Lot 13 Northam-Cranbrook Road Northam

Development Application –

Broiler Poultry Farms

Prepared by Avon Valley Poultry Pty Ltd

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Appendices

1.0 INTRODUCTION

This application is made by Avon Valley Poultry Pty Ltd, for planning approval of a proposed free range broiler (meat) poultry farming operation on Northam - Cranbrook Road, in the Shire of Northam. The current farming property in its entirety is on five different titles being

- Avon Location P5
- Avon Lot 13 Diagram 94266
- Lot 91 - 94
- Lots 401-409
- Avon Lot 22

All proposed farms to be located on the one title being Avon Lot 13 Diagram 94266.

The proposal comprises four (4) free range chicken broiler farms, each comprising 4 sheds (total of 16 sheds), spread across the 2,877 hectare site. In addition to the growing sheds, each farm includes ancillary facilities. Each farm will house a maximum of approximately 180,000 birds at any given time. The proposal includes shared internal access and water supply.

It is intended that that the farms will be constructed according to a staging plan agreed with Ingham's, the company which the chickens are being grown for.

Stage 1 of the proposal will involve the construction of;

- Farm 1 – construction of 3 sheds to be completed by October 2017
- Farm 2 – construction of 3 sheds to be completed by February 2018

Stage 2 of the proposal;

- Farm 3 – construction of 3 sheds at Ingham's discretion, 6 months' notice must be given to the grower

Stage 3 of the proposal;

- All 4 farms constructed to have 4 sheds – total of 16 sheds on the entire property, which will be approximately completed in the next 2-3years at Ingham's discretion.

An environmental report has been completed by Aurora Environmental, this report was based on four farms at six sheds, a total of twenty four sheds. While there is no need for this size operation in the future, a long term view was taken in the chance that consumer demand changed and Ingham's required additional sheds in Free Range Poultry.

The proposal represents a significant economic development opportunity for the Shire of Northam. The development will comply with all planning requirements and industry codes of practice. Aurora Environmental has prepared a report addressing all potential concerns relating to the natural environment and odour emissions, as addressed in **Appendix A**.

2.0 THE SITE

2.1 TITLE DETAILS

The property subject to this application is legally described as Lot 13 on Diagram; Certificate of Title Volume 2125, Folio 166. A copy of the Certificate or Title and Deposited Plan is included in **Appendix B.**

2.2 SITE DESCRIPTION

Lot 13 is located between Muluckine Road and Rogers Road on the western side. The lot has frontage to Northam-Cranbrook Road of 3.5 kilometres. The current land uses are sheep grazing and cropping. Surrounding land uses comprise of

- Rural land uses to the North
- Rural mall holdings and residential land to the east
- Muresk Agricultural College to the south west

The site has an area of 2,877 hectares and is mostly cleared.

2.3 SITE SELECTION

This site has been selected as it meets many of the very specific locational criteria that must be met for poultry production. The proposed location is under 2 hours from Ingham's processing plant in Osborne Park, which is a guideline set by the processor. Proposed farm locations on Lot 13 can be viewed in the maps seen in **Appendix C**.

3.0 DESCRIPTION OF PROPOSED DEVELOPMENT

The application for planning approval comprises four (4) poultry broiler farms, each comprising 4 broiler sheds (16), spread across the 2,877 hectare site. The development comprises the following key components;

- Four independently operated farms, all served by four sheds
- Sixteen free range chicken sheds, each 160.4m long x 17.30m wide (2,774.92m²), all orientated 'east-west' and having a roofed area of 108,494m²
- Each shed will have 40 internal bays with 9 cooling bays
- Each shed will have 16 to 20 axial fans, allowing discharge of air on the western side with evaporative cooling pads on the eastern side
- Spacing between each shed is 34m
- Stocking capacity of 44,842 birds per shed (16.2 birds per m²)
- Total of 716,800 birds maximum capacity
- Two individual water tanks per farm (375,000L each)
- Twenty four storage silos (5m high) – six per farm
- Four amenities buildings (including lunchroom and shower) – 1 per farm, connected to individual on-site effluent disposal systems
- Four generator sheds 1 per farm
- Four machinery sheds (approximately 5m x 8m)
- Four Gas Tanks (25,000L capacity)

The Table below outlines the maximum amount of birds on the farm at any one given time. This is based on 44,800 birds per shed and that there will be 5.79 batches per year.

Table.1

	Farm	Sheds	Birds per farm per batch	Birds per year
Stage 1	1	3	134,400	778,176
	2	3	134,400	778,176
	TOTAL	**6**	**268,800**	**1,556,352**
Stage 2	1	3	134,400	778,176
	2	3	134,400	778,176
	3	3	134,400	778,176
	TOTAL	**9**	**403,200**	**2,334,528**
Stage 3	1	4	179,200	1,037,568
	2	4	179,200	1,037,568
	3	4	179,200	1,037,568
	4	4	179,200	1,037,568
	TOTAL	**16**	**716,800**	**4,150,272**

3.1 OVERVIEW POULTRY FARMING

Broiler chicken farms typically operate using purpose built sheds to house birds. Day old chicks are provided by Ingham's and reared to an age between 42 and 56 days, when the batch is transported to the processing plant.

The young chicks are kept warm, generally up to 14 days of age, by gas heaters. At approximately 21 days of age the chickens are allowed to access the free range area. Water and feed is provided by automatic gravitational/mechanical means to appropriate feeder pans or water points. The floors of the sheds which are concrete are covered in deep litter of 10-15cm in depth of straw. The sheds are ventilated by large fans encouraging air flow and evaporative cooling systems able to be used in hot conditions. The shed temperature, humidity and air quality are all electronically controlled.

At the end of a growing period birds are caught be hand by the processors contractors in the sheds, placed in crates, to be transported to the processor. The catching and transportation process takes place from midnight to dawn, when the birds are quieter and causes less stress before processing. Sheds are then cleaned by removing the deep litter. Sheds are washed and sprayed with disinfectant to reduce the risk of disease in preparation for the next batch. There is usually a one week to 2 week period between batches when the sheds are empty.

3.2 BROILER SHEDS

The application proposes four poultry farms, comprised of four broiler free range sheds. Each broiler free range shed is 160m x 17.3m each and can accommodate approximately 44,800 chickens per shed, totalling approximately 179,200 chickens per farm. Each shed is separated by a distance of 34 meters, being the range area for the birds. Detailed photographs can be seen in **Appendix D.**

Sheds will be constructed from fabricated hot-dipped galvanised steel, with concrete floors to Ingham's specification. All sheds have clean skin ceilings.

All sheds are mechanically ventilated, both tunnel and side ventilation. Tunnel ventilation is achieved by using 10 x 1.4m diameter exhaust fans. Sheds are constructed to be fully integrated with cooling, heating, feeding and watering systems. Detailed drawings can be seen in **Appendix E.**

3.3 BUILDINGS

Other structures will include

- Four amenities buildings (including lunchroom and shower) – 1 per farm, connected to individual on site effluent disposal systems
- Four generator Sheds – 1 per farm
- Four machinery/chemical sheds (approximately 5m x 8m)
- Three silos per two sheds – 6 per farm
- One gas tank per farm

3.4 VEHICLE ACCESS AND PARKING

Traffic generated by the proposed development arise from

- Staff Vehicles
- Delivery Trucks

Currently the farm has an internal road system which is 15m wide and is accessible in all weather conditions. The proposed free range poultry farms will connect onto this internal laneway system which has an access point on the Northam-Cranbrook Road. The delivery trucks will be coming from either Ingham's feed mill or hatchery located in Wanneroo or the processing plant which is located in Osborne Park. The delivery trucks will be able to access the Northam bypass via Yilgarn Avenue.

As can be seen in the Main roads website, Main Roads - Road Information Mapping System, Northam – Cranbrook Road is classified as a Primary Distributor, along with Great Eastern Highway. With Yilgarn Avenue classified as a Regional Distributor. These roads are adequately suitable for use of delivery truck routes for this proposal.

Based on Ingham's feed conversion ratio a bird will consume around 4.4kg over the 56 days or one batch. So a farm of 3 sheds as proposed in stage 1 would require the following tonnes of feed;

44,000 birds x 4.4kg x 3 sheds = 581tonnes

Based on this a road train averaging 48tonnes would require 12 loads over eight week period, or average 1.5 trips per week, per farm.

Day old birds are delivered in single semi-trailers, with one trailer per shed.

Birds will be removed at various stages from 31 days into the batch depending on market demands. Approximately 6,000 birds will fit onto a semi-trailer or 12,000 onto a road train. Based on this 11 road trains will be required to remove all birds from one 3 shed farm for processing.

44,000 birds x 3 sheds / 12,000 = 11

In regards to farm staff we will initially commence with 3 staff for stage 1. All will use light vehicles and access via Northam-York road, and parking will be adjacent to amenities on each farm. Truck parking will be short term, however there is sufficient room within our internal laneway system for trucks to manoeuvre and park. Visitors will be minimal due to biosecurity.

3.5 INFRASTRUCTURE

3.5.1 WATER

Water has been sourced by a bore located on the property which has the capacity to produce 6L/second. Each shed will require a supply capable of providing approximately 6ML/year. The proposed development will generate the following demands for water:

- Drinking water for the birds
- Cooling of ventilation systems
- Irrigation of pastures/vegetation
- Supply of water to amenity buildings
- Cleaning out of sheds

Two individual water tanks are proposed per farm, which will hold water drawn from the bore via the pump and pipeline. These tanks are designed to provide sufficient capacity to allow the farms to run.

4.0 ENVIRONMENTAL ASSESSSMENT AND MANAGEMENT PLAN

The Environmental Assessment and Management Plan in **Appendix A**, explores the following issues

- Noise and Odour
- Bushfire Management
- Environmental Assessment
- Visual Impact
- Social Impact