib wall at the base of the insulated panel wall. As such internal shed areas are entirely separated from interaction with stormwater or roof water. The water is therefore expected to be of high quality, similar to the

quality of water runoff from the surrounding area, and as such not capable of generating issues of water contamination in receiving surface water or groundwater environments.

Given the controlled environment in which the proposed poultry development will operate, along with the approval and licensing conditions it will need to comply with, the proposed farm will pose a minimal risk with respect to stormwater quality.

## 3.5 CAPITAL INVESTMENT VALUE

Quanto Pty Ltd has been engaged to calculate the Capital Investment Value (CIV) Report for the revised project which is included as **Appendix 4**. As outlined in the report, the revised CIV for the project is $54,572,100 Inclusive of GST.

## 3.6 EMPLOYMENT

Each farm will be overseen by 3 on-site managers and 4 full time staff per farm, thereby creating a total of 14 full time positions. Contract staff are also used to assist with placement of day old chicks, clean out and set up the sheds in between batches.

## 3.7 PROJECT STAGING

Staging of the project is no longer required or proposed by the Applicant.

## 3.8 CONSOLIDATION OF LAND

As the proposed farms are wholly contained within a single lot with buildings no longer straddling the property boundaries.

## 3.9 CONDITIONS TO BE MODIFIED

| CONDITION | REQUIRED AMENDMENTS | JUSTIFICATION |
|---|---|---|
| Staging of Development<br>A6 | Condition to be deleted. | The modelling presented in the Odour and Dust Impact Assessment (**Appendix 8**), considers the modified operations and has been performed in accordance with the Approved Methods. The modelling indicates that the proposed development would not lead to any exceedances of the odour criterion (5 ou) at the nearest sensitive locations.<br>In addition, it is noted that the modified development has a similar, odour footprint compared to Stage 1 of the approved development, and would have a substantially smaller footprint compared Stage 2, which is no longer proposed.<br>As the development will no longer be staged and compliance with the relevant odour criteria has been demonstrated, the removal of Condition A6 is required. |
| Farm Operations – A7 | Removal of A7 (a) Requiring Ventilation Stacks to be fitted to the sheds. | Due to the reduction to the total bird numbers on the site, non-conventional ventilation stacks are no longer required to achieve compliance with the Odour Impact criteria. As such, the proposed sheds will adopt the industry standards tunnel ventilation system. |
| Odour Emissions – B2 | Removal of the requirement for an Air Quality Impact Assessment prior | As outlined above (Condition A6) the development will no longer be staged and compliance with the relevant |

| CONDITION | REQUIRED AMENDMENTS | JUSTIFICATION |
|---|---|---|
| | to commencement of works on Stage 2. | odour criteria has been demonstrated. As such, removal of Condition B2 is required. |
| Operational Noise Limits<br>B14 | Updated Table 2 to reference a Day Criteria of 40dB(A) as calculated in accordance with the updated NPfI. | Advitech was re-engaged by PSA Consulting to prepare an updated NIA for the modified project. The NIA has been prepared in accordance with the updated *Noise Policy for Industry* (NPfI) and presents the updated methodology and results based on the modifications to the planned development and new assessment procedures specified in the NPfI. The Project Noise Trigger level calculated for the Day period is now 40dB(A) as opposed to 35db(a) and as such, Table 2 requires updating. It is noted that the modified project continues to comply with the lesser 35db(A) criteria. |
| Asset Protection Zones<br>B48 | Condition to be amended to reference the following APZs:<br>• Farm 1 dwellings = 20m<br>• Farm 2 dwelling = 22m<br>• Solar Arrays = 20m<br>• All other buildings = 20m<br>• Property access road = 6m | As part of the modified development, the Applicant has engaged Integrated Consulting to prepare a Bushfire Assessment Report (BFAR) which is included as **Appendix 13**. The BFAR has also been prepared in accordance with *Planning for Bush Fire Protection 2019* (PBP) published by the NSW Rural Fire Service.<br>This BFAR recommends that project will be carried out in accordance with a number of Bush Fire Protection Measures (BFPM) to ensure it is best protected from the effects of bushfire in accordance with the requirements of PBP and other best practice guidelines. These are included in the revised Mitigation and Management Measures.<br>With respect to Asset Protection Zones, the BFAR recommends the following APZ be adopted for the project:<br>• Farm 1 dwellings = 20m<br>• Farm 2 dwelling = 22m<br>• Solar Arrays = 20m<br>• All other buildings = 20m<br>• Property access road = 6m<br>Accordingly, it is recommended that Condition B48 to reference these APZ. |
| Appendix A | Updates of Approved Documents and Plans. | Update Appendix A is required to reference the Modified Development Plans. |
| Appendix C | Consequential Amendments of the Approved Management and Mitigation Measures | Update Appendix c is required to reference the Modified Mitigation and Management Measures. |

## 3.10 MODIFICATION TYPE

### 3.10.1 Section 4.55(2) Modification

This modification application is submitted in accordance with Section 4.55 (2) of the EP&A Act which indicates that a consent authority may modify the consent if—

> *(a) it is satisfied that the development to which the consent as modified relates is substantially the same development as the development for which consent was originally granted and before that consent as originally granted was modified (if at all), and*
>
> *(b) it has consulted with the relevant Minister, public authority or approval body (within the meaning of Division 4.8) in respect of a condition imposed as a requirement of a concurrence to the consent or in accordance with the general terms of an approval proposed to be granted by the approval body and that Minister, authority or body has not, within 21 days after being consulted, objected to the modification of that consent, and*
>
> *(c) it has notified the application in accordance with—*
>
> *(i) the regulations, if the regulations so require, or*
>
> *(ii) a development control plan, if the consent authority is a council that has made a development control plan that requires the notification or advertising of applications for modification of a development consent, and*
>
> *(d) it has considered any submissions made concerning the proposed modification within the period prescribed by the regulations or provided by the development control plan, as the case may be.*

### 3.10.2 Substantially the Same

The proposed development has been assessed against the relevant matters for consideration pursuant to Section 4.55 (2) of the EP&A Act. In particular, a consent authority may modify a Development Consent if it is satisfied that the development to which the consent as modified relates is substantially the same development as the development for which consent was originally granted. In this regard, the proposed modification is substantially the same as the approval as:

- The 'essence' of the development as approved under the Consent is a large-scale poultry farm complex with ancillary works. In that sense, the modification will not alter the essence of the development – it remains a large-scale poultry farm complex with ancillary works.
- Stage 1 as approved by the Consent will provide for a total of 60 poultry sheds, accommodating a maximum of 3.6 million broilers at any time, as well as various ancillary works. The modification will provide for a total of 40 poultry sheds, accommodating a maximum of 2.23 million broilers at any time, as well as various ancillary works.
- Stage 2 as approved by the Consent may possibly provide for an additional 40 sheds, totalling 100, and a maximum of 6 million broilers. While there has been a large reduction in the total number of sheds and birds, the original consent needs to be considered in full, and in its proper context and in this regard, it is considered unlikely that Stage 2 will eventuate. This is because before Stage 2 can proceed, the proponent must provide an odour assessment which satisfies the Planning Secretary and EPA that compliance with relevant odour criteria will be achieved. Based on the submitted material, the EPA's previous assessment and the Applicant's recent odour modelling, approval of Stage 2 is very unlikely.
- As Stage 2 being subject to a further approval process, the Consent should be regarded as for only Stage 1, unless and until Stage 2 is approved (which is unlikely). Thus, the correct assessment for the purposes of the 'substantially the same' test is not the modification as against Stage 2; rather, it is to compare the modification against Stage 1, which has an option to apply for further approval (Stage 2) which is unlikely to be granted.
- The most significant impacts of the development as approved under the Consent related to odour and air quality impacts, truck movements, and potential environmental impacts (soil impacts, stormwater and effluent control, composting, noise, etc). As demonstrated in this report and the supporting documentation, the modification will either maintain similar impacts as would occur in Stage 1, or in fact reduce the impacts in many instances.

# 4 STATUTORY CONTEXT

A brief overview of the key statutory requirements for the project are presented in Table 2 below.

**Table 2: Statutory Requirements**

| MATTER | GUIDANCE |
|---|---|
| **Power to Grant Consent** | In accordance with section 2.6 and Schedule 1 of the *State Environmental Planning Policy (Planning Systems) 2021*, development is declared to be State Significant Development if it is listed in Schedule 1 of the SEPP. With respect to intensive livestock agriculture, this use is listed as SSD if it has a Capital Investment Value (CIV) of more than $30 million.<br><br>Quanto Pty Ltd has been requested to prepare a Capital Investment Value (CIV) Report for the revised project which is included as **Appendix 4**. As outlined in the report, the revised CIV for the project is $54,572,100 Inclusive of GST, and as such, the project as modified remains State Significant Development.<br><br>Under clause 4.5 of the EPA Act 1979, the Consent Authority for the SSD (including any modifications) is the Minister or the Independent Planning Commission. |
| **Permissibility** | Under the Carrathool Local Environmental Plan 2012 (LEP), the subject site is located in the RU1 Primary Production Zone.<br><br>The proposed development falls under Carrathool LEP definition of intensive livestock agriculture which means "*the keeping or breeding, for commercial purposes, of cattle, poultry, pigs, goats, horses, sheep or other livestock, and includes any of the following – dairies (restricted), feedlots, pig farms, poultry farms; but does not include extensive agriculture, aquaculture or the operation of facilities for drought or similar emergency relief".*<br><br>In accordance with the Land Use Table of the Carrathool LEP, development of an intensive livestock agriculture located in the Primary Production Zone (RU1) is permitted with consent.<br><br>There are no aspects of the development that classified as prohibited development. |
| **Other Approvals** | **Protection of the Environment Operations Act 1997:** The modified development is 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 and accordingly an Environment Protection Licence (EPL) is still necessary and will be applied for and issued by the Environment Protection Authority (EPA) under the *Protection of the Environment Operations Act 1997* prior to commencement of the use.<br><br>**Roads Act 1993:** Consistent with the current approvals, the approved intersection with the Mid Western Highway (Classified Road) requires a Works Authorisation Deed (WAD) will be required from TfNSW and a s.138 approval from Cowra Council (including concurrence from TfNSW).<br><br>**Local Government Act 1993:** As per the current approval, the proposed dwellings will be installed in accordance with Division 4 of the *Local Government (Manufactured Home Estates, Caravan Parks, Camping Grounds and Moveable Dwellings) Regulation 2005,* will be provided with a 20,000L rain water tank and an on-site septic system (1 per dwelling). The Applicant will be required to obtain |

| MATTER | GUIDANCE |
|---|---|
| | approval from Council under section 68 of the *Local Government Act 1993* for the installation of the farm manager accommodation and associated septic system.<br>Similarly, the Applicant will be required to obtain approval from Council under section 68 of the *Local Government Act 1993* for the installation of septic systems for staff amenities. |
| **Pre-conditions to exercising the power to grant consent** | None Identified. |
| **Mandatory matters for consideration**<br>(See Table 3 below). | • Section 1.3 of the EP&A Act 1979<br>• Section 4.55 (2) of the EP&A Act 1979<br>• Section 4.15 of the EP&A Act 1979<br>• *State Environmental Planning Policy (Resilience and Hazards) 2021 - Chapter 3 Part 3 s3.12*<br>• *State Environmental Planning Policy (Resilience and Hazards) 2021 - Chapter 4 s4.6*<br>• *State Environmental Planning Policy (Transport and Infrastructure) 2021 Chapter 2 Part 2.3 Division 17* |

**Table 3: Mandatory matters for Consideration**

| STATUTORY REFERENCE | MANDATORY CONSIDERATION | SECTION IN EIS |
|---|---|---|
| **Consideration under the Act and Regulation** | | |
| **Section 1.3** | Relevant objectives of the Act<br>• to promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources,<br>• to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment,<br>• to promote the orderly and economic use and development of land,<br>• to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats,<br>• to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage), | All |
| **Section 4.15** | **Relevant environmental planning instruments:**<br>• *State Environmental Planning Policy (Resilience and Hazards) 2021 - Chapter 3 Part 3 s3.12*<br>• *State Environmental Planning Policy (Resilience and Hazards) 2021 - Chapter 4 s4.6* | 6.1 |

| STATUTORY REFERENCE | MANDATORY CONSIDERATION | SECTION IN EIS |
|---|---|---|
| | • *State Environmental Planning Policy (Transport and Infrastructure) 2021 Chapter 2 Part 2.3 Division 17*<br>• Carrathool LEP 2012<br>**The likely impacts of that development:**<br>• including environmental impacts on both the natural and built environments, and social and economic impacts in the locality<br>• the suitability of the site for the development<br>• the public interest | 6.<br>8. |
| **Mandatory Relevant Considerations under EPI** | | |
| ***State Environmental Planning Policy (Resilience and Hazards) 2021 - Chapter 3 Part 3 s3.12*** | Consideration of the findings of the Preliminary Hazard Analysis as the development is considered potentially hazardous. | 6.1.1<br>6.13 |
| ***State Environmental Planning Policy (Resilience and Hazards) 2021 - Chapter 4 s4.6*** | Consideration of the whether the land is contaminated, and (b) if the land is contaminated, it is satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation) for the purpose for which the development is proposed to be carried out. | 6.1.1 |
| ***State Environmental Planning Policy (Transport and Infrastructure) 2021 Chapter 2 Part 2.3 Division 17*** | Consideration of the safety, efficiency and ongoing operation of the classified road. | 6.8 |
| ***Consideration under other Legislation*** | | |
| **EPBC Act 1999** | The potential for significant impacts on Matters of National Environmental Significance (MNES). | 6.5 |

# 5 ENGAGEMENT

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

## 5.1 CONSULTATION

### 5.1.1 Department of Planning

Following acquisition of the site, the Applicant met with DPE on 18 July 2022 to undertake preliminary discussions with respect to the potential modification of the SSD-8036. On 6 October 2022, the Applicant provided formal written correspondence to the DPE to confirm the modification pathway and identify the information necessary to support the application.

A response was provided confirming that the proposed modification would follow the s4.5.5(2) pathway and confirming the documentation required. This Modification Report has been prepared in accordance with the feedback provided by DPE.

### 5.1.2 Environmental Protection Agency

On 21 September 2022, the Applicant met with the Local Environmental Protection Agency (EPA) officers, Jason Price and Darren Wallet to discuss the proposed modification of the project and in particular the change to the farm operations, adoption of standard shed designs, and the associated odour modelling.

The EPA were supportive of the proposed reduction in overall scale of the project and the adoption of modelling assumptions consistent with the assessment of similar farms within the region.

### 5.1.3 Carrathool Shire Council

The applicant consulted with Jason Nicholson, Manager Building and Regulatory Services at Carrathool Shire Council to discuss the proposed modifications to the approved farms. The Applicant was advised that any application should have regard to the matters previously raised by Council in relation to the original approval.

### 5.1.4 Community Consultation

The Applicant has undertaken informal discussions with the adjoining land owner who owns the immediately properties to the south, north and east of the site regarding the modification.

As there was only 2 submissions received for the SSD, and the proposed modification involves a substantial reduction in the scale of the operation (compared to that which was approved), broader community consultation with the surrounding community has not been undertaken at this stage. It is understood that the modification application will be exhibited for a period of 14 Days where members of the public will be invited to make further comments.

## 5.2 PUBLIC NOTIFICATION

The Department is required to exhibit an application seeking to modify an SSD development consent under either section 4.55(2) or section 4.56(1) of the EP&A Act, for at least 14 days prior to completing its assessment of the application. This is to give the community an opportunity to read the modification report and make a submission on the merits of the modified project.

# 6 ASSESSMENT OF IMPACTS

## 6.1 ENVIRONMENTAL PLANNING INSTRUMENTS

### 6.1.1 SEPPS

The following table identifies the applicability and implications of the SEPPs on the project.

**Table 4: SEPP Applicability**

| STATE ENVIRONMENTAL PLANNING POLICY (PLANNING SYSTEMS) 2021 | |
|---|---|
| **CHAPTERS** | **APPLICABILITY AND ASSESSMENT** |
| **Chapter 2 - State and Regional Development** | **Applies.** In accordance with section 2.6 and Schedule 1 of the *State Environmental Planning Policy (Planning Systems) 2021*, development is declared to be State Significant Development if it is listed in Schedule 1 of the SEPP. With respect to intensive livestock agriculture, this use is listed as SSD if it has a Capital Investment Value (CIV) of more than $30 million.<br><br>Quanto Pty Ltd has been requested to prepare a Capital Investment Value (CIV) Report for the revised project which is included as **Appendix 4**. As outlined in the report, the revised CIV for the project is $54,572,100 Inclusive of GST, and as such, the project as modified remains State Significant Development. |
| **Chapter 3 - Aboriginal Land** | **N/A.** The site is not located on land owned by a Local Aboriginal Land Council. |
| **Chapter 4 - Concurrences and Consents** | **N/A.** There are no concurrences of consents described in Chapter 4 applicable to the site. |

| STATE ENVIRONMENTAL PLANNING POLICY (BIODIVERSITY AND CONSERVATION) 2021 | |
|---|---|
| **CHAPTERS** | **APPLICABILITY AND ASSESSMENT** |
| **Chapter 2 - Vegetation in Non-Rural Areas** | **N/A.** Chapter 2 does not apply to the Carrathool Shire Council Area. |
| **Chapter 3 - Koala Habitat Protection 2020** | **N/A.** Chapter 2 does not apply to the Carrathool Shire Council Area. |
| **Chapter 4 - Koala Habitat Protection 2021** | **N/A.** Chapter 3 does not apply to the Carrathool Shire Council Area. |
| **Chapter 5 – River Murray Lands** | **N/A.** The chapter does not apply to the Carrathool Shire Council Area. |
| **Chapter 6 – Water Catchments** | **N/A.** The site is not located within a nominated water catchment. |
| **Chapter 13 – Strategic Conservation Planning** | **N/A.** The site is not located on the nominated Land Application maps. |

| STATE ENVIRONMENTAL PLANNING POLICY (RESILIENCE AND HAZARDS) 2021 | |
|---|---|
| **CHAPTERS** | **APPLICABILITY AND ASSESSMENT** |
| **Chapter 2 - Coastal Management** | **N/A.** The site is not located in the Coastal Zone. |
| **Chapter 3 - Hazardous and Offensive Development** | **Applies.** As the proposed volumes and storage locations of the LPG is being modified, a revised Screening Assessment was undertaken by Lote Consulting and is submitted as part of this application as **Appendix 11**. |

| | |
|---|---|
| | The proposed poultry farms require Liquified Petroleum Gas (LPG) in order to provide heating for the birds during the cooler months. LPG gas is stored within tanks on each of the farms. LPG is described as a Dangerous Good and as such, Chapter 3 of the SEPP (Resilience and Hazards) 2021 applies. Across the 2 poultry farms, a total of 120,000L (66,000 kg) are proposed to be stored which exceeds the SEPP screening threshold of 10,000 kg. Accordingly, the Screening Assessment recommends a PHA be prepared.<br><br>An updated PHA has been prepared based on the proposed storage of LPG on the 2 poultry farms in accordance with the Hazardous Industry Planning Advisory paper (HIPAP) No. 4(2) and No. 6(3). The assessment requires the preparation of a hazard identification table to identify potential hazards that may be present on the site as a result of the operations and storage of LPG. Incident scenarios where then development that may result in offsite impacts.<br><br>The identified incidents where then carried forward for consequence analysis and were assessed in detail to determine impact distances using the Gexcon Effects (15) software. The analysis shown that only the Boiling Liquid Expanding Vapour Explosion (BLEVE) scenarios had the potential for offsite impact and as such were subject to frequency analysis.<br><br>The frequency analysis showed that the fatality risk was well within the acceptable risk criteria and as such, the site would only be classified as potentially hazardous and would be permitted within the RU1 zoning. |
| **Chapter 4 - Remediation of Land** | **Applies.** The site has been historically cleared and used for cropping and as such, is not expected to be at high risk from contamination.<br><br>The original EIS included two site contamination assessments. The Phase 1 assessment concluded a moderate to high risk of contamination associated the sites historical agricultural uses, identified waste stockpiles, operation of on-site waste (effluent), machinery areas and hazardous materials in existing buildings.<br><br>In accordance with the now superseded SEPP 55, the original EIS included a Phase 2 Detailed Investigation which consisted of 260 boreholes and 92 samples in a grid across the site and in the locations identified by the Phase 1 assessment.<br><br>The assessment concluded the site is suitable for the proposed agricultural use subject to engaging qualified personnel to service the septic systems, undertake a hazardous materials survey of any structures prior to demolition and classify excavated material in accordance with (ENM Order 2014) (EPA Waste Classification Guideline).<br><br>The modified farm is located in the previously assessed areas of the site and as such, it remains suitable for the development and meets the requirements of 4.6(1) of the SEPP.<br><br>Condition B59 of the current consent requires the preparation of an unexpected finds protocol for contaminated material to ensure it is appropriately managed if encountered. |

| STATE ENVIRONMENTAL PLANNING POLICY (TRANPORT AND INFRASTRUCTURE) 2021 | |
|---|---|
| **CHAPTERS** | **APPLICABILITY AND ASSESSMENT** |
| **Chapter 2 - Infrastructure** | **Applicable.**<br>**Division 17:** As the modified development proposes access onto a Classified Road, Division 17 of the SEPP is applicable.<br>However, as the existing approved access point and intersection will be adopted and is not being modified, it is considered that the modification meets the assessment requirements outlined under s2.119 (2) (a) and (b). |
| **Chapter 3 - Educational Establishments and Childcare Facilities** | **N/A.** The project does not involve an Educational Establishment of Childcare Facility. |
| **Chapter 4 - Major Infrastructure Corridors** | **N/A.** The site is not within or adjacent to a major infrastructure corridor. |
| **Chapter 5 - Three Ports-Port Botany, Port Kembla and Newcastle** | **N/A.** The site is not located on the within the relevant port areas. |

| STATE ENVIRONMENTAL PLANNING POLICY (INDUSTRY AND EMPLOYMENT) 2021 | |
|---|---|
| **CHAPTERS** | **APPLICABILITY AND ASSESSMENT** |
| **Chapter 2 - Western Sydney Employment Area** | **N/A.** The site is not located on the within Western Sydney Employment Area. |
| **Chapter 3 - Advertising and Signage** | **N/A.** No advertising or signage under Chapter 3 is proposed as part of this application. |

| STATE ENVIRONMENTAL PLANNING POLICY (RESOURCES AND ENERGY) 2021 | |
|---|---|
| **CHAPTERS** | **APPLICABILITY** |
| **Chapter 2 - Mining, Petroleum Production and Extractive Industries** | **N/A.** The project does not involve mining or extractive industry. |
| **Chapter 3 - Extractive Industries** | **N/A.** The project does not involve mining or extractive industry. |

| STATE ENVIRONMENTAL PLANNING POLICY (PRIMARY PRODUCTION) 2021 | |
|---|---|
| **CHAPTERS** | **APPLICABILITY** |
| **Chapter 2 - Primary Production and Rural Development** | **N/A.** The project does not involve primary production or rural development regulated by Chapter 2. |
| **Chapter 3 - Central Coast Plateau Areas** | **N/A.** The project is not located in the central Coast Plateau Area. |

| STATE ENVIRONMENTAL PLANNING POLICY (PRECINCTS – EASTERN HARBOUR CITY) 2021 | |
|---|---|
| **CHAPTERS** | **APPLICABILITY** |
| **All** | **N/A.** The project is not located in a listed State Significant Precinct. |

| STATE ENVIRONMENTAL PLANNING POLICY (PRECINCTS – CENTRAL RIVER CITY) 2021 | |
|---|---|
| **CHAPTERS** | **APPLICABILITY** |
| **All** | **N/A.** The project is not located in a listed State Significant Precinct. |

| STATE ENVIRONMENTAL PLANNING POLICY (PRECINCTS – WESTERN PARKLAND CITY) 2021 | |
|---|---|
| **CHAPTERS** | **APPLICABILITY** |
| **All** | **N/A.** The project is not located in a listed State Significant Precinct. |

| STATE ENVIRONEMENTAL PLANNING POLICY (PRECINCTS - REGIONAL) 2021 | |
|---|---|
| **CHAPTERS** | **APPLICABILITY** |
| **All** | **N/A.** The project is not located in a listed State Significant Precinct. |

### 6.1.2 LEP

#### 6.1.2.1 Zoning and Permissibility

Under the *Carrathool Local Environmental Plan 2012* (LEP), the subject site is located in the RU1 Primary Production Zone.

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

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

The objectives for the RU1 Primary Production Zone 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.*
- *To facilitate farm adjustments.*
- *To enable agricultural support facilities to be carried out on land within the zone in a manner which does not significantly reduce the agricultural and horticultural production potential of land in the locality.*
- *To encourage eco-tourist facilities and tourist and visitor accommodation that minimise any adverse effect on primary industry production and scenic amenity of the area.*

The site is located within an active agricultural area and surrounded by a number of other intensive livestock agriculture uses. The modified poultry farm is considered to be complementary to the surrounding land uses and zones. Further, the development of farms will support expansion of primary industry enterprises across the region and accordingly maintains alignment with the zone objectives.

#### 6.1.2.2 Principal Development Standards

There are no applicable principal development standards identified in Part 4 of the LEP applicable to the development.

#### 6.1.2.3 Other Clauses

Other assessment provisions considered include in Table 5 below.

**Table 5: Carrathool LEP 2012 Assessment Provisions**

| PROVISION | APPLICABILITY AND RESPONSE |
|---|---|
| **MISCELLANEOUS PROVISIONS** | |
| 5.1 Relevant acquisition authority | Not Applicable. |
| 5.2 Classification and reclassification of public land | Not Applicable. |
| 5.3 Development near zone boundaries | Not Applicable. The subject site is not located near zone boundaries. |
| 5.4 Controls relating to miscellaneous permissible uses | Not Applicable. The stated miscellaneous permissible uses are not relevant to the proposed development. |
| 5.6 Architectural roof features | Not Applicable. |
| 5.7 Development below mean high water mark | Not Applicable. |
| 5.8 Conservation of fire alarms | Not Applicable. |
| 5.10 Heritage conservation | Not Applicable. The subject site is not identified as a heritage conservation area. |
| 5.11 Bush fire hazard reduction | Complies.<br>Refer to Section 6.14 and the Bushfire Hazard Assessment included as **Appendix 13** and the which demonstrates that the development is compliant with *Planning for Bush Fire Protection 2019*. |
| 5.12 Infrastructure development and use of existing buildings of the Crown | Not Applicable. |
| 5.13 Eco-tourist facilities | Not Applicable. No eco-tourist facilities are involved in this DA. |
| 5.14 Siding Spring Observatory – maintaining dark sky | Not Applicable. |
| 5.15 Defence communications facility | Not Applicable. |
| 5.16 Subdivision of, or dwellings on, land in certain rural, residential or environment protection zones | Not Applicable. Land within environmental protection zones are not involved in this DA. |

| PROVISION | APPLICABILITY AND RESPONSE |
|---|---|
| 5.17 Artificial waterbodies in environmentally sensitive areas in areas of operation of irrigation corporations | Not Applicable. The proposed on site water storage dam is not located within an environmentally sensitive area. |
| 5.18 Intensive livestock agriculture | |
| (3) In determining whether or not to grant development consent under this Plan to development for the purpose of intensive livestock agriculture, the consent authority must take the following into consideration—<br>(a) the adequacy of the information provided in the statement of environmental effects or (if the development is designated development) the environmental impact statement accompanying the development application,<br>(b) the potential for odours to adversely impact on the amenity of residences or other land uses within the vicinity of the site,<br>(c) the potential for the pollution of surface water and ground water,<br>(d) the potential for the degradation of soils,<br>(e) the measures proposed to mitigate any potential adverse impacts,<br>(f) the suitability of the site in the circumstances,<br>(g) whether the applicant has indicated an intention to comply with relevant industry codes of practice for the health and welfare of animals,<br>(h) the consistency of the proposal with, and any reasons for departing from, the environmental planning and assessment aspects of any guidelines for the establishment and operation of relevant types of intensive livestock agriculture published, and made available to the consent authority, by the Department of Primary Industries (within the Department of Industry) and approved by the Planning Secretary. | Complies.<br>This Modification Assessment Report provides a detailed assessment of the proposed development and addresses all relevant matters raised in original EIS as well as the LEP. This report provides sufficient information regarding the project to enable DPE to undertake a thorough assessment of the modification.<br>A detailed odour and dust assessment for the modified project has been prepared and is included in **Appendix 8**. The modelling undertaken shows that the development will comply with the applicable odour impact criterion at the nearest sensitive receptors.<br>In addition, it is noted that the modified development has a similar, odour footprint compared to Stage 1 of the approved development, and would have a substantially smaller footprint compared Stage 2, which is no longer proposed.<br>While not part of the original approval, the Applicant has also elected to construct Vegetated Environmental Buffers (VEB) around each farm provide additional dust, and odour reductions and visual screening.<br>Stormwater runoff from the sheds and other impervious areas will be directed to swales running between and away from the shed. As per the approved development, stormwater retention basins will be provided to ensure there is no nuisance associated with post development flows.<br>With respect to stormwater quality, all sheds are constructed on an elevated pad and concrete slab and surrounded by a waterproof blockwork at the base of the insulated panel wall. As such internal shed areas are entirely separated from interaction with stormwater or roof water. The water is therefore expected to be of high quality, similar to the quality of water runoff from the surrounding area, and as such will have a minimal risk of contamination for down stratum waterways or water dependent ecosystems.<br>The project has a reduced footprint compared to the approved development and is located within existing cultivation area. The site will be constructed and operated in manner to ensure there is minimal impact on the surrounding land which can continue to be used for extensive agriculture.<br>An updated list of measures to mitigate the potential risks of the proposed development is provided in Section 7.<br>The site is located within an established rural area containing a number of intensive livestock facilities and significant agricultural operations. The existing approval (Stage 2) allows |

| PROVISION | APPLICABILITY AND RESPONSE |
|---|---|
| | for the construction of 5 poultry farms on the site with 100 sheds and a maximum population of 6 Million birds, demonstrating that the site is inherently suitable for poultry production. As demonstrated in this Modification Report, the impacts associated with reduced scale of the development are considerably less than the approved development and can be predicted with a much higher degree of certainty through the adoption of standard sheds and operating systems, commonly used in the region. As such, the site is considered to be inherently suitable for the modified (reduced) development.<br>A detailed overview of the management of the proposed farm in regard to animal health and welfare can be seen in Sections 4.15 of the original EIS. The farm will be contractually required to operate in accordance with the relevant industry codes.<br>The proposed design and operation of the poultry farm accords with the relevant guidelines. |
| (4) Despite any other provision of this Plan, development for the purpose of intensive livestock agriculture may be carried out without development consent if—<br>(a) the development is of a type specified in subclause (5), and<br>(b) the consent authority is satisfied that the development will not be located—<br>(i) in an environmentally sensitive area, or<br>(ii) within 100 metres of a natural watercourse, or<br>(iii) in a drinking water catchment, or<br>(iv) within 500 metres of any dwelling that is not associated with the development, or a residential zone, or<br>(v) if the development is a poultry farm—within 500 metres of another poultry farm. | Not Applicable.<br>The proposed development is 'permitted with consent'. |
| (5) The following types of development are specified for the purposes of subclause (4)—<br>(a) a cattle feedlot having a capacity to accommodate fewer than 50 head of cattle,<br>(b) a goat feedlot having a capacity to accommodate fewer than 200 goats,<br>(c) a sheep feedlot having a capacity to accommodate fewer than 200 sheep,<br>(d) a pig farm having a capacity to accommodate fewer than 20 breeding sows, or fewer than 200 pigs (of which fewer than 20 may be breeding sows),<br>(e) a dairy (restricted) having a capacity to accommodate fewer than 50 dairy cows, | Not Applicable.<br>The proposed development is 'permitted with consent'. |

| PROVISION | APPLICABILITY AND RESPONSE |
|---|---|
| (f) a poultry farm having a capacity to accommodate fewer than 1,000 birds for meat or egg production (or both). | |
| (6) For the avoidance of doubt, subclause (4) does not apply to development that is prohibited or that may be carried out without development consent under this or any other environmental planning instrument. | Not Applicable.<br>The proposed development is 'permitted with consent'. |
| 5.19 Pond-based, tank-based and oyster aquaculture | Not Applicable.<br>No pond-based, tank-based and oyster aquaculture is not involved in this DA. |
| 5.20 Standards that cannot be used to refuse consent – playing and performing music | Not Applicable.<br>Playing and performing music is not involved in this DA. |
| **ADDITIONAL LOCAL PROVISIONS** | |
| 6.1 Earthworks | Complies.<br>The proposed development will require some earthworks to create a level building pad for the poultry sheds, access road, supporting infrastructure and the water storage dam. The extent of earthworks is documents on the Civil Engineering Plans included in **Appendix 2**.<br>Fill for the construction of the poultry farm will be extracted from the water storage dam and retention basins to be constructed adjacent to the poultry farms.<br>Stormwater runoff from the sheds and other impervious areas will be directed to swales running between and away from the shed. As per the approved development, stormwater retention basins will be provided to ensure there is no nuisance associated with post development flows.<br>The stormwater retention basins are shown on the development plans included in **Appendix 2**. Updated stormwater retention calculations have been prepared by Lance Ryan Consulting Engineers (LCRE) and are included as **Appendix 3**.<br>Stormwater runoff generated from the proposed developed is captured in a perimeter swale drain that directs runoff to the retention dams for both Farm 1 and Farm 2. Each Farm is provided with 2 retention dams with a total capacity of 27ML, which is capable of capturing the 1 in 100 year, 72 hour storm event (requiring 23,944$m^3$) of storage.<br>Runoff from outside the proposed development footprint is diverted away from the site and the retention dam via a combined swale / bund bank. This ensures the retention dam is only capturing runoff from the proposed development footprint. Due to the size of surrounding agricultural paddocks and separation to points of discharge, the minor diversions of |

| PROVISION | APPLICABILITY AND RESPONSE |
|---|---|
| | stormwater around the development footprint will have negligible impact on the downstream receiving environment.<br><br>As required by Condition B26 of the current approval, prior to the commencement of construction, suitable erosion and sediment control measures will be installed and maintained on-site, in accordance with the relevant requirements in the latest version of the Managing Urban Stormwater: Soils and Construction Vol 1. (Landcom 2004, the Blue Book) and the Erosion and Sediment Control Plan included in the CEMP also required by condition C1. |
| 6.2 Flood planning | Not Applicable. The subject site does not impact on flood prone land. |
| 6.3 Terrestrial biodiversity | Not Applicable. The subject site does not impact on mapped areas of terrestrial biodiversity. |
| 6.4 Groundwater vulnerability | Not Applicable. The site is not located in area subject to groundwater vulnerability. |
| 6.5 Riparian land and watercourses | Not Applicable. The proposed development does not impact on riparian land and watercourses. |
| 6.6 Wetlands | Not Applicable. The proposed development does not impact on riparian land and watercourses. |
| 6.7 Essential services | Not Applicable. The site is not located within the RU5, R5 or IN1 Zone. Regardless, all necessary infrastructure and services can be provided to the site. |
| 6.8 Location of sex services premises | Not Applicable. The proposed development does not involve a sex services premise. |

### 6.1.3 Riverina Murray Regional Plan 2036

The *Riverina Murray Regional Plan 2036* is a 20 year blueprint for the future for the Riverina Murray Region prepared by the NSW State Government. The vision for the region contained in the plan includes the following statements which align with the core objectives of the proposed development:

- *Identifying and protecting agricultural land preserves the region's fresh produce sectors and their potential to keep growing.*

*The Riverina Murray is a leading and highly diversified economy, with growing local job opportunities and sustainable communities. The region is acknowledged as one of Australia's premium agricultural areas. This agricultural base benefits from a well-connected export conduit to Melbourne and ports in NSW.*

The plan also provides a Local Government priorities for Carrathool including to:

> *Support the sector through diversification and more intensive production of crops, including cotton, nuts and olives, as well as poultry.*

The proposed broiler farms seeks to continue to expand poultry production within the Shire. The modified development closely aligns with the vision for the region as it will support ongoing growth in the agricultural sector, provide

employment opportunities for the local areas which in turn will support the local economy and strengthen the region's sustainable communities.

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

- Goal 1 – A growing and diverse economy
- Goal 2 – A healthy environment with pristine waterways
- Goal 3 – Efficient transport and infrastructure networks
- Goal 4 – Strong, connected and healthy communities

An assessment of the proposed development's contribution towards achieving these goals is provided below.

**Table 6: Assessment of the development against the Riverina Murray Regional Plan**

| REGIONAL PLAN GOALS | PROPOSED DEVELOPMENT CONTRIBUTION |
|---|---|
| Goal 1 – A growing and diverse economy | In the Local Government Narrative, a priority sector to support the growing diverse economy is poultry. The modified development supports the regional area by continuing to expand the poultry operations, with the development of 2 new broiler farms on the site.<br>The proposed farms will supply birds to Baiada's Poultry Processing plant at Hanwood which is increasing production capacity to 2.8 million birds per week in accordance with their recent development consents. The proposed development will support the ongoing growth and stability of the regional poultry cluster and provide poultry to meet the project growth in demand for poultry products in Australia. |
| Goal 2 – A healthy environment with pristine waterways | The original and modified development has been subject to a rigorous assessment of potential environmental impacts and will be constructed and operated in a manner consistent with the applicable environmental standards.<br>The modified development adopts a sound stormwater management strategy and other environmental management and mitigations measures and is not expected to result in any unacceptable environmental impacts or affect the ecological health of any waterways or the downstream receiving environment. |
| Goal 3 – Efficient transport and infrastructure networks | The modified development can be efficiently connected to all necessary infrastructure networks that are necessary to service a poultry broiler farm. Where necessary, new connections to the networks are to be provided in accordance with the relevant standards. The site is well located to take advantage of existing major transport networks which enable transport of poultry products from the region to major national markets. |
| Goal 4 – Strong, connected and healthy communities | The proposed development will increase direct and indirect employment within the region and facilitate expansion and investment of in the broader poultry cluster. |

## 6.2 OTHER LEGISLATIVE CONSIDERATIONS

### 6.2.1 EPBC Act 1999

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) requires approval from the Commonwealth Minister for the Environment, for any actions that may have a significant impact on Matters of National

Environmental Significance (MNES). The original EIS and supporting ecological assessment identified that the larger development was unlikely to have a significant impact on MNES, largely due to the location of the farms within the existing cultivated areas of the property.

A detailed assessment of the modified development with respected to the MNES is provided in the revised Flora and Fauna Assessment in **Appendix 7**. Similar to the original assessment, the report demonstrates that the modified development is not expected to have a significant impact on any MNES and referral of the project under the EPBC Act is not required.

### 6.2.2 Biodiversity Conservation Act 2016

The Biodiversity Conservation Act 2016 (BC Act) requires that an SSD application must be accompanied by a Biodiversity Development Assessment Report (BDAR) unless the determining authority (NSW Planning in this instance) is satisfied that the modification to the approved Goolgowi Poultry Complex development (SSD-8036) will not increase the impact on biodiversity values. Wildthing Environmental Consultants have been engaged to review the proposed modification and prepare a Flora and Fauna Assessment to address the impacts of the modified proposal compared to the approved proposal. This Assessments included as **Appendix 7.**

As noted on the Flora and Fauna Assessment, the modification to the Goolgowi Poultry Complex development results in a significant reduction in the impact footprint allowing the construction of only 2 broiler farms compared to the 5 originally approved. The report demonstrates that the proposed changes will not constitute an increase in impacts (direct, indirect or prescribed) on biodiversity values that have not been assessed in the original approval and as such, a BDAR is not required to assess the impacts of the modification. The approved Goolgowi Poultry Complex development (SSD-8036) also did not require the use of the credit calculator associated with the Framework for Biodiversity Assessment (FBA) for the approved development to determine whether an offset requirement was necessary.

### 6.2.3 Roads Act 1993

The *Roads Act 1993*, Section 138 requires consent from Roads and Maritime Services for the connection of the proposed access road to a classified road being the Mid Western Highway. The proposed intersection with the Mid Western Highway was approved as part of the original SSD process and no changes to the approved layout are proposed.

## 6.3 CULTURAL HERITAGE

### 6.3.1 Previous Assessment

An Archaeological Report for Historic Heritage and Aboriginal Cultural Heritage Assessment dated 5 January 2017 was prepared by Advitech and submitted with the original EIS. For the original farm, the report concluded that there are no constraints, on Archaeological grounds, to the proposed development and that no further archaeological work or cultural heritage assessment was required.

### 6.3.2 Updated Assessment Results

Advitech were re-engaged by Agright to update the previous archaeological reporting for aboriginal cultural heritage, based on the modified development footprint.

Based on the data reviewed, the report notes that the 2016 survey can be supported in the revision of the proposed development as the original assessment covered areas critical to the predictive model and gave consideration of the 2022 footprint. In addition, the modified area is reduced and impacts on the previously cultivated areas.

During the previous survey there was a high degree of exposure and visibility for the study area due to both past and present disturbances. The intensive clearance of vegetation, ploughing, modifications for irrigation and overland inundation that has occurred within the study area has, or should have, revealed any Aboriginal objects or the likelihood of the present of any Aboriginal objects. No Aboriginal objects or items, or potential archaeological deposits, indicating the presence of an Aboriginal cultural landscape were found during the survey.

The report concludes that there are no constraints, on Archaeological grounds, to the modified development and that no further archaeological work or cultural heritage assessment is required.

### 6.3.3 Management and Mitigation Measures

As per the current management and mitigation measures, Advitech have recommended that, in case of any unexpected Aboriginal objects being located during excavation works, Aboriginal objects be added to the 'Unexpected Heritage Items Procedure'. This requirement is contained in Conditions B41 and B42 of the current consent.

## 6.4 HISTORIC HERITAGE

### 6.4.1 Previous Assessment

An Archaeological Report for Historic Heritage and Aboriginal Cultural Heritage Assessment dated 5 January 2017 was prepared by Advitech and submitted with the original EIS. For the original farm, the report concluded that there are no constraints, on Archaeological grounds, to the proposed development and that no further archaeological work or cultural heritage assessment was required.

### 6.4.2 Updated Assessment

Advitech were re-engaged by PSA Consulting on behalf of Agright to update the previous archaeological reporting for historic heritage, based on the revised development footprint. Similar to the previous assessment, the report identifies that the site has a high degree of exposure and visibility due to both past and present disturbances. The intensive clearance of vegetation, ploughing, modifications for irrigation and overland inundation that has occurred within the study area has, or should have, revealed any historical objects or the likelihood of the present of any historical objects. No historical objects or items, or potential archaeological deposits, were found during the survey.

Based on the data reviewed, the report notes that the 2016 survey can be supported in the revision of the proposed development as the original assessment covered areas critical to the predictive model and gave consideration of the 2022 footprint. In addition, the modified area is reduced and impacts on the previously cultivated areas.

No items of historical or natural heritage, as defined by the *Heritage Act 1977,* were found to be located within the study area. Therefore, no approvals or permits are required under the *Heritage Act 1977* to proceed with the development.

### 6.4.3 Management and Mitigation Measures

As per the current management and mitigation measures, it is recommended that the proponent is to prepare an 'Unexpected Heritage Items Procedure' prior to construction.

## 6.5 ECOLOGICAL IMPACT ASSESSMENT

### 6.5.1 Previous Assessment

A Biodiversity Assessment Report for the approved development was previously prepared by Wildthing Environmental Consultants in 2017 and was submitted as part of the original EIS. The original assessment involved comprehensive flora, habitat and fauna assessments, to identify the potential impacts of the proposed development on threatened species, populations and communities.

The previous assessment noted that the proposed poultry complex had a footprint of approximately 170ha which have been positioned within previously cropped areas of the site to avoid the removal of native vegetation with the exception of an individual tree.

A specimen of *Eucalyptus socialis* (Red Mallee) will likely require removal to upgrade of the access road along the northern boundary of the site. Given the impact of the development has been identified as a single tree, OEH has indicated that with the removal of one tree did not require the use of the credit calculator associated with the previous Framework for Biodiversity Assessment to determine whether an offset requirement is necessary.

In addition, the previous assessment found:

- No Threatened Ecological Communities within the site.
- No listed Endangered Populations were recorded within the site.
- No threatened flora species were recorded within the survey area during fieldwork.
- Three threatened fauna species were recorded within the site during fieldwork, being:

- Pomatostomus temporalis temporalis (Grey-crowned Babbler).
- Circus assimilis (Spotted Harrier).
- Chalinolobus picatus (Little Pied-bat).

- Varying quality habitat for a further 24 threatened fauna species.

With respect to the habitat for threatened species, the assessment notes that a majority of these species would be confined to the areas of woodland and derived grassland patches which were to be retained and that the proposal is unlikely to have a significant impact.

The assessment concluded that the proposed development had been positioned within cropping land to avoid the removal of native vegetation, therefore the potential for conflict between the poultry farm development and the existing native flora and fauna is considered low. The direct impact on ecological values was described as:

- The footprint of the development proposal will be situated on approximately 170ha of cropping land.
- The north-western access road upgrade is likely to result in the removal of one native tree, Tree No. 40 (Tag 140) a specimen of Eucalyptus socialis (Red Mallee) to upgrade of the access road along the northern boundary of the site.

Potential indirect impacts identified included:

- Increased spread of weeds.
- Increased spread of pest fauna species.
- Edge effects.
- Increase in noise from machinery, vehicles etc.
- Increase in dust.
- Increase in artificial lighting. Increased lighting may be the result of security lighting.

In order to minimise the impact of the development of number of mitigation and management measures were proposed including:

- Protection of remaining native vegetation within the site.
- Protection of native fauna within the site.
- Rehabilitation of native vegetation within the site.

These measures have been captured in Condition 43 of the Development Consent which requires the preparation of a Biodiversity Management Plan prior to commencement of construction.

### 6.5.2 Updated Assessment

The Biodiversity Conservation Act 2016 (BC Act) requires that an SSD application must be accompanied by a Biodiversity Development Assessment Report (BDAR) unless the determining authority (DPE) is satisfied that the modification to the approved Goolgowi Poultry Complex development (SSD-8036) will not increase the impact on biodiversity values. Wildthing Environmental Consultants have been engaged to review the proposed modification and prepare a Flora and Fauna Assessment to address the impacts of the modified proposal compared to the approved proposal. This Assessments included as **Appendix 7**.

As noted on the Flora and Fauna Assessment, the modification to the Goolgowi Poultry Complex development results in a significant reduction in the size of the development allowing the construction of only 2 poultry broiler farms compared to the 5 approved broiler farms.

In this regard, the proposed modification will reduce the footprint of development from 167ha to approximately 41ha. The two poultry farms are to be positioned in the central north and far north-east of the site (entirely within Lot 1 DP 749831) in the general location of the approved farms 2 and 4. The modified farm layout will be entirely located within the existing, cleared and cultivated portion of the site. In addition, the modified proposal will use the approved widened access road off the Mid-Western Highway, which requires the removal of a single *Eucalyptus socialis* (Red Mallee) tree in the north-western corner of the site.

The modification will not constitute an increase in impacts (direct, indirect or prescribed) on biodiversity values not assessed in the original approval. Therefore, a BDAR would not be required to assess the impacts of the modification. The approved Goolgowi Poultry Complex development (SSD-8036) also did not require the use of the credit calculator

associated with the Framework for Biodiversity Assessment (FBA) for the approved development to determine whether an offset requirement was necessary.

The development modification will result in the retention of nearly all of the 52.67ha of existing native vegetation within the site. It is noted that an existing PVP (Property Vegetation Management Plan) agreement between the landholder and the Local Land Services (LLS) exists within the site (Murrumbidgee CMA, 2011). The PVP has allowed the removal of 47 paddock trees for cropping which has been offset by the protection of remnant woodland in the south-west of the site. The approved Goolgowi Poultry Complex development has a 20 shed poultry farm located just above the defined PVP area. This poultry farm has been removed as a result of the proposed modification, reducing the risk of indirect impacts.

A number of mitigation measures have been given to reduce the impact on native flora and fauna during the construction and operational phase of the proposal which are noted below and will be adopted for the project.

The Flora and Fauna Assessment concluded that the proposed modification of the approved Goolgowi Poultry Complex development (SSD-8036) will occupy a significantly reduced footprint within a cleared and cultivated portion of the site and the fact that all impacts on native vegetation for the access road from the Great Western Highway are the same as that in the approved development, the modification will not constitute an increase in impacts (direct, indirect or prescribed) on biodiversity values not assessed in the original approval.

### 6.5.3 Management and Mitigation Measures

The following ecological management and mitigation measures have been recommended and will be adopted for the modified poultry farm

**Construction**

- A small area of PCT 193 Red Mallee Woodland in the north of the development area containing one specimen of *Eucalyptus socialis* (Red Mallee) will require removal. To reduce the impact of the northern access road within the vicinity of PCT 193 Red Mallee Woodland and grassland area for the Mid Western Highway intersection upgrade the extent of clearing is to be clearly defined on the ground and delineated with bunting fencing or flagging tape to prevent any unintended disturbance outside areas of impact. The individual Red Mallee Tree No. 40 (Tag 140) is to be clearly marked prior to works to avoid additional nearby trees being mistakenly removed. The tree is to be inspected to ensure it does not contain any active bird nests. The removed tree is to be placed into the area of Red Mallee Woodland to supplement habitat. No other additional areas of native vegetation are required to be impacted and are to be avoided.
- Priority will be given during construction to avoid any inadvertent impact to significant biodiversity values within the study area. Avoidance measures should include the following:
  - all material stockpiles, vehicle parking and machinery storage will be located within cleared areas proposed for clearing, and not in areas of native vegetation that are to be retained; and
  - implementation of temporary stormwater controls during construction and to ensure that discharges outside the development footprint are consistent with existing conditions.
- Areas of remnant native vegetation outside the development footprint are not to be inadvertently impacted.
- The adaptive clearance methodology should include the following key aspects:
  - seeking consultation with a suitably qualified ecologist to determine the best time to schedule clearance works to avoid nesting and breeding times for resident fauna;
  - any captured displaced fauna relocated to the nearest area of appropriate habitat. If arboreal, the fauna to be placed inside an artificial nest box and relocated. If the displaced fauna is nocturnal relocation to occur during dusk; and
- All tree felling activities and results to be summarised in a tree clearance report by the supervising ecologist, including fauna injuries.
- Any animals injured during construction should be taken immediately to the nearest Veterinary Hospital for treatment.
- The individual removed Red Mallee Tree t is to be placed into the area of Red Mallee Woodland to supplement habitat.
- The following measures should be implemented to prevent exotic plant material from entering/exiting the study area:

- no imported/exported material to be permitted unless it has been inspected and confirmed to be free of dirt and mud which may contain weed seeds and vegetative

**Operation**

- The extent of all four remnant patches of native vegetation are to be clearly defined on the ground and permanently protected by fencing to ensure they are not subject to disturbance during future land practices and other activities within the site.
- As a part of maintenance of native remnant vegetation within the site any high threat or significant weeds present will be controlled in accordance with appropriate DPI guidelines. Guidelines for the treatment of high threat weeds can be sourced within the DPI website (DPI, 2018).
- Any artificial lighting used for security at night should be angled/directed downwards to avoid excessive light pollution affecting surrounding habitat.

## 6.6 AIR QUALITY IMPACT ASSESSMENT

### 6.6.1 Previous Assessment

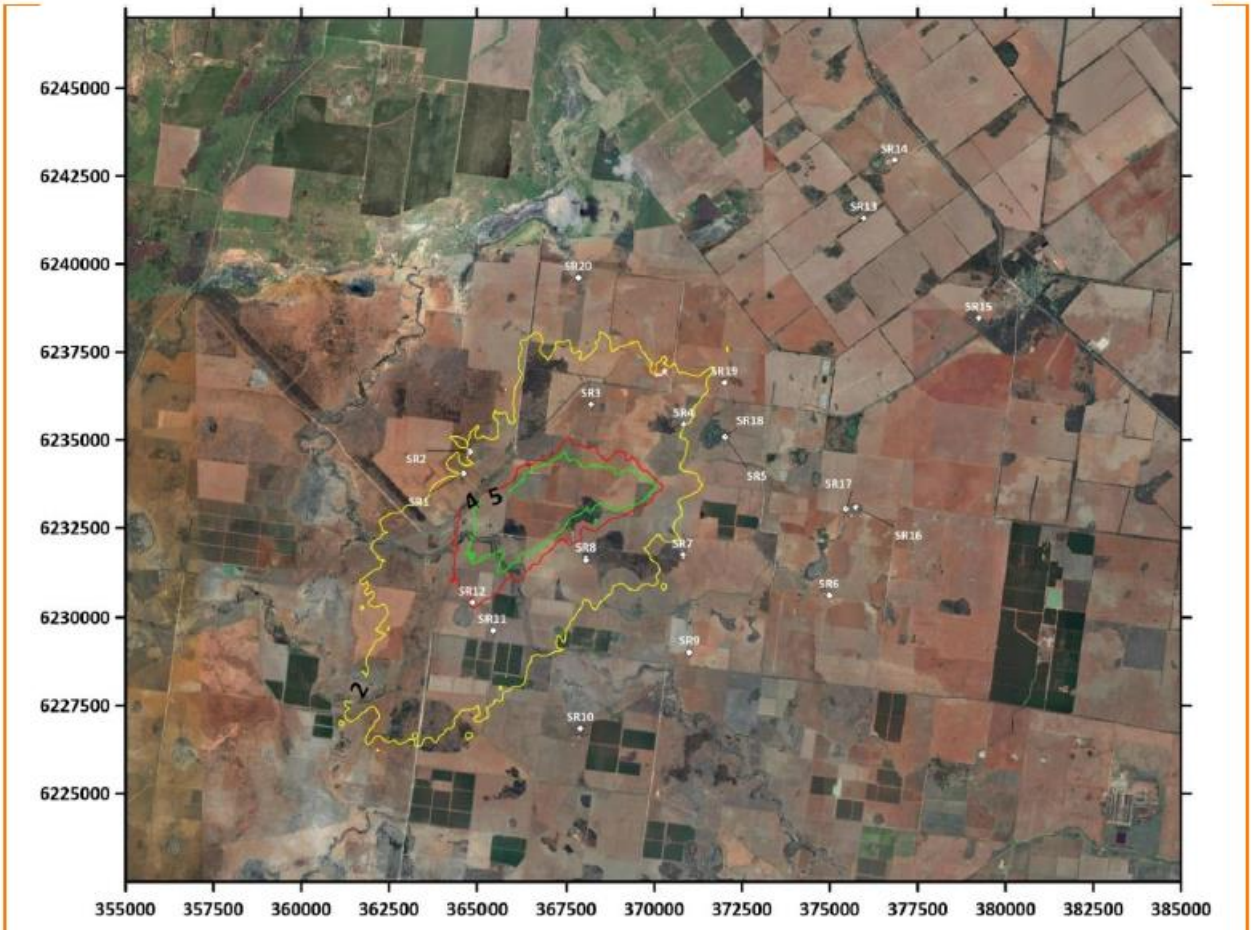
The original approval was supported by an Air Quality Assessment Report prepared by Astute Environmental Consulting dated 21 October 2019. This assessment was prepared to demonstrate that Stage 1 of the initial approval was able to comply with the applicable odour criteria.

As outlined above, the existing Stage 1 approval for SSD-8036 consisted of five broiler farms each with 12 sheds, housing a maximum population of 3.6 million birds. Key to the existing approval is that each fan on each shed would have a vertical ventilation stack discharging above the roof height at a defined vertical velocity.

It is noted that the odour impacts associated with Stage 2 of SSD-8036 (100 Sheds / 6 million birds), were not modelled and Condition A6 of the requires further modelling prior to approval as outlined below.

> *To obtain approval for Stage 2 of the development, the Applicant must prepare an updated Air Quality Impact Assessment and undertake the work to the satisfaction of the Planning Secretary, in consultation with the EPA. The updated Air Quality Impact Assessment must:*
>
> *(a) be undertaken in accordance with condition B2; and*
>
> *(b) demonstrate that an increase in the development to Stage 2 can achieve compliance with the odour impact assessment criteria set out in the Approved Methods for the Modelling and Assessment of Air Pollutants in NSW at all sensitive receptors identified in Figure 2 – Appendix B.*

For the Stage 1 of SSD-8036, the submitted Air Quality Impact Assessment showed compliance with the $C_{99\ 1sec}$ = 5 ou criterion when the farms were modelled in isolation. When modelled cumulatively, with the nearby Jeanella and Jeanella South Farms (yet to be constructed) the modelling showed that all sensitive receptors were at below the $C_{99\ 1sec}$ = 5 ou criterion. The previous modelling of the isolated farm (day 28) and cumulative assessment (day 28) is shown in Figure 11 and Figure 11 respectively. Note that the 5 ou criterion is shown in green.




| Species: Odour | Site: Goolgowi | Scenario: Isolation Day 28 | Averaging Period: 1 second | Percentile: 99 th |
|---|---|---|---|---|
| Criterion: 5 | Units: ou | Meteorology: 2007 | Model: CALPUFF v 6.42 | Author: W. Shillito |

**Figure 10: Original Isolated Farms Odour Modelling Footprint (Stage 1, 60 Sheds, Day 28)**

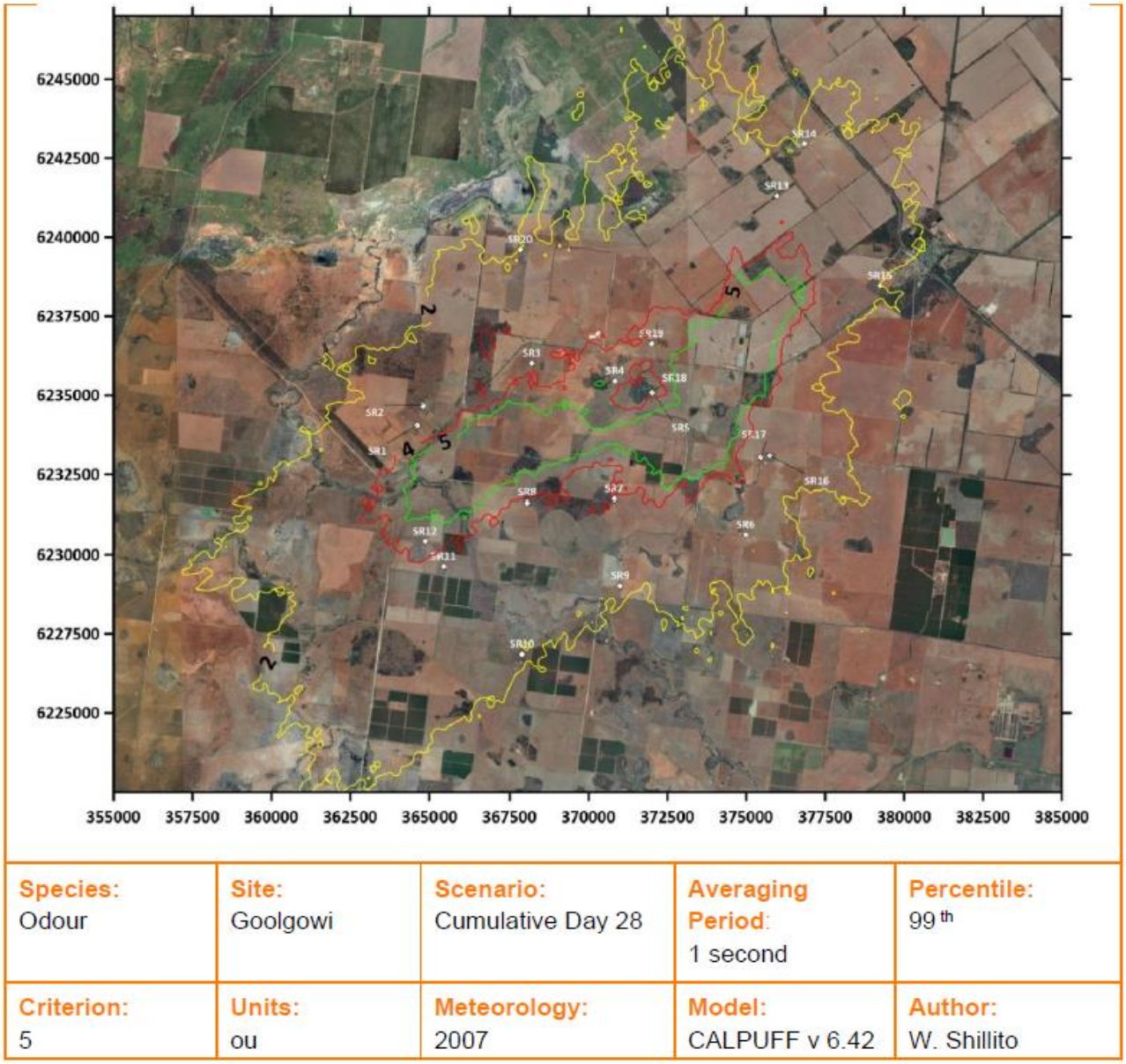



**Figure 11: Original Cumulative Odour Modelling Footprint (Stage 1, 60 Sheds, Day 28)**

### 6.6.2 Updated Assessment

An Odour and Dust Assessment has been prepared by Astute Environmental Consulting (refer to **Appendix 8**) to assess the potential air quality impacts of the modified development. The report assesses the proposed poultry farm in accordance with the following documents:

- Approved Methods for Modelling and Assessment of Air Pollutants in New South Wales (NSW EPA, 2016);
- Generic Guidance and Optimum Model Settings for the CALPUFF modelling system for inclusion into the 'Approved methods for the Modelling and Assessment of Air Pollutants in NSW, Australia' (OEH, 2011);
- Technical Notes: Assessment and Management of Odour from Stationary Sources in NSW (DEC NSW, 2006a); and
- Technical Framework – Assessment and Management of Odour from Stationary Sources in NSW (DEC NSW, 2006b).

As per the previous assessment, the odour emissions model of Ormerod and Holmes (2005) was used for this assessment. The K Factor method, as it is commonly known, is the basis of the *Best Practice Guidance for the Queensland*

*Poultry Industry - Plume Dispersion Modelling and Meteorological Processing* (PAEHolmes, 2011) and the *Planning and environment guideline for establishing meat chicken farms – Guide 1 Assessment Guide* (McGahan, et al., 2021).

As noted above, standardised broiler sheds (without vertical ventilation stacks), consistent with existing operating farms in the Riverina Region have now been adopted for the proposed broiler farms and as such, the modelling has been revised on this basis. For the proposed operation, based on recent and real-world test data from the Griffith region at several farms, Astute Environmental has adopted a K factor of 1.5. This recent test data collected by a NATA accredited odour laboratory in the Griffith area on behalf of Astute is presented in the Air Quality Assessment Report. The use an emissions method based on real K factor data is important as it reflects the real world relationship between the mass of birds present, the ventilation rate, and odour concentrations as measured.

The maximum average K factor from any of the tested sheds was 1.4 and the average was 0.9 ± 0.3. Therefore, a K factor of 1.5 is appropriate for the modified sheds and also the cumulative assessment of sheds at Jeanella and Jeanella South and represents a realistic emission value.

With respect to the relevant sensitive receptors it is important to note that:

- SR3 – Has been identified as a derelict/abandoned house and is no longer considered a sensitive receptor.
- SR8 – Has been identified as a derelict/abandoned house and is no longer considered a sensitive receptor.
- SR18 – Has been identified as a Rural Shed (associated with SR5) and is no longer considered a sensitive receptor.

Regardless, of these changes to the status to the sensitive receptors, the locations have been included in the revised modelling for consistency and ease of comparison.

#### 6.6.2.1 Odour Impact Assessment Results

The revised Odour and Dust Assessment shows compliance with the $C_{99\ 1sec}$ = 5 ou criterion when the modified broiler farms were modelled in isolation. When modelled cumulatively, with the nearby Jeanella and Jeanella South Farms (yet to be constructed) the modelling showed that all sensitive receptors were at below 4ou and within the $C_{99\ 1sec}$ = 5 ou criterion. The modified modelling for the isolated farms (day 28) and the cumulative assessment (day 28) is shown in Figure 12 and Figure 13. Note that the 5 ou criterion is shown in red.

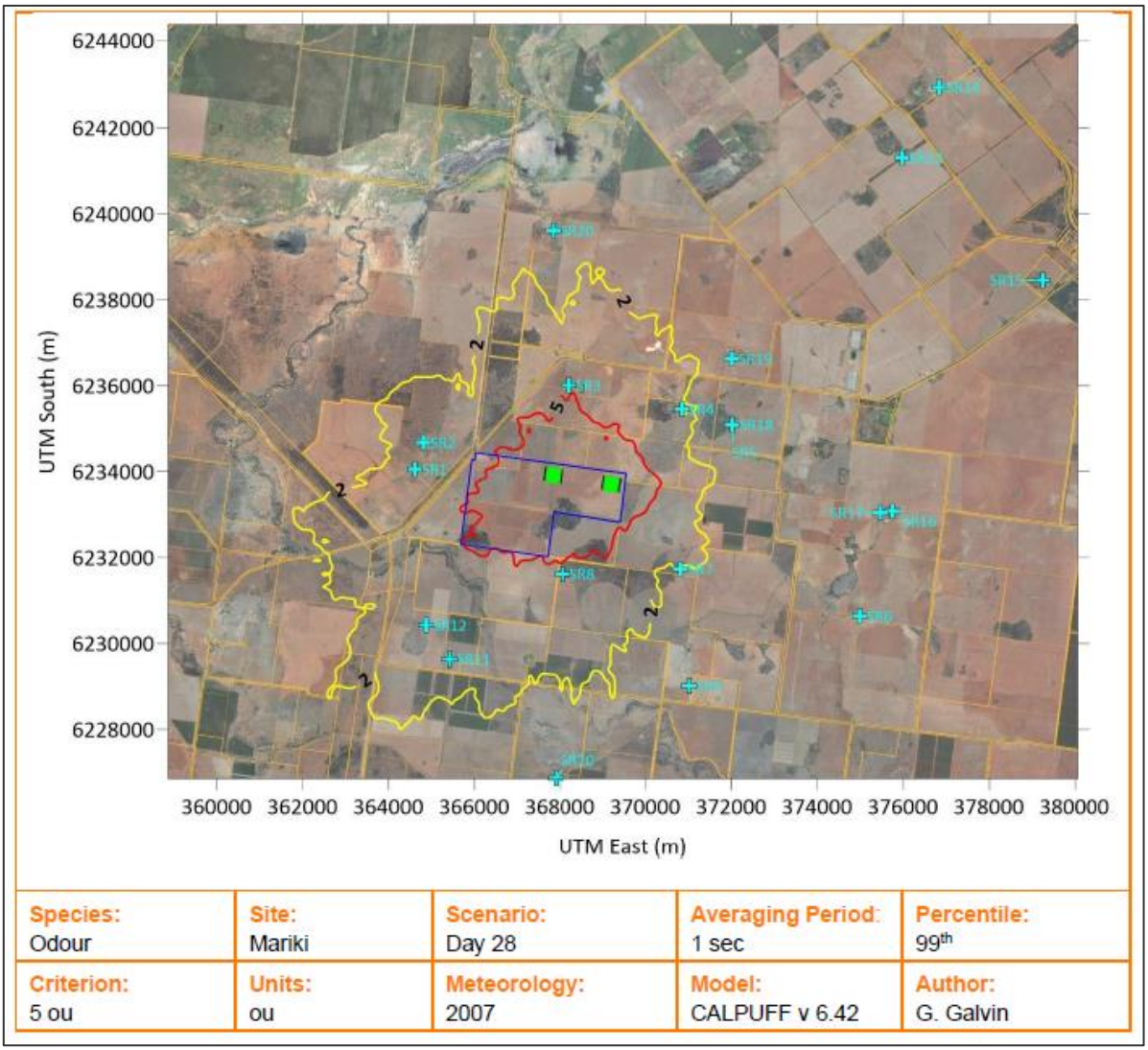



**Figure 12: Modified Isolated Farms Odour Modelling Footprint (40 Sheds, Day 28)**

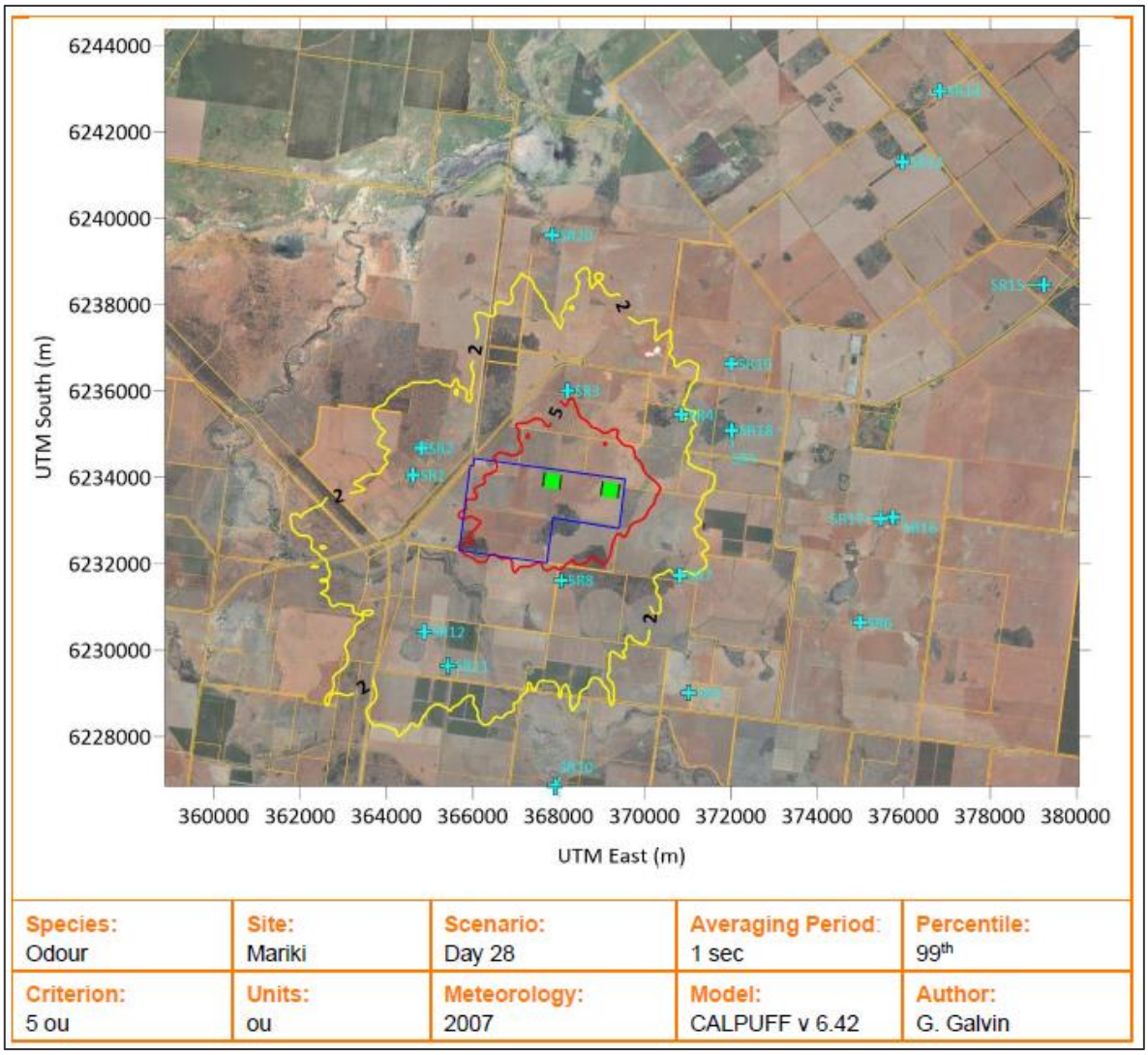



**Figure 13: Modified Cumulative Odour Modelling Footprint (40 Sheds, Day 28)**

The modelling presented in the Odour and Dust Assessment considers the modified operations and has been performed in accordance with the Approved Methods. The modelling indicates that the proposed development would not lead to any exceedances of the odour criterion (5 ou) at the nearest sensitive locations.

In addition, it is noted that the modified development has a similar, odour footprint compared to Stage 1 of the approved development and would have a substantially smaller footprint compared Stage 2, which is no longer proposed.

#### 6.6.2.2 Dust Impact Assessment Results

An updated Dust Impact Assessment has also been prepared for the modified development and is presented in the Odour and Dust Impact Assessment included in **Appendix 8**. The results showed small incremental maximum 24 hour concentrations, however with background included, there was only one additional exceedance of the 24 hour $PM_{10}$ criterion at a single receptor. As demonstrated in the assessment, the increments that lead to the additional exceedance was relatively small, and would be unlikely to occur if a more typical background concentration year were modelled

#### 6.6.2.3 Vegetated Environmental Buffers

While not included in the modelling or required to achieve compliance, Astute Environmental have recommended, and the Applicant will adopt, a vegetative environmental buffer (VEB) which will be installed at the fan ends of each of the farms.

As documented in the Odour and Dust Impact Assessment (**Appendix 8**), research has shown that dust concentrations from livestock operations can be reduced by 35% to 65% using vegetative buffers (Laird, 1997; Thernelius, 1997; Malone,

et al., 2006; Malone, et al., 2008). As a specific example, Malone *et. al.* (2006; 2008) showed an average dust reduction over three years of 56%. This was found to be associated with the dust impacting on the trees and depositing out.

Concerning vegetation and odour, studies have shown reductions in the order of 60% (Parker, et al., 2012) downwind of a vegetative barrier at a pig farm. Patterson et. al. (2009) reported a 34% odour reduction downwind of an egg layer farm with a four-row vegetative planting, and 46-54% reductions downwind of a five-row vegetative barrier. Therefore, the vegetative buffer will assist in further reducing the potential for odour impacts.

As noted in the assessment, that the vegetative screens in the research quoted were not dedicated plantings such as those typically used in Australia. At farms in Australia, a standard vegetative buffer would often be at least 10 metres wide, with a variety of species achieving a 50% porosity base to crown, to a final height of at least six metres. Such a buffer would be wider and denser than the buffers studied in the literature, and such would likely achieve more consistent and higher rates of reduction.

### 6.6.3 Management and Mitigation Measures

The following best practice odour and dust management measures have been recommended and will be adopted for the modified poultry farm.

**Odour**

- Vegetation buffers should be planted and maintained around the sheds as soon as practicable following construction. Vegetation buffers reduce the magnitude and frequency of any adverse air quality impacts by effectively slowing and filtering air movement, which reduces dust impacts via dust deposition and also assists in odour dispersion.
- The poultry sheds will be tunnel-ventilated which allow good control over internal moisture levels and also promote optimum growing conditions and bird health. The increased airflow and improved feed conversion in modern tunnel-vented sheds assists in the maintenance of the bedding material within the optimal moisture range.
- The poultry sheds will be fully enclosed, have wide eaves and be surrounded by concrete bund walls to prevent rainwater entering the sheds and to allow for the controlled discharge of wash down water during cleaning. These measures will reduce the level of moisture within the poultry sheds associated with rainfall, which in turn helps keep litter moisture low, which in turn reduces the risk of abnormal odour emissions.
- The poultry sheds will be fitted with nipple drinkers with drip cups to minimise water spillage and prevent elevated moisture levels in the litter.
- 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.
- The maximum stocking density will not exceed RSPCA specifications.
- Regular monitoring and maintenance of the tunnel ventilation systems and bird drinkers will be undertaken to avoid spillage, leaks, lowering of efficiency of fans and uneven distribution.
- Stocking densities and bird health within each of the poultry sheds will be regularly checked and, if necessary, appropriate corrective measures will be implemented.
- Daily monitoring and maintenance of the bedding material will occur to identify, remove and replace any caked material beneath drinking lines and/or areas with excessive moisture content.
- Poultry 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. Wherever possible the handling of the material will be avoided during adverse climatic conditions, such as times of cold air drainage during early morning or at night and during strong winds. The shed ventilation systems will not be used during litter removal.
- Poultry litter will not be stockpiled or spread within the site.
- 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 undertaken during daytime hours.

**Particulate Matter**

- Vegetation buffers should be planted be planted and maintained around the new PPUs as soon as practicable following construction. Vegetative buffers reduce the magnitude and frequency of any adverse air quality impacts by effectively slowing and filtering air movement, which enhances dust deposition which reduces the movement of dust offsite.
- The feed silos will be fully enclosed to minimise emissions of particulate matter when loading/unloading.
- The poultry sheds will be tunnel-ventilated which allow good control over internal moisture levels and also promote optimum growing conditions and bird health. The increased airflow and improved feed conversion in modern tunnel-vented sheds assists in the maintenance of the bedding material within the optimal moisture range.
- Vehicles will not exceed a general speed limit of 40 km/hr within the site and should be confined, where possible, to the internal access roads.
- Internal access roads will be appropriately constructed and 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.
- The generators are mounted in covered enclosures with adequate shade and ventilation with vertical air discharge
- 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.

## 6.7 NOISE IMPACT ASSESSMENT

### 6.7.1 Previous Assessment

The original approval was supported by a Noise Impact Assessment (NIA) prepared by Advitech Pty Ltd dated 16 February 2017. This assessment was prepared in accordance with the *NSW EPA Industrial Noise Policy* and the NSW Road Noise Policy (RNP) demonstrate that proposed development was able to comply with the noise criteria.

The noise modelling for the previous assessment was undertaken using the Predictor environmental noise modelling software and included a 4m high strategic earth mounds which were to be constructed around each of the five farms to minimise noise emissions. The previous modelling showed a marginally exceedance of the applicable criteria during the bulk earthworks phase of construction. Once operational, the previous assessment predicted compliance with the nominated PSNL criteria and sleep disturbance criteria at all receiver locations under neutral and worst case operating conditions.

With respect to road noise, the analysis of the predicted noise levels associated with additional traffic movements along the Mid-Western Highway, indicated that noise increases of up to 1.5 dB(A) would be experienced; however, the modelled noise levels were below the criteria for arterial roads / freeways and the predicted increase was shown to be below the 2 dB level recognised as barely perceptible by an average person.

### 6.7.2 Updated Assessment

Advitech was re-engaged by PSA Consulting to prepare an updated NIA for the project which is included as **Appendix 9**. The NIA has been prepared in accordance with the updated *Noise Policy for Industry* (NPfI) and presents the updated methodology and results based on the modifications to the planned development and new assessment procedures specified in the NPfI.

With respect to the relevant sensitive receptors it is important to note that:

- R3 – Has been identified as a derelict/abandoned house and is no longer considered a sensitive receptor.
- R7 – Has been identified as a derelict/abandoned house and is no longer considered a sensitive receptor.

Regardless, of these changes to the status to the sensitive receptors, the locations have been included in the revised modelling for consistency and ease of comparison.

#### 6.7.2.1 Operational Noise

Modelled noise levels for standard operational scenarios has been undertaken for the modified farms and compared to the operational noise criteria at each receptor. It is important to note that the 4m high earth mounds around each farms are no longer proposed and have not been included in the acoustic models. The results of the modelling indicate that noise levels from the modified operations are not expected to exceed the Project Noise Trigger Levels (PNTL) at any receiver, during any mode of operation.

The revised modelling predicts some minor increases in the operational noise levels predicted at Receptors 1, 2, 4 and 6 compared to the original assessment. However, as noted above, the modelling results demonstrate clear compliance with the PNTLs.

#### 6.7.2.2 Construction Noise

Modelled noise levels for construction scenarios for the modified project have been undertaken and compared to the construction noise criteria at each receptor. The results of the modelling indicate that noise levels are not expected to exceed the construction noise criteria at any receiver.

The revised modelling predicts reductions in bulk earthworks at all sensitive receptors and minimal change to levels with respect to shed construction noise.

#### 6.7.2.3 Road Noise

The modelled results cover an 18-hour period, including existing traffic volumes and additional traffic generated by the development. Results are presented for the local receiver positions (adjacent to the highway) and compared to both overall and relative increase criteria outlined in the NSW Road Noise Policy. This assessment shows that road noise is well below relevant criteria levels and may only generate marginal increases on existing levels.

#### 6.7.2.4 Vibration

An assessment of vibration was conducted in the original NIA. Advitech consider that this assessment is still valid for the modified project as it show that distance between the construction areas and the nearest sensitive receiver was approximately 1.4 km, which is well beyond the range of vibration impacts for both human comfort and structural/cosmetic damage. As such, the assessment confirms that no vibration impacts related to the works are expected.

### 6.7.3 Management and Mitigation Measures

No specific management and mitigation measures were included in original EIS or NIA Assessment, beyond the construction of the 4m high earth mounds which are no longer proposed or required. It is noted that Conditions B9 – B14 place restriction on the hours of operation and require preparation of a Construction Noise Management Plan which will continue to apply to the modified project.

## 6.8 TRAFFIC IMPACT ASSESSMENT

### 6.8.1 Previous Assessment

A Traffic Impact Assessment (TIA) dated 12 February 2018 was prepared for the original SSD by SECA Solution. The assessment was prepared in accordance with the Austroads Guidelines and the RTA Guide to Traffic Generating Developments.

Peak traffic generation for the farm was identified to occur on days where inbound product (feed, litter and/or LPG) is delivered whilst thinning / cleanout is being undertaken. This would result in a peak of 67 inbound and 67 outbound truck movements across a 24 hour periods. Outside of these peaks, normal operation of the poultry farm could generate up to 14 truck movements (7 inbound and 7 outbound) per day for the delivery of inbound product (feed, litter and/or LPG).

In order to accommodate that traffic for the original farm, a new intersection connecting to the Mid Western Highway as shown in Figure 14 below was proposed and approved for the project.

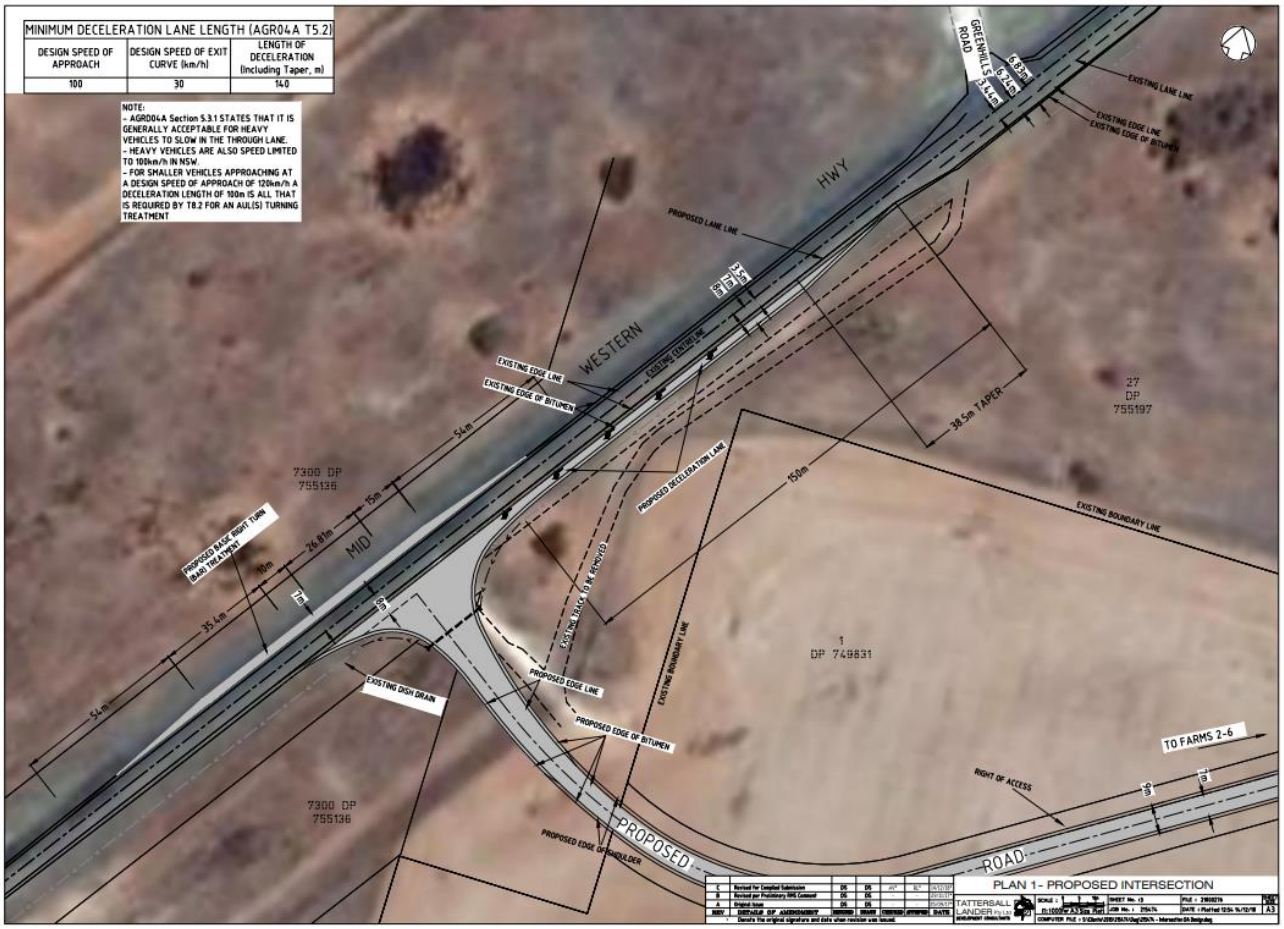



**Figure 14: Proposed Intersection Arrangement**

Overall, the TIA confirmed that the proposed poultry farm (100 sheds) would have a minimal impact upon the overall local road network and that the site access will be able to operate in a safe manner.

### 6.8.2 Updated Assessment

An updated TIA (dated 8 November 2022) has been prepared by SECA Solutions and is included as **Appendix 10**.

Peak traffic generation for the farm was again identified to occur on days where inbound product (feed, litter and/or LPG) is delivered whilst thinning / cleanout is being undertaken. However, as a result in the reduction in the overall scale of the operation the modified farm would result in a peak of 31 inbound and 31 outbound truck movements across a 24 hour day during a thinning / cleanout. Outside of these peaks, normal operation of the poultry farm could generate up to 14 truck movements (5 inbound and 5 outbound) per day for the delivery of inbound product (feed, litter and/or LPG).

While there has been a significant reduction in traffic associated with the development, the approved access arrangements including the intersection with the Mid-Western Highway and the farm Access Road will be constructed as per the current approval. It is noted that site works for construction of the access road are proceeding in accordance with the existing approval.

The revised TIA concludes that the modified poultry farm (40 sheds) would have a minimal impact upon the overall local road network and that the site access will be able to operate in a safe manner as per the original approval.

# 6.9 STORMWATER MANAGEMENT

## 6.9.1 Stormwater Quantity

Stormwater runoff from the sheds and other impervious areas will be directed to swales running between and away from the shed. As per the approved development, stormwater retention basins will be provided to ensure there is no nuisance associated with post development flows.

The stormwater retention basins are shown on the development plans included in **Appendix 2**. Updated stormwater retention calculations have been prepared by Lance Ryan Consulting Engineers (LCRE) and are included as **Appendix 3**.

Stormwater runoff generated from the proposed developed is captured in a perimeter swale drain that directs runoff to the retention dams for both Farm 1 and Farm 2. Each Farm is provided with 2 retention dams with a total capacity of 27ML, which is capable of capturing the 1 in 100 year, 72 hour storm event (requiring 23,944m$^3$) of storage.

Runoff from outside the proposed development footprint is diverted away from the site and the retention dam via a combined swale / bund bank. This ensures the retention dam is only capturing runoff from the proposed development footprint. Due to the size of surrounding agricultural paddocks and separation to points of discharge, the minor diversions of stormwater around the development footprint will have negligible impact on the downstream receiving environment.

## 6.9.2 Stormwater Quality

All sheds are constructed on an elevated pad and concrete slab and surrounded by a waterproof blockwork at the base of the insulated panel wall. As such internal shed areas are entirely separated from interaction with stormwater or roof water. The water is therefore expected to be of high quality, similar to the quality of water runoff from the surrounding area, and as such not capable of generating issues of water contamination in waterways or water dependent ecosystems.

Given the controlled environment in which the proposed poultry development will operate, along with the approval and licensing conditions it will need to comply with, the proposed farm will pose a minimal risk with respect to stormwater quality.

It is therefore considered that the potential for impacts from the farm on groundwater and surface water is very low. The proposed development poses a low risk to local water resources and negligible impacts are expected.

## 6.9.3 Management Measures

In spite of the low risk to downstream water quality, the following standard management and mitigation measure are proposed to further minimise risks.

**During Construction**

- Implementation of an Erosion and Sediment Control Plan to limit discharge of sediment into water courses.
- Overland flows upslope will be diverted around areas of disturbance.
- Minimise clearing of ground covers to construction areas only.
- Construction managers are required to regular inspect and maintain erosion and sediment control will be implemented to ensure the continued integrity of the temporary erosion and sediment control structures.

**Development Design**

- The poultry sheds will be constructed on a concrete slab with a poured solid concrete wall to ensure no interaction of external water movement (roof water and stormwater).
- Shed roof will be constructed with an overhang to ensure roof water is separated from the internal bird accommodation areas.
- Stormwater runoff over the sheds is collected within grass swales running lengthwise each of the building pads and discharged into the retention basin on site.
- Stormwater discharge points will be constructed of loose packed rock to slow velocities, disperse water and minimise the risk of erosion at the outlet.

**Operation, Monitoring and Maintenance**

- There will not be any on-site stockpiling of used bedding material, manure or waste materials on site.
- At the end of each production cycle, bedding material will be promptly removed from the sheds, loaded trucks and transported off-site in covered trucks for disposal.
- Dead birds will be collected from the sheds on a daily basis and stored in on-site freezers prior to removal off-site.
- The poultry sheds will be cleaned and sanitised at the end of each production cycle using high pressure gurney sprays to minimise water use and are left to dry before new bedding is introduced for a new batch of birds.
- The waste water generated by the staff amenities and caretakers' dwellings will be appropriately treated by a standard septic system in accordance with the requirements of Council.

**Chemical Use**

- The operation will require limited chemical use, with appropriate systems in place for storage and disposal.
- All chemical use within the proposed poultry development will be undertaken in full compliance with the *Pesticides Act 1999*.
- Where appropriate, chemicals used within the proposed poultry development will be approved by the Australian Pesticide and Veterinary Medicine Authority as safe and fit for that particular use.

## 6.10 ECONOMIC AND SOCIAL IMPACTS

A comparison of the direct economic impacts of the approved and modified development are provided in Table 7 below.

**Table 7: Direct Economic Impacts**

| ECONOMIC FACTOR | APPROVED DEVELOPMENT | MODIFIED DEVELOPMENT |
|---|---|---|
| **Capital Investment Value** | $101,000,000 | $54,572,100. |
| **Construction Employment** | 20 FTE Workers for 12 Months | 30 FTE Workers for 20 Months |
| **Operational Employment** | 20 full time<br>40 part time<br>Contract staff are also used to assist with placement of day old chicks, clean out and set up the sheds for new batches | 14 full time<br>Contract staff are also used to assist with placement of day old chicks, clean out and set up the sheds for new batches |

As shown above, the modified 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 Carrathool Local Government Area (LGA), which (as of 2019) was estimated to have a population of around 2,799 persons. Of these residents, 64% (or 1792 persons) were aged over 15 years. The unemployment rate for the LGA is around 3.2% which is much lower than the national average of 6.9% of the same period. Of those people employed, it is estimated that 46.5% worked in the areas of agriculture, forestry and fishing.

The Capital Investment Value of the project is estimated to be $54,572,100, a majority of which is associated with construction of the proposed farms. In this regard, it is estimated that the project will create 30 FTE construction jobs to deliver the project over a 20 month period, as well as indirect opportunities for local tradespersons to assist with the build (e.g. electricians, plumbers etc).

Once operational, the project will create 16 full time 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 day old chicks, 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 electrician and plumbers, etc.

With consideration of these employment opportunities, the modified project continues to display a positive economic impact and employment impact for the region.

With respect to social impacts, the findings of the detailed technical assessments undertaken in relation to modified development farm demonstrate that project is unlikely to have significant, negative social impacts provided the proposed mitigation and management measures documented in this EIS are implemented. Further, due to the significant reduction in the scale of the project, compared to that which was originally approved, potential social and amenity impacts such as odour, dust, noise, traffic, visual intrusion and the loss of productive agricultural land will in many cases be substantially reduced.

With consideration of the positive impacts, particular in relation to economic investment and local employment opportunities, overall, it is considered that the farm will have a positive social outcome.

## 6.11 VISUAL IMPACTS

The submitted EIS demonstrated that the visual modification of the much larger development was negligible and that the local topography and extensive vegetation prevents the visibility of the proposed poultry farms from all surrounding residences. The proposed broiler farms are generally located as per the Farms 2 and 4 of the approved layout and have a greater setback to the nearest residential dwellings previously assessed. As such, the modified project is expected to have reduced visibility and negligible visual impacts.

In accordance with the best practices recommendations of the updated Air Quality Impact Assessment (**Appendix 8**) it is now proposed to install a vegetated buffer around each of the proposed farms providing enhanced visual screening as well as odour and dust reduction.

## 6.12 WASTE MANAGEMENT

Waste management is critical to the operation of an efficient poultry farm. As per the approved development, the applicant will adopt measures to ensure that all waste generated from activities on the site are reused and recycled where practical or otherwise managed and disposed of in a manner that will not cause environmental harm. Importantly, no on-site stockpiling or disposal of waste materials is proposed as part of this development.

Typically, broiler farms generate little waste that cannot be recycled or beneficially re-used. Potential waste streams and the proposed management arrangements are identified below.

### 6.12.1 Non-Recyclable Waste

Day to day general waste (e.g. packaging, used personal bio-security clothing) will be placed into enclosed skip bins and removed from the farm by a licensed contractor on a regular / as needed basis. This type of waste will be transported to and disposed of at a local landfill site. No waste material will be disposed of on-site.

### 6.12.2 Recyclable Waste

Provision of collection bins for collection of recycling material such as plastic, paper, cardboard, and waste metal will also be provided and removed from the farm by a licensed contractor on a regular basis.

### 6.12.3 Bedding Material & Litter

At the end of each production cycle, accumulated bedding material and floor litter (comprising of soft wood shavings/rice hulls/chopped straw and manure accumulated) will be removed from each of the sheds. For bio-security and quarantine control reasons, spent litter will not be stockpiled on-site due to minimise the risk of disease between flocks. It is important to note that the risk of disease transfer is extremely low and the use of poultry litter as a fertiliser on rural properties does not pose a health threat to the land or surrounding community when applied appropriately.

At the end of each cycle, the material will be collected from the sheds and loaded directly into trucks for removal from the site. Truck loads will be covered to minimise emissions of odour and particulate matter into the surrounding environment.

Spent litter and used bedding material is commonly used by farmers within the region as an organic fertiliser, soil additives and rehabilitation agent for agricultural lands. The collected material will be taken from the site by an

approved contractor and sold directly to regional farmers or provided to a commercial composter for creation of value added products (such as palletised fertiliser or compost).

The safe handling and application of the material once it has left the development site is the responsibility of the end-user. Baiada has prepared a Litter Spreading Management Plan which can be provided to recipients of the litter to minimise the risk of secondary impacts (such as odour or dust) resulting from its application.

### 6.12.4 Mortalities

The sheds will be checked regularly for deceased birds which will be promptly removed from the sheds and transferred to cold storage. Once a week a rigid truck will collect the birds from the farm and transport them for processing at the Hanwood Rendering Plant.

Dead birds will not be allowed to be stockpiled within the development site for reasons of strict quarantine control and in order to ensure that the remainder of the flock are not at risk by leaving potential sources of infection/disease in close proximity to the sheds.

In the event of a mass mortality event, the proponents will contact the supplier and the Department of Primary Industries (DPI) and follow all directions made.

### 6.12.5 Sewerage waste

Effluent from the staff amenities and manager residences will be treated by standard on-site septic system. It is proposed that the waste to be treated and irrigated onto landscaped gardens and lawn areas with signage to be erected advising that the water is reclaimed effluent and not suitable for drinking.

Separate applications to install and operate septic systems and the associated irrigation areas will be submitted to Council in accordance with the provisions of Section 68 of the *Local Government Act 1993,* prior to the commencement of operations.

### 6.12.6 Construction Waste

Waste generated during construction may contain materials such as steel, metals, plastics, paper, cardboard, glass and food waste. The waste will be managed through being stored in secure receptacles to mitigate against waste becoming airborne or accessible to other animals. This will be disposed of to a licensed facility via a waste contractor on an as need basis. As there are adequate provisions to store building and waste materials on site during construction, the preparation of a Construction Waste Management plan will not be necessary.

## 6.13 HAZARD ASSESSMENT

### 6.13.1 Previous Assessment

The previously submitted EIS identified that the storage of Liquified Petroleum Gas (LPG) was the only dangerous goods planned to be stored on site above the screening thresholds and was therefore is considered potentially hazardous and required a Preliminary Hazards Assessment (PHA). The PHA concluded that the *"operations of the proposed development with the safeguards as stipulated would not cause significant off site risks. The development is considered to be potentially hazardous based on the SEPP 33 screening thresholds, given the quantity of LPG stored on site. However, the total storage will be separated into four areas with associated poultry operations approximately 1 km apart. It is noted that the surrounding area is sparsely populated with the Mid Western Highway and closest neighbouring residence being 690 and 1270 metres respectively.*

*It is the conclusion of this PHA that the proposed development meets all the requirements stipulated by the Department of Planning, and hence would not be considered, with suitable engineering and design controls in place, to be a hazardous or offensive development on or off site."*

### 6.13.2 Screening Assessment

As the proposed volumes and storage locations of the LPG is being modified, a revised Screening Assessment was undertaken by Lote Consulting and is submitted as part of this application as **Appendix 11**.

The proposed poultry farms require Liquified Petroleum Gas (LPG) in order to provide heating for the birds during the cooler months. LPG gas is stored within tanks on each of the farms. LPG is described as a Dangerous Good and as such, Chapter 3 of the *SEPP (Resilience and Hazards) 2021* applies. Across the 2 poultry farms, a total of 120,000L (66,000 kg)

are proposed to be stored which exceeds the SEPP screening threshold of 10,000 kg. Accordingly, the Screening Assessment recommends a Preliminary Hazard Assessment (PHA) be prepared. No other dangerous goods were exceeded the nominated screening values.

In addition to the storage of Dangerous Goods, the SEPP also requires a review of their transportation to the site. As outlined in the Screening Assessment, the proposed farm will require 96 deliveries of LPG per annum which is substantially less than the threshold of 500 movements. As such, Lote Consulting concludes that the policy for transportation of dangerous goods does not apply in this instance.

### 6.13.3 Preliminary Hazard Assessment

As outlined above, an updated PHA has been prepared based on the proposed storage of LPG on the 2 poultry farms in accordance with the Hazardous Industry Planning Advisory paper (HIPAP) No. 4(2) and No. 6(3) and is included as **Appendix 12**. The assessment requires the preparation of a hazard identification table to identify potential hazards that may be present on the site as a result of the operations and storage of LPG. Incident scenarios where then development that may result in offsite impacts.

The identified incidents where then carried forward for consequence analysis and were assessed in detail to determine impact distances using the Gexcon Effects (15) software. The analysis shown that only the Boiling Liquid Expanding Vapour Explosion scenarios had the potential for offsite impact and as such were subject to frequency analysis.

The frequency analysis showed that the fatality risk was well within the acceptable risk criteria and as such, the site would only be classified as potentially hazardous and would be permitted within the RU1 zoning.

### 6.13.4 Management and Mitigation Measures

Regardless of these findings, the PHA provided updated management and mitigation measures to ensure safe operation of the site.

- The Dangerous Goods requirements of the Work Health and Safety Regulation 2017 shall be complied with (i.e. preparation of risk assessments, registers, notifications, etc).
- Compliance with LPG Standard AS1596:2014 for the storage and handling of LP Gas.
- The following safety measures shall be in place:
    - Non-return valves on both the tank and LPG tanker;
    - Excess flow valves on the LPG tanker;
    - Earthing connections; and
    - Ignition Source control measures.
- The safeguards outlined in table A1 in Appendix A – Hazard Identification Table shall be implemented including but not limited to:
    - LPG facilities to be designed to comply with AS/NZS 1596:2014 and shall be installed by an experienced LPG Facility supply company;
    - Ignition source control as per AS/NZs 60079.14:2017 including earthing to prevent stative sparks; and
    - Hoses shall be tested annually as per AS/NZS 1596:2014 and the ADG.
- Preparation of an Emergency Response Plan and emergency Services Information Package in accordance with HIPAP No.1.
- The LPG storages shall be subject to hazardous area classification in accordance with AS/NZS 60079 series of standards.
- A hazardous area verification dossier shall be prepared in accordance with AS/NZS 60079.14:2017.

## 6.14 BUSHFIRE MANAGEMENT

### 6.14.1 Previous Assessment

As outlined in the original EIS, the site was not included on Carrathool Bush Fire Prone Land Map but does include some woodland vegetation which was regarded as a potential fire threat. The EIS did not include a Bushfire Assessment Report but recommended that the proposed dwellings and poultry complex maintain a 27m Asset Protection Zone which was ultimately included in condition B48 of the current consent.

### 6.14.2 Updated Assessment

As part of the modified development, the Applicant has engaged Integrated Consulting to prepare a Bushfire Assessment Report (BFAR) which is included as **Appendix 13**. The BFAR has also been prepared in accordance with *Planning for Bush Fire Protection 2019* (PBP) published by the NSW Rural Fire Service.

Consistent with the findings of the original EIS, the report notes that the subject site is not mapped as being bushfire prone land on Council's Bush Fire Prone Land Map, however, it has been identified that future mapping of grassland hazards is likely to impact parts of the site (NSW Rural Fire Service 2022). Accordingly, the BFAR has been prepared to provide sufficient information for the DPE to consider bushfire impacts pursuant to Section 4.15 of the *Environmental Planning & Assessment Act 1979.*

The submitted BFAR demonstrates that the proposed development is located in an area that has an acceptable bushfire hazard level (i.e. ≤BAL-29). These site characteristics, combined with the implementation of the proposed recommendations, the proposed development is considered to be appropriately protected from bushfire and complies with the requirements of PBP. The recommendations with respect to bushfire are documented below.

### 6.14.3 Management and Mitigation Measures

This BFAR recommends that project will be carried out in accordance with a number of Bush Fire Protection Measures (BFPM) to ensure it is best protected from the effects of bushfire in accordance with the requirements of PBP and other best practice guidelines.

**Asset Protection Zone**

- Prior to the issue of an Occupation Certificate for the development, an Asset Protection Zone (APZ) of the following sizes:
  - Farm 1 dwellings = 20m
  - Farm 2 dwelling = 22m
  - Solar Arrays = 20m
  - All other buildings = 20m
  - Property access road = 6m

  is to be provided as shown on the plans in Appendix E and as outlined in Appendix G of the BFAR, and is to be maintained in perpetuity in accordance with these requirements.

**Access**

- Prior to the issue of an Occupation Certificate for the development, the property access road is to be constructed to comply with the following requirements and is to be maintained in accordance with the following requirements in perpetuity:
  - Ensure the road is suitable for two-wheel drive vehicles and for all weather access;
  - The capacity of road surfaces is to be sufficient to carry a fully loaded fire fighting vehicle (up to 32 tonnes);
  - Bridges and causeways are to clearly indicate load rating;
  - Hydrants are provided in accordance with the relevant clauses of AS 2419.1:2005.
  - There is suitable access for a Category 1 fire appliance to within 4m of the static water supply;
  - The emergency secondary property access road is to be made available for use at all times;
  - Minimum 4m wide road carriageway width to the dwellings, otherwise 7m wide road carriageway;
  - Vegetation above the road is clear to a height of 4m above it;
  - Turning areas are to be provided in the locations shown on the plans in Appendix E and in accordance with the design specifications provided in Appendix H of the BFAR;
  - curves have a minimum inner radius of 6m
  - the minimum distance between inner and outer curves is to be 6m;
  - Gradient of the access road is not to exceed 15 degrees (sealed road)/10 degrees (unsealed road); and
  - Crossfall of the access road is not to exceed 10 degrees.

**Water Supply**

- Installation of a metal or concrete firefighting water supply tank:

- of 20,000L adjacent to each dwelling, and
- a 1.5 ML tank(s) on the water tank pad area of each farm,

and in the location as shown on the plans in **Appendix E** of the BFAR, prior to the issue of an Occupation Certificate for the relevant component of the development.

- The tank is to be installed and maintained in perpetuity in accordance with the following:
  - The tank is to be provided with connections for firefighting purposes including a 65mm Storz outlet with a gate/ball valve;
  - Valves and pipes are to be metal and adequate for water flow;
  - Supply pipes from tank to ball valve have the same bore size to ensure flow volume;
  - A hardened ground surface for truck access is supplied within 4m of the tank;
  - Raised tanks have their stands constructed from non-combustible material or bush fire-resisting timber (see Appendix F of AS 3959);
  - Tanks on the hazard side of a building are provided with adequate shielding for the protection of firefighters;
  - All exposed water pipes external to the building are metal, including any fittings;
  - Where pumps are provided, they are a minimum 5hp or 3kW petrol or diesel powered pump, and are shielded against bush fire attack; any hose and reel for firefighting connected to the pump shall be 19mm internal diameter;
  - Fire hose reels are constructed in accordance with AS/NZS 1221:1997, and installed in accordance with the relevant clauses of AS 2441:2005; and
  - Tanks are provided with unobstructed access at all times;

**Electricity Services**

- Where practicable, electrical transmission lines are underground. Where electricity transmission lines are above ground, short pole spacings are to be provided (i.e. less than 30m) and no part of a tree is closer to a power line than the distance set out in accordance with the specifications in ISSC3 Guideline for Managing Vegetation Near Power Lines.

**Gas Services**

- Ensure any gas supplies (reticulated or bottled) are provided and maintained in perpetuity as follows:
  - installed and maintained in accordance with AS 1596:2014 and the requirements of relevant authorities;
- Metal piping is to be used for all connections to and from the cylinders/gas connection. No Polymer sheathed flexible gas supply lines are to be used adjacent to the building;
  - Fixed cylinders are to be kept clear of flammable materials to a distance of at least 10m; and
  - Fixed cylinders are to be shielded from the hazard.

**Construction Standards**

- The dwellings and office buildings are to be constructed to BAL-19 as prescribed by the National Construction Code (NCC) and as modified by the following:
  - Ember Protection (section 7.5.1 & 7.5.2 of PBP).

**Landscaping**

- Any future landscaping is to be undertaken in accordance with guidelines provided in Appendix G of this report
- A clear area of low-cut lawn or pavement is maintained adjacent to the dwellings and offices;
- All fences in bush fire prone areas are to be made of either hardwood or non-combustible material.
- Where the fence is within 6m of a building or in areas of BAL-29 or greater, the fence is to made of non-combustible material only.
- Trees and shrubs are located so that:
  - the branches will not overhang the roof;
  - the tree canopy is not continuous; and
  - any proposed windbreak is located on the elevation from which fires are likely to approach

**Emergency Evacuation Plan**

- Prior to the issue of an Occupation Certificate for the development, a Bush Fire Emergency Evacuation and Management Plan (BFEEMP) is to be prepared for the development generally in accordance with the NSW RFS's Development Planning: A Guide to developing a Bush Fire Emergency Management & Evacuation Plan (NSW Rural Fire Service 2014). The BFEEMP is to also include:
  - detailed measures to prevent or mitigate fires igniting;
  - work that should not be carried out during total fire bans;
  - availability of fire-suppression equipment, access and water;
  - storage and maintenance of fuels and other flammable materials;
  - notification of the local NSW RFS Fire Control Centre for any works that have the potential to ignite surrounding vegetation, proposed to be carried out during a bush-fire fire danger period to ensure weather conditions are appropriate;
  - appropriate bush fire emergency management planning; and
  - awareness of operations that may be carried out on days of Total Fire Ban and any prohibited activities or exemptions that are notified by the Commissioner of the NSW RFS under the RF Act s.99.
- The BFEEMP is to be prepared prior to occupation of the development, updated when relevant and implemented during operation of the development.

## 6.15 ANIMAL WELFARE

Agright will operate as a contract grower of poultry on behalf of Baiada Poultry. As such, the farms will be contractually required to adopt the Company's rigorous standards for animal welfare. Agright and Baiada are both committed to achieving high standards of bird welfare and understand 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 proposed farm will employ the latest technology for the collection of live birds, transportation and short term storage and unloading. All measures will be taken to best ensure these animals are not subjected to avoidable stress, cruelty or harm.

There are several Codes of Practice and Guidelines which are applicable to the operation of broiler farms that are designed to safeguard the health and welfare of poultry during growing, transportation and slaughter associated with meat chicken production. These standards are listed in condition B38 of the development consent and will be adopted by the modified development.

## 6.16 BIOSECURITY

There is a major economic incentive for Agright and the processor (Baiada) to ensure flocks are kept disease free. As well as affecting bird health and welfare, disease can significantly reduce production efficiency and product quality. If a flock requires depopulating, the economic gain from the flock is immediately lost. In addition, there is considerable cost associated with the removal and euthanasia of birds, carcass disposal, shed disinfection and remediation activities. On this basis there is increasing emphasis on maintaining flock health through vaccination, farm hygiene and biosecurity.

Due to Australia's 'island' status, high standards are set by the Australian Quarantine and Inspection Service (AQIS) and the industry's biosecurity measures provide significant protection against disease entering local poultry flocks.

The modified development represents a substantial improvement with respect to biosecurity risk management. This is because the total number of sheds and birds to be grown on the site has been substantially reduced, and the number of risk control points have also been reduced through the rationalisation of farms (from 5 to 2) and adoption of industry standard operating systems.

As noted above, as Agright will be a contractor to Baiada Poultry, they will be contractually required to adopt the Company's standards for animal welfare will utilise the following documents as adopted standards for the project:

- *National Farm Biosecurity Manual for Chicken Growers* produced by the Australian Chicken Meat Federation Inc (dated May 2020).
- *Approved Farming Scheme Standard – Meat Chickens* produced by the RSPCA (dated August 2020).

- *National Standards for Chicken Facility Standard Barn Sheds New Building Projects 2020* by Baiada (dated November 2020).

It is also noted that a *Biosecurity (salmonella Enteritidis) Control Order 2020* is currently in place and applies to the site. The proposed farm will operate in accordance with strict biosecurity protocols which align with and exceed the requirements outlined in the *Biosecurity (salmonella Enteritidis) Control Order 2020*.

## 6.17 ENVIRONMENTAL MANAGEMENT

Contractually, the proposed farm will be operated in accordance with the following documents which are specified by the processor:

- *Chicken Facility Standard Barn Sheds New Building Projects 2020* by Baiada (dated November 2020). These standards address security, wash stations, fencing and gates, storage, sanitizing and footbaths, dead bird storage and disposal, and staff amenities; and
- *Barn Broiler Manual* by Baiada (dated August 2020). This manual addresses the cleanout, set up and brooding, environmental control – ventilation, drinker management, feed management, grow out, test weights, biosecurity, food safety, environmental management and animal welfare for Barn Broiler operations.

In addition, the existing farm and proposed extension has been designed and will be operated generally in accordance with the Best Practice Management Guidelines prepared by the NSW DPI:

- Best Practice Management for Meat Chicken Production in NSW Manual 1 - Site Selection & Development.
- Best Practice Management for Meat Chicken Production in NSW Manual 2 - Meat Chicken Growing Management.

It is noted that Conditions C4 and C5 of the current consent require the preparation of a consolidated Operational Environment Management Plan (OEMP) for the project, which will be prepared and submitted to DPE for approval, prior to commencement of operations.

# 7 MITIGATION AND MANAGEMENT MEASURES

**Table 8: Updated Management and Mitigation Measures**

| IDENTIFIED IMPACT | MITIGATION AND MEASUREMENT MEASURES |
|---|---|
| **TRAFFIC** | • Construct the intersection of the access road with the Mid-Western Highway so that it provides a Basic Right Turn (BAR) and Auxiliary Left Turn (AUL) intersection treatment in accordance with the Austroads Guide to Road Design for a Road Train route, as amended by the supplements adopted by TfNSW for the posted speed zone.<br>• Prepare a Construction Traffic Management Plan as part of the Construction Certificate Documentation to address site access and construction activities.<br>• Works on the Highway are not to be undertaken until a WAD is approved by TfNSW. |
| **ODOUR** | • Vegetation buffers should be planted and maintained around the sheds as soon as practicable following construction. Vegetation buffers reduce the magnitude and frequency of any adverse air quality impacts by effectively slowing and filtering air movement, which reduces dust impacts via dust deposition and also assists in odour dispersion.<br>• The poultry sheds will be tunnel-ventilated which allow good control over internal moisture levels and also promote optimum growing conditions and bird health. The increased airflow and improved feed conversion in modern tunnel-vented sheds assists in the maintenance of the bedding material within the optimal moisture range.<br>• The poultry sheds will be fully enclosed, have wide eaves and be surrounded by concrete bund walls to prevent rainwater entering the sheds and to allow for the controlled discharge of wash down water during cleaning. These measures will reduce the level of moisture within the poultry sheds associated with rainfall, which in turn helps keep litter moisture low, which in turn reduces the risk of abnormal odour emissions.<br>• The poultry sheds will be fitted with nipple drinkers with drip cups to minimise water spillage and prevent elevated moisture levels in the litter.<br>• 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.<br>• The maximum stocking density will not exceed RSPCA specifications.<br>• Regular monitoring and maintenance of the tunnel ventilation systems and bird drinkers will be undertaken to avoid spillage, leaks, lowering of efficiency of fans and uneven distribution.<br>• Stocking densities and bird health within each of the poultry sheds will be regularly checked and, if necessary, appropriate corrective measures will be implemented.<br>• Daily monitoring and maintenance of the bedding material will occur to identify, remove and replace any caked material beneath drinking lines and/or areas with excessive moisture content.<br>• Poultry 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. Wherever possible the handling of the material will be avoided during adverse climatic conditions, such as times of cold air drainage during early morning or at night and during strong winds. The shed ventilation systems will not be used during litter removal.<br>• Poultry litter will not be stockpiled or spread within the site. |

| IDENTIFIED IMPACT | MITIGATION AND MEASUREMENT MEASURES |
|---|---|
| | • Dead birds will be collected from the sheds on a daily basis and stored in on-site chillers before removal from site.<br>• The insides of the poultry sheds and the surrounds will be maintained at all times to ensure a clean and sanitary environment.<br>• Shed access points will remain closed at all times other than for allowing access to the sheds.<br>• Where possible, activities that may increase odour emissions (for example, bedding material replacement) will be undertaken during daytime hours. |
| **DUST** | • Vegetation buffers should be planted and maintained around the new PPUs as soon as practicable following construction. Vegetative buffers reduce the magnitude and frequency of any adverse air quality impacts by effectively slowing and filtering air movement, which enhances dust deposition which reduces the movement of dust offsite.<br>• The feed silos will be fully enclosed to minimise emissions of particulate matter when loading/unloading.<br>• The poultry sheds will be tunnel-ventilated which allow good control over internal moisture levels and also promote optimum growing conditions and bird health. The increased airflow and improved feed conversion in modern tunnel-vented sheds assists in the maintenance of the bedding material within the optimal moisture range.<br>• Vehicles will not exceed a general speed limit of 40 km/hr within the site and should be confined, where possible, to the internal access roads.<br>• Internal access roads will be appropriately constructed and maintained to minimise dust emissions.<br>• The poultry shed ventilation systems will be maintained to ensure air movement is at design levels.<br>• The poultry sheds will be thoroughly cleaned between batches, with a focus on the fan end of the sheds.<br>• The generators are mounted in covered enclosures with adequate shade and ventilation with vertical air discharge<br>• 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.<br>• Poultry litter will be promptly transported off-site in covered trucks at the end of each production cycle. |
| **ECOLOGICAL** | **Construction**<br>• A small area of PCT 193 Red Mallee Woodland in the north of the development area containing one specimen of *Eucalyptus socialis* (Red Mallee) will require removal. To reduce the impact of the northern access road within the vicinity of PCT 193 Red Mallee Woodland and grassland area for the Mid Western Highway intersection upgrade the extent of clearing is to be clearly defined on the ground and delineated with bunting fencing or flagging tape to prevent any unintended disturbance outside areas of impact. The individual Red Mallee Tree No. 40 (Tag 140) is to be clearly marked prior to works to avoid additional nearby trees being mistakenly removed. The tree is to be inspected to ensure it does not contain any active bird nests. The removed tree is to be placed into the area of Red Mallee Woodland to supplement habitat. No other additional areas of native vegetation are required to be impacted and are to be avoided. |

| IDENTIFIED IMPACT | MITIGATION AND MEASUREMENT MEASURES |
|---|---|
| | • Priority will be given during construction to avoid any inadvertent impact to significant biodiversity values within the study area. Avoidance measures should include the following:<br>  • all material stockpiles, vehicle parking and machinery storage will be located within cleared areas proposed for clearing, and not in areas of native vegetation that are to be retained; and<br>  • implementation of temporary stormwater controls during construction and to ensure that discharges outside the development footprint are consistent with existing conditions.<br>• Areas of remnant native vegetation outside the development footprint are not to be inadvertently impacted.<br>• The adaptive clearance methodology should include the following key aspects:<br>  • seeking consultation with a suitably qualified ecologist to determine the best time to schedule clearance works to avoid nesting and breeding times for resident fauna;<br>  • any captured displaced fauna relocated to the nearest area of appropriate habitat. If arboreal, the fauna to be placed inside an artificial nest box and relocated. If the displaced fauna is nocturnal relocation to occur during dusk; and<br>• All tree felling activities and results to be summarised in a tree clearance report by the supervising ecologist, including fauna injuries.<br>• Any animals injured during construction should be taken immediately to the nearest Veterinary Hospital for treatment.<br>• The individual removed Red Mallee Tree t is to be placed into the area of Red Mallee Woodland to supplement habitat.<br>• The following measures should be implemented to prevent exotic plant material from entering/exiting the study area:<br>  • no imported/exported material to be permitted unless it has been inspected and confirmed to be free of dirt and mud which may contain weed seeds and vegetative<br>**Operation**<br>• The extent of all four remnant patches of native vegetation are to be clearly defined on the ground and permanently protected by fencing to ensure they are not subject to disturbance during future land practices and other activities within the site.<br>• As a part of maintenance of native remnant vegetation within the site any high threat or significant weeds present will be controlled in accordance with appropriate DPI guidelines. Guidelines for the treatment of high threat weeds can be sourced within the DPI website (DPI, 2018).<br>• Any artificial lighting used for security at night should be angled/directed downwards to avoid excessive light pollution affecting surrounding habitat. |
| **CULTURAL HERITAGE** | • The proponent is to prepare an 'Unexpected Heritage Items Procedure' prior to construction.<br>• All contractors are to be inducted to be aware of the Unexpected Heritage Items Procedure. |
| **STORMWATER** | • Provide all stormwater management treatment actions in accordance with the project Stormwater Plan prepared by Lance Ryan Consulting Engineers (LCRE). |

| IDENTIFIED IMPACT | MITIGATION AND MEASUREMENT MEASURES |
|---|---|
| | **During Construction**<br>• Implementation of an Erosion and Sediment Control Plan to limit discharge of sediment into water courses;<br>• Overland flows upslope will be diverted around areas of disturbance;<br>• Minimise clearing of ground covers to construction areas only;<br>• Construction managers are required to regular inspect and maintain erosion and sediment control will be implemented to ensure the continued integrity of the temporary erosion and sediment control structures.<br>**Development Design**<br>• The poultry sheds will be constructed on a concrete slab with a poured solid concrete wall to ensure no interaction of external water movement (roof water and stormwater);<br>• Shed roof will be constructed with an overhang to ensure roof water is separated from the internal bird accommodation areas;<br>• Stormwater runoff over the sheds is collected within grass swales running lengthwise each of the building pads and discharged into the retention basin on site; and<br>• Stormwater discharge points will be constructed of loose packed rock to slow velocities, disperse water and minimise the risk of erosion at the outlet.<br>**Operation, Monitoring and Maintenance**<br>• There will not be any on-site stockpiling of bedding material, manure or waste materials on site;<br>• At the end of each production cycle, bedding material will be promptly removed from the sheds, loaded trucks and transported off-site in covered trucks for disposal;<br>• Dead birds will be collected from the sheds on a daily basis and stored in on-site freezers prior to removal off-site;<br>• The poultry sheds will be cleaned and sanitised at the end of each production cycle using high pressure gurney sprays to minimise water use and are left to dry prior to placement of new bedding material for the next batch of birds;<br>• The waste water generated by the staff amenities and caretakers' dwellings will be appropriately treated by a standard septic system in accordance with the requirements of Council.<br>**Chemical Use**<br>• The operation will require limited chemical use, with appropriate systems in place for storage and disposal;<br>• All chemical use within the proposed poultry development will be undertaken in full compliance with the Pesticides Act 1999.<br>• Where appropriate, chemicals used within the proposed poultry development will be approved by the Australian Pesticide and Veterinary Medicine Authority as safe and fit for that particular use. |
| **WASTE** | **Solid waste**<br>• Day to day general waste (e.g. packaging, used personal bio-security clothing) will be placed into enclosed skip bins and removed from the farm by a licensed contractor on a regular / as needed basis.<br>• The sheds will be checked regularly inspected for deceased birds which will be promptly removed from the sheds and transferred to cold storage.<br>• Dead birds will be will collected weekly from the farm and transported them for processing at the Hanwood Rendering Plant. |

| IDENTIFIED IMPACT | MITIGATION AND MEASUREMENT MEASURES |
|---|---|
| | • Waste bedding material will be collected from the site and removed off-set as part of cleaning activities at the end of each production cycle.<br>• No waste material will be disposed of on-site.<br>• Collection bins for collection of recycling material such as plastic, paper, cardboard, and waste metal will also be provided on site and removed from the farm by a licensed contractor on a regular basis.<br><br>**Liquid waste**<br>• Waste oil from plant will be collected in sealed containers and stored on-site awaiting collection by a waste contractor. The waste oil storage areas will be roofed and bunded.<br><br>**Sewerage waste**<br>• Effluent water from the amenities will be treated on site via septics systems.<br>• Effluent water is to be disposed via irrigation onto landscaped gardens and lawn areas with signage to be erected advising that the water is reclaimed effluent and not suitable for drinking.<br><br>**Construction waste**<br>• Waste generated during construction is to be store in secure receptacles to mitigate against waste becoming airborne or accessible to other animals.<br>• Recyclable waste and Building Materials are to be separate from non-recyclables.<br>• Non-recyclable waste is to be collected and disposed of to a licensed facility via a waste contractor on an as need basis.<br>• Recyclables are also to be collected and taken to a recycling facility by a licensed contractor on an as need basis.<br>• Provisions for the storage and collection of waste are to be documented in the construction management plan prepared for the site. |
| **CHEMICAL USE** | • The Dangerous Goods requirements of the *Work Health and Safety Regulation 2017* shall be complied with (i.e. preparation of risk assessments, registers, notifications, etc)<br>• Compliance with LPG Standard AS1596:2014 for the storage and handling of LP Gas<br>• The following safety measures shall be in place:<br>  • Non-return valves on both the tank and LPG tanker;<br>  • Excess flow valves on the LPG tanker<br>  • Earthing connections; and<br>  • Ignition Source control measures.<br>• The safeguards outlined in Table A1 in Appendix A of the Preliminary Hazard Assessment – Hazard Identification Table shall be implemented including but not limited to:<br>  • LPG facilities to be designed to comply with AS/NZS 1596:2014 and shall be installed by an experienced LPG Facility supply company<br>  • Ignition source control as per AS/NZs 60079.14:2017 including earthing to prevent stative sparks<br>  • Hoses shall be tested annually as per AS/NZS 1596:2014 and the ADG<br>• Preparation of an Emergency Response Plan and emergency Services Information Package in accordance with HIPAP No.1<br>• The LPG storages shall be subject to hazardous area classification in accordance with AS/NZS 60079 series of standards<br>• A hazardous area verification dossier shall be prepared in accordance with AS/NZS 60079.14:2017. |

| IDENTIFIED IMPACT | MITIGATION AND MEASUREMENT MEASURES |
|---|---|
| **BUSHFIRE** | **Asset Protection Zone**<br>• Prior to the issue of an Occupation Certificate for the development, an Asset Protection Zone (APZ) of the following sizes:<br>  • Farm 1 dwellings = 20m<br>  • Farm 2 dwelling = 22m<br>  • Solar Arrays = 20m<br>  • All other buildings = 20m<br>  • Property access road = 6m<br>  is to be provided as shown on the plans in Appendix E and as outlined in Appendix G of the BFAR, and is to be maintained in perpetuity in accordance with these requirements.<br>**Access**<br>• Prior to the issue of an Occupation Certificate for the development, the property access road is to be constructed to comply with the following requirements and is to be maintained in accordance with the following requirements in perpetuity:<br>  • Ensure the road is suitable for two-wheel drive vehicles and for all weather access;<br>  • The capacity of road surfaces is to be sufficient to carry a fully loaded fire fighting vehicle (up to 32 tonnes);<br>  • Bridges and causeways are to clearly indicate load rating;<br>  • Hydrants are provided in accordance with the relevant clauses of AS 2419.1:2005.<br>  • There is suitable access for a Category 1 fire appliance to within 4m of the static water supply;<br>  • The emergency secondary property access road is to be made available for use at all times;<br>  • Minimum 4m wide road carriageway width to the dwellings, otherwise 7m wide road carriageway;<br>  • Vegetation above the road is clear to a height of 4m above it;<br>  • Turning areas are to be provided in the locations shown on the plans in Appendix E and in accordance with the design specifications provided in Appendix H;<br>  • curves have a minimum inner radius of 6m<br>  • the minimum distance between inner and outer curves is to be 6m;<br>  • Gradient of the access road is not to exceed 15 degrees (sealed road)/10 degrees (unsealed road); and<br>  • Crossfall of the access road is not to exceed 10 degrees.<br>**Water Supply**<br>• Installation of a metal or concrete firefighting water supply tank:<br>  • of 20,000L adjacent to each dwelling, and<br>  • a 2 ML tank(s) on the water tank pad area of each farm,<br>  and in the location as shown on the plans in **Appendix E** of the BFAR, prior to the issue of an Occupation Certificate for the relevant component of the development.<br>• The tank is to be installed and maintained in perpetuity in accordance with the following:<br>  • The tank is to be provided with connections for firefighting purposes including a 65mm Storz outlet with a gate/ball valve;<br>  • Valves and pipes are to be metal and adequate for water flow;<br>  • Supply pipes from tank to ball valve have the same bore size to ensure flow volume;<br>  • A hardened ground surface for truck access is supplied within 4m of the tank; |

| IDENTIFIED IMPACT | MITIGATION AND MEASUREMENT MEASURES |
|---|---|
| | • Raised tanks have their stands constructed from non-combustible material or bush fire-resisting timber (see Appendix F of AS 3959);<br>• Tanks on the hazard side of a building are provided with adequate shielding for the protection of firefighters;<br>• All exposed water pipes external to the building are metal, including any fittings;<br>• Where pumps are provided, they are a minimum 5hp or 3kW petrol or diesel powered pump, and are shielded against bush fire attack; any hose and reel for firefighting connected to the pump shall be 19mm internal diameter;<br>• Fire hose reels are constructed in accordance with AS/NZS 1221:1997, and installed in accordance with the relevant clauses of AS 2441:2005; and<br>• Tanks are provided with unobstructed access at all times;<br>**Electricity Services**<br>• Where practicable, electrical transmission lines are underground. Where electricity transmission lines are above ground, short pole spacings are to be provided (i.e. less than 30m) and no part of a tree is closer to a power line than the distance set out in accordance with the specifications in ISSC3 Guideline for Managing Vegetation Near Power Lines.<br>**Gas Services**<br>• Ensure any gas supplies (reticulated or bottled) are provided and maintained in perpetuity as follows:<br>  • installed and maintained in accordance with AS 1596:2014 and the requirements of relevant authorities;<br>• Metal piping is to be used for all connections to and from the cylinders/gas connection. No Polymer sheathed flexible gas supply lines are to be used adjacent to the building;<br>  • Fixed cylinders are to be kept clear of flammable materials to a distance of at least 10m; and<br>  • Fixed cylinders are to be shielded from the hazard.<br>**Construction Standards**<br>• The dwellings and office buildings are to be constructed to BAL-19 as prescribed by the National Construction Code (NCC) and as modified by the following:<br>  • Ember Protection (section 7.5.1 & 7.5.2 of PBP).<br>**Landscaping**<br>• Any future landscaping is to be undertaken in accordance with guidelines provided in Appendix G of this report<br>• A clear area of low-cut lawn or pavement is maintained adjacent to the dwellings and offices;<br>• All fences in bush fire prone areas are to be made of either hardwood or non-combustible material.<br>• Where the fence is within 6m of a building or in areas of BAL-29 or greater, the fence is to made of non-combustible material only.<br>• Trees and shrubs are located so that:<br>  • the branches will not overhang the roof;<br>  • the tree canopy is not continuous; and<br>  • any proposed windbreak is located on the elevation from which fires are likely to approach<br>**Emergency Evacuation Plan** |

| IDENTIFIED IMPACT | MITIGATION AND MEASUREMENT MEASURES |
|---|---|
| | • Prior to the issue of an Occupation Certificate for the development, a Bush Fire Emergency Evacuation and Management Plan (BFEEMP) is to be prepared for the development generally in accordance with the NSW RFS's Development Planning: A Guide to developing a Bush Fire Emergency Management & Evacuation Plan (NSW Rural Fire Service 2014). The BFEEMP is to also include:<br>• detailed measures to prevent or mitigate fires igniting;<br>• work that should not be carried out during total fire bans;<br>• availability of fire-suppression equipment, access and water;<br>• storage and maintenance of fuels and other flammable materials;<br>• notification of the local NSW RFS Fire Control Centre for any works that have the potential to ignite surrounding vegetation, proposed to be carried out during a bush-fire fire danger period to ensure weather conditions are appropriate;<br>• appropriate bush fire emergency management planning; and<br>• awareness of operations that may be carried out on days of Total Fire Ban and any prohibited activities or exemptions that are notified by the Commissioner of the NSW RFS under the RF Act s.99. |
| **COMMUNITY CONSULTATION** | • The proponents will engage with the local community at the commencement of site works and at the commencement of operations.<br>• The community will be provided with relevant contact numbers as part of the farm Management Plan for any post commencement activities.<br>• Adjoining neighbours will be engaged on an ongoing basis. |
| **CONSTRUCTION MANAGEMENT** | • A Construction Management Plan will be prepared and include discussion on:<br>• Bulk Earthworks<br>• Establishment of batter plantings<br>• Dam Construction<br>• Leachate Control<br>• Dust minimisation / Air quality<br>• Ecological Impacts<br>• Aboriginal Cultural Heritage<br>• Site Access<br>• Traffic Control<br>• Noise Control<br>• Complaints Register with details of actions taken to resolve issues<br>• Persons responsible for complaint handling. |
| **OPERATIONAL MANAGEMENT** | • A detailed Farm management Plan will be prepared by the Proponent with relevant input from the Processor for all operational aspects of the project and include:<br>• Odour Control<br>• Litter Odour Control<br>• Daily Mortality Procedures<br>• Shed Cleanout Odour Control<br>• Control of Waterfowl<br>• Bird Drinking Water quality<br>• Noise Controls<br>• Emergency Procedures<br>• Mass mortalities<br>• The farm will be operated in accordance with the following standards: |

| IDENTIFIED IMPACT | MITIGATION AND MEASUREMENT MEASURES |
|---|---|
| | • National Farm Biosecurity Manual for Chicken Growers produced by the Australian Chicken Meat Federation Inc (dated May 2020);<br>• Approved Farming Scheme Standard – Meat Chickens produced by the RSPCA (dated August 2020);<br>• National Standards for Chicken Facility Standard Barn Sheds New Building Projects 2020 by Baiada (dated November 2020);<br>• Barn Broiler Manual (August 2010). |

# 8 JUSTIFICATION OF MODIFICATION

The submitted EIS noted that the poultry industry was experiencing continual growth and public demand for product has caused significant growth in the utilisation of processing facilities within the Riverina. In addition, poultry meat growers are being encouraged by poultry processors to increase their operations to facilitate the additional and growing processing capacity.

Since acquisition of the site, the Applicant has entered into commercial negotiations with Baiada Poultry (the processor) to determine the actual demand within the region and how the proposed Goolgowi Farm would best support growth of the poultry processing. As a result of these negotiations and based on the Applicant's extensive experience in design and operation of broiler farms the approved development is proposed to be modified to meet the process or requirements, improve efficiency of the operation and enhance bio-security and risk management.

The following section provides a justification of the proposed modification with consideration of the proposed Biophysical, Economic and Social factors as well as the principles of Ecologically Sustainable Development.

## 8.1 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 potential:

- Ecological impacts;
- Acoustic Emissions;
- Odour and Dust Emissions;
- Water Quality Impacts;
- Cultural heritage impacts;
- Historic Heritage impacts;
- Bushfire risks;
- Potentially Hazardous Materials, Chemical use and storage;
- Waste management; and
- Biosecurity risks.

As such, it is considered that there are no bio-physical considerations which would preclude approval of the proposed development. In addition, it is note that the scale of the project has been substantially reduced compared to that which was approved, significantly reducing the potential biophysical impacts associated with the development and improving the certainty to which potential impacts can be forecast, mitigated and managed.

## 8.2 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 of the project is estimated to be $54,572,100, a majority of which is associated with construction of the proposed farms. In this regard, it is estimated that the project will create 30 FTE construction jobs to deliver the project over a 20 month period, as well as indirect opportunities for local tradespersons to assist with the build (e.g. electricians, plumbers etc).

Once operational , the project will create 14 full time 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 day old chicks, 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 electrician and plumbers, etc.

With consideration of these employment opportunities, the modified project continues to display a positive economic impact and employment impact for the region.

## 8.3 SOCIAL CONSIDERATIONS

With respect to social impacts, the findings of the detailed technical assessments undertaken in relation to modified development farm demonstrate that project is unlikely to have significant, negative social impacts provided the proposed mitigation and management measures documented in this Modification Report are implemented. Further, due to the significant reduction in the scale of the project, compared to that which was originally approved, potential social and amenity impacts such as odour, dust, noise, traffic, visual intrusion and the loss of productive agricultural land will in many cases be substantially reduced.

With consideration of the positive impacts, particular in relation to economic investment and local employment opportunities, overall it is considered that the farm will have a positive social outcome.

## 8.4 PRINCIPLES OF ECOLOGICALLY SUSTAINABLE DEVELOPMENT

A discussion of the proposal's compliance with the principles of Ecologically Sustainable Development is also provided in Table 9.

**Table 9: Principles of Ecological Sustainability**

| PRINCIPLE | DISCUSSION |
|---|---|
| *(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:*<br>*(i) careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment, and*<br>*(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 modified project. A number of mitigation, management and monitoring measures are also applied to proposed operation to ensure that it will 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 improve the economic and operational efficiency of the site and support the broader growth and economic development associated with poultry production in the Riverina. |
| *(c) conservation of biological diversity and ecological integrity, namely, that conservation of biological diversity and ecological integrity should be a fundamental consideration,* | **Complies.** The Flora and Fauna Assessment concluded that the proposed modification of the approved Goolgowi Poultry Complex development (SSD-8036) will occupy a significantly reduced footprint within a cleared and cultivated portion of the site and the fact that all impacts on native vegetation for the access road from the Great Western Highway are the same as that in the approved development, the modification will not constitute an increase in impacts (direct, indirect or prescribed) on biodiversity values not assessed in the original approval. |
| *(d) improved valuation, pricing and incentive mechanisms, namely, that environmental factors* | **Complies.** Waste management is critical to the operation of an efficient poultry farm. As per the approved |

| PRINCIPLE | DISCUSSION |
|---|---|
| *should be included in the valuation of assets and services, such as:*<br>*(i) polluter pays, that is, those who generate pollution and waste should bear the cost of containment, avoidance or abatement,*<br>*(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,*<br>*(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.* | development, the applicant will adopt measures to ensure that all waste generated from activities on the site are reused and recycled where practical or otherwise managed and disposed of in a manner that will not cause environmental harm. Importantly, no on-site stockpiling or disposal of waste materials is proposed as part of this development. Typically, broiler farms generate little waste that cannot be recycled or beneficially re-used.<br><br>In addition, the farm will be operated "off the grid" with power to be supplied through on-site solar farms and batteries. The use of this technology is expected to avoid in the order of 1060.9 Tonnes of Carbon each year. |

As demonstrated in this Modification report, the proposed development complies with the relevant statutory planning instruments and will not result in unacceptable adverse environmental impacts on the receiving environment. In addition, the proposed modification will lessen predicted impacts, improve efficiency of the operation, enhance bio-security and risk management and creates a more viable operation compared to that which was approved.

The proposal capitalises on and improves the existing approvals on the site, and supports the ongoing expansion of the broader poultry industry and economic development in the Riverina. Where potential impacts have been identified, suitable mitigation and management measures have been implemented. Accordingly, approval of the proposed modification is justified.

# APPENDIX 1
# DEVELOPMENT CONSENT

# APPENDIX 2
# MODIFIED PLANS

# APPENDIX 3
# STORMWATER CALCULATIONS

# APPENDIX 4
# CIV REPORT

# APPENDIX 5
# CULTURAL HERITAGE ASSESSMENT

# APPENDIX 6
# HISTORIC HERITAGE ASSESSMENT

# APPENDIX 7
# FLORA AND FAUNA ASSESSMENT

# APPENDIX 8
# ODOUR AND DUST ASSESSMENT

# APPENDIX 9
# NOISE IMPACT ASSESSMENT

# APPENDIX 10
# TRAFFIC IMPACT ASSESSMENT

# APPENDIX 11
# DANGEROUS GOODS SCREENING ASSESSMENT

# APPENDIX 12
# PRELIMINARY HAZARD ASSESSMENT

# APPENDIX 13
# BUSHFIRE ASSESSMENT REPORT